

# **Role and Impact of Media Interventions on Creating awareness about Cancer among masses**

**THESIS**

**SUBMITTED TO  
BABASAHEB BHIMRAO AMBEDKAR UNIVERSITY  
(A CENTRAL UNIVERSITY)  
LUCKNOW**

BABASAHEB  
BHIMRAO  
AMBEDKAR  
UNIVERSITY



प्रज्ञा शील करुणा  
ESTABLISHED 1996

**FOR THE DEGREE OF**

**Doctor of Philosophy  
IN**

**MASS COMMUNICATION AND JOURNALISM**

Submitted by

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Enrollment No.: 058/11

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**BABASAHEB BHIMRAO AMBEDKAR UNIVERSITY  
(A Central University)**

**VIDYA VIHAR, RAEBARELI ROAD, LUCKNOW-226 025**

**2021**



*Dedicated to  
My Beloved Parents*

*Mrs. Sangeeta Sharma*

*&*

*Late Shiv Nandan Sharma*



## **DECLARATION**

I declare that the thesis entitled- **Role and Impact of Media Interventions on Creating awareness about Cancer among masses** has been prepared by me under the supervision of Prof. Govind Ji Pandey-Department of Mass Communication and Journalism-Babasaheb Bhimrao Ambedkar University-Lucknow.

No part of this thesis has formed the basis for the award of any degree, diploma or fellowship previously. Further, I declare that the material embodied in the present work is based on original research work and the indebtedness to others has been duly acknowledged at relevant places. I further declare that the thesis essentially free from all kinds of plagiarism.

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## **CERTIFICATE**

This is to certify that the thesis entitled “**Role and Impact of Media Interventions on Creating awareness about Cancer among masses**” submitted by **Ms. Neelu Sharma** is an original research work and has not been previously submitted in part or full for the award of any other degree or diploma to this or any other university.

This thesis submitted to Babasaheb Bhimrao Ambedkar University, Lucknow satisfies all the requirements as stipulated in the Doctor of Philosophy (Ph.D.) regulations- 1999 as amended in 2008/2010/2013 and it is fit for submission and evaluation for the award of the degree of Doctor of Philosophy of the university.

**Supervisor**

**Head of Department**

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## ACKNOWLEDGEMENTS

I bow in reference to the almighty for blessing me with strong will power patience and confidence that help me in completing my work.

I owe my deepest gratitude to Professor Govind Ji Pandey, my supervisor whose unflagging guidance and intellectual insight has made this work possible. From Prof. Govind Ji I have learnt how to examine a problem with insight and to incorporate narrative value within the words. He has been a constant source of guidance, supervision and encouragement in the time of distress apprehension and anxiety during the study. He is a perfect blend of guide, supervisor, guardian and friend. I am greatly privileged to have him as my research supervisor.

I am extremely grateful to Prof Gopal Singh, Head - Department Mass Communication and Journalism, BBAU, Lucknow for providing an excellent guidance and good research environment at the Department which help me to complete my work and encourage me to keep up with the best and possible results.

I am obliged to Dr. Mahendra kumar Padhy (Assistant Professor-BBAU), Dr. Kuwar Surendra Bahadur (Assistant Professor-BBAU), Dr. Loknath (Assistant Professor-BBAU), and Dr. Arvind Singh (Assistant Professor-BBAU), Prof R C Sobti for their constant encouragement and guidance.

I Owe a debt of gratitude to Prof. Anand Mishra (Prof. KGMU), Dr. Sudhir Singh( Associate Prof.-KGMU), Dr. Rohini Khurana (Oncologist-RMLIMS), Dr. Geeta Khanna (Gynaecologist-Ajanta Hospital) and Prof. Shubhini Saraf (Porf.-BBAU) for their constant help, support and expert guidance for the strategic media interventions.

Many thanks to Sapna Upadhyay, Gulab Jahan, Ram Singh and Sanjog Walter who happily agreed to be a part of my film can break cancer, I'm thankful to all them for sharing their experiences and valuable insights with me.

I am thankful to my Film-shooting team; Dheeraj Kumar, Ranjit Kumar, Hitesh Singh, Dheeraj Kumar, Pradeep Jain, Anurag Anand Pandey and Late Aiyaz for pouring their hard work and making all three films successfully.

I am extremely thankful to honourable Health Minister of Uttar Pradesh Sri Jai Pratap Ji for allowing public screening of all my films in government hospitals of Uttar Pradesh. I am extremely thankful to RSPL Group- Ghari detergent for taking my films under their corporate social responsibility for creating awareness about cancer.

Some of my very close friends and family members who stood by me through frustration and depression- Siddhant and Saksham also deserve to be mentioned on this platform for their love and care. I am extremely thankful to my cousin brother Vishaal for sending health communication books which were not available in India.

I want to thank my co-research scholars- Harinath Kumar, Anand Babu, Pratima, Arvind, Ankit Dixit for their immense support and guidance. I also want to thank non-teaching staff of my Department – Sandeep Bhaiya, Anurag Bhaiya and Deepika Ma'am for their immense support during this study.

I extend my regards to my Mother and my Masi- Mrs Leela Sharma who have always encouraged me with their words “ Beta Khoob Padh likh, paise di chinta na kari”, which means that read more and more learn more and more and don't bother about money. I extend my deepest gratitude to my father who left for his heavenly abode 2 years before but he always stood there with his silence which gave me strength to move forward with unbridled energy.

**Neelu Sharma**

## **PREFACE**

Health Communication refers to the array of communication processes and messages that are constituted around health issues. The primary aim of this research is to critically review issues and approaches related to strategic media intervention and its impact on masses regarding cancer awareness. The theories and models presented in communication textbooks and mainstream literature have been used for intervention planning, these theories and models are valuable conceptual tools for designing intervention program.

Effective Health Communication is more than disseminating health messages using strategic media intervention or enhancing peoples compliance with medical regime's it involves initiating and sustaining fundamental changes at individual and societal levels, at individual level it requires changing personal lifestyle and risk behaviours that are deeply rooted in culturally conditions belief attitudes practice norms and patterns of personal relations; for example behaviour related to food and nutrition etc. and at society level it requires challenging cultural values social norms customs and practices social organization and intercultural relations that directly affect health related behaviour's and status.

Public Health Communication interventions are designed to bring about some desired health improvement goal in a target audience and the result measured in terms of their effectiveness in achieving that particular change. Health issues specially research on Health Communication and health related public communication campaigns are becoming increasingly important. Healthcare requires accurate accessible information and timely effective communication. Health information is the lifeblood of healthcare. Providers patience and well population need timely and accurate information media intervention has been defined as an activity is an project that secure exercise challenger require media power for tactical and strategic action media interventions am to provide a more nuanced and comprehensive understanding of the strategic media intervention and effects of that particular intervention/ media power.

The aim of the present study, “ Role and Impact of Media Interventions on Creating awareness about Cancer among masses” is an attempt to provide an insight on creating

strategic media interventions and studying their role on the masses for change in awareness level regarding cancer.

**Chapter 1** Of the study deals with the Introduction, theoretical framework and research methodology adopted by the researcher to pursue the present research.

**Chapter 2** Is related with Review and citation of the work done by other researchers/investigators in the area of Media Intervention and Health Communication Campaigns.

**Chapter 3** Entitled “Cancer and Strategic Communication: Mass Media for Attitudinal and Behavioural Changes” showcases examples of mass media usage for Health Communication programs in order to bring out attitudinal and behavioural changes among masses.

**Chapter 4** Showcases data tabulation, diagrammatic representation and analysis of the data, being collected by the researcher.

**Chapter 5** Encompasses discussion on the basis of analysis being done by the researcher it also presents conclusion of the study, recommendations made by the researcher and it also highlights the limitations of the present study.

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# **Chapter 1**

*Introduction, Theoretical  
Framework and  
Research Methodology*

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# *Chapter 1*

## *Introduction, Theoretical Framework and Research Methodology*

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*“Without health life is not life; it is only a state of languor and suffering, an image of death.”*

*-Lord Buddha*

### **1.1 Introduction of the Research Study**

Health is a mixture of three important components physical, mental and emotional well-being: because an individual cannot have a healthy body without healthy mind or healthy emotions and vice versa. The World Health Organisation (wikipedia, 2016) defines health as “ a dynamic condition that is identifiable by a physical and mental state that allows a person to pursue his or her goals, given in a set of accepted circumstances”. Bircher defines health as “a dynamic state of well-being characterized by a physical and mental potential, which satisfies the demands of life commensurate with age, culture and personal responsibility” (Bircher, 2005). Sarachi defines health as “ a condition of well being free of disease or infirmity and a basic and universal human right” (Sarachi, 1997).

Individual health partially depends on the social structure of a person’s life. Health is the bedrock upon which all of human society exists. Thus, the health status of a populace plays an imperative role in the well being of people within a topology and social space. Health and its care are not only indicators of well being but the health status is also a determinant of human development (Bourne, 2009).

To persuade individuals to adopt healthy behaviours has never been an easy task. And so it is necessary that they have proper information and knowledge to be able to develop healthy practices (SCHIAVO, Health Communication FROM THEORY TO PRACTICE , 2011). Important role of communication is to create a receptive and favourable environment in which communication can be shared, understood, absorbed and discussed by the programs intended audience.

Health communication is a subset of communication that concerns itself with how individuals in a society seek to maintain health and deal with related issues such as how health related messages are disseminated, accessed and interpreted. Development planners use different mass media vehicles to spread health related messages so they are able to influence the attitude and behaviour of the members of society so as to influence acts towards desired direction. The key characteristic of health communication is to influence individuals and communities regarding health seeking behavior, as health communication aims at improving health outcomes by sharing health related information. Health communication is also concerned with communication among policy makers, health planners, doctors, patients and community in health realm. It is an emerging field in which professional communicators and health providers inform, influence and motivate individual, institutional, governmental and public audiences about important health issues. Social and behavioural scientists have defined health communication as:-

Health communication is a multifaceted and multidisciplinary approach to reach different audiences and share health related information with the goal of influencing, engaging and supporting individual, communities, health professionals, special groups, policy makers and the public to champion, introduce, adopt or sustain a behaviour, practice or policy that will ultimately improve health outcomes (SCHIAVO, HEALTH COMMUNICATION FROM THEORY TO PRACTISE, 2007).

(Ratzan, 1994) defines Health Communication as the art and technique of informing, influencing, and motivating individual, institutional, and public audiences about important health issues. The scope of health communication includes disease prevention, health promotion, health care policy, and the business of health care as well as enhancement of the quality of life and health of individuals within the community.

Health communication is a key strategy to inform the public about health concerns and to maintain important health issues on the public agenda (SCHIAVO, HEALTH COMMUNICATION FROM THEORY TO PRACTISE, 2007).

U.S. Department of Health and Human Services defines Health Communication as the study or use of communication strategies to inform and influence individual and

community decision that enhance health (SCHIAVO, HEALTH COMMUNICATION FROM THEORY TO PRACTISE, 2007).

Health communication is a “means to disease prevention through behavior modification” (SCHIAVO, HEALTH COMMUNICATION FROM THEORY TO PRACTISE, 2007).

Health communication is the process for the development and diffusion of messages to specific audiences in order to influence their knowledge, attitudes and beliefs in favor of healthy behavioural choices (SCHIAVO, HEALTH COMMUNICATION FROM THEORY TO PRACTISE, 2007).

Health communication is the use of communication techniques and technologies to (positively) influence individuals, populations, and organizations for the purpose of promoting conditions conducive to human and environmental health; it may include diverse activities such as clinician-patient interactions, classes, self-help groups, mailings, hot lines, mass media campaigns, and events (SCHIAVO, HEALTH COMMUNICATION FROM THEORY TO PRACTISE, 2007).

Health communication, like health education, is an approach which attempts to change a set of behaviors in a large-scale target audience regarding a specific problem in a predefined period of time (SCHIAVO, HEALTH COMMUNICATION FROM THEORY TO PRACTISE, 2007).

The goal of health communication is to increase knowledge and understanding of health related issues and to improve the health status of the intended audience (SCHIAVO, HEALTH COMMUNICATION FROM THEORY TO PRACTISE, 2007).

Health communication is the scientific development, strategic dissemination, and critical evaluation of relevant , accurate, accessible, and understandable health information communicated to and from intended audiences to advance the health of the public (SCHIAVO, HEALTH COMMUNICATION FROM THEORY TO PRACTISE, 2007).

Effective health communication is the art an technique of informing, influencing and motivating individuals, institutions, and large public audiences about important health

issues based on sound scientific and ethical considerations (SCHIAVO, HEALTH COMMUNICATION FROM THEORY TO PRACTISE, 2007).

Communication means a process of creating understanding as the basis for development. It places emphasis on people interaction. Communication empowers people by providing them with knowledge and understanding about specific health problems and interventions (SCHIAVO, HEALTH COMMUNICATION FROM THEORY TO PRACTISE, 2007).

Health communication leads to exchange of information in a two-way dialogue as it's a process for partnership and participation that is based on a two-way dialogue, where there is an interactive interchange of information, ideas, techniques and knowledge between senders and receivers of information on an equal footing, leading to improved understanding, shared knowledge, greater consensus, and identification of possible effective action.

### **1.1.1 A BRIEF ORIENTATION TO HEALTH COMMUNICATION**

Although the 1970s as a decade has taken a lot of flak, quite possibly because of leisure suits and frighteningly bad hairstyles, a lot of good things came out of that decade. Stephen Hawking discovered the second law of black hole dynamics. AC/DC released "Highway to Hell." Microwave ovens became commercially available, paving the way for Hot Pockets. And most notably, for our purposes, health communication was established as a distinct sub discipline in communication. The year was 1975. The location, Chicago, Illinois. Communication scholars from around the world were convening for the 28th annual convention of the International Communication Association (ICA). Large professional organizations like ICA usually have divisions to facilitate scholarly interaction among members with similar research interests. A small group of scholars had been getting together at ICA since 1972, calling themselves the "Therapeutic Communication" interest group. At the 1975 meeting, these folks decided to change their group's name to "Health Communication" to reflect a broader scope of interest in health. And thus our field was born. (HARRINGTON, 2015).

Health communication officially became a sub discipline of communication in 1975 at the annual convention of the International Communication Association.

(HARRINGTON, 2015).

The key characteristics of health communication are: Audience-centered, Research-based, Multidisciplinary, Strategic, Process oriented, Cost-effective, Creative in support of strategy, Audience and media specific, Relationship building and it is Aimed at behavioural or social change (SCHIAVO, HEALTH COMMUNICATION FROM THEORY TO PRACTISE, 2007).

The word 'Cancer' comes from the Latin word 'Carcinoma' which means Crab. It is a dreaded disease and refers to all malignant tumors caused by the abnormal growth of a body cell or a group of cells. Cancer is a complex disease that is the end result of a disturbed metabolism (body chemistry). It is an insidious disease that involves the entire body; the nervous system, digestive tract, pancreas, lungs, excretory organs, endocrine system and the entire defence mechanisms. Currently, cancer is the third most deadly disease in developing nations like India. Cancer, also called Malignancy, is an abnormal growth of cells. There are more than 200 types of Cancer, it is a common household word, with at least one near and dear one, a family member, a friend, a neighbour, or a colleague diagnosed with Cancer.

The 2014 study of World Health Organisation (WHO) revealed that deaths from cancer cases in India are projected to rise to 13.1 million by the year 2030. The burden of cancer is expected to further increase due to an increase in life expectancy, demographic transitions and the effects of tobacco and other risk factors (World Health Organisation-Cancer, 2015). In 2015, 8.8 million people worldwide died from cancer. That is nearly 1 in 6 of all global deaths (World Health Organisation, Global Health Observatory (GHO) data, n.d.). Cancer has emerged as a major public health concern in India. 12.5 lakh new cases are diagnosed every year and around 28 lakh cases of cancers are prevalent at any given point of time. It also claims lives of about 6.8 lakh patients per year (Ferlay, et al., p. 2013). As per latest data of India from GLOBOCAN 2012, the top three variations of Cancer in women are breast, cervix uteri and colo-rectum and in men are oral cavity, lung and stomach. Most Cancer cases in India are associated with tobacco use, infections, and other avoidable causes. Social factors, especially inequalities, are major determinants of India's cancer burden, with poor people more likely to die from cancer before the age of 70 years than those who are more affluent (Mallath, et al., 2014). If we look up at the cancer patient scenario and compare India

with other countries of the world, the facts than suggest that, “every 13<sup>th</sup> cancer patient in the world is an Indian, out of which most of them are women; out of 12.5 lakhs cancer patient each year around seven lakhs are women” (Correspondent, 2016).

Every 13<sup>th</sup> new cancer patient in the world is an Indian, most of them women, and out of 12.5 lakh (1.25 million) new cancer patients each year in India, over seven lakh are women. The International Agency for Research on Cancer in its GLOBOCAN 2012 report stated that in India 1.1 million new cancer cases were estimated, indicating India as a single country (of the 184 countries) contributing to 7.8% of global cancer burden with mortality figures of 682830, contributing to 8.33% of global cancer deaths; and the five year prevalence was 1.8 million individuals with cancer corresponding to 5.52% of global prevalence (GLOBOCAN-Estimated Cancer Incidence, Mortality and Prevalence Worldwide in 2012, 2012). Therefore, it is extremely important to not overlook this phenomenon.

The challenge of addressing the socio-cultural taboos, misconceptions and beliefs about cancer is further compounded by the low knowledge level, understanding and awareness of cancer. In the year 1975, Government of India launched the ‘National Cancer Control Programme (NCCP) with emphasis on awareness related to primary prevention and early detection of cancer. Today, the NCCP has supported 85 oncology wings in the medical colleges including 27 tertiary cancer centres across the country (Welfare, 2005). Therefore, there is a great demand and need for accurate and relevant communication strategy by proper media interventions on cancer patients for proper advocacy, behaviour change and social mobilizations to approach in this combating issue. Cancer prevention occurs by arresting, slowing down or reversing the carcinogenic process before invasion into surrounding tissue or by avoiding or blocking causative exposure. Preventive interventions range from avoiding known carcinogens (e.g., tobacco or asbestos) to intervening with anti-carcinogenic strategies (behavioural modifications, such as diet and exercise, medications, nutritional agents and vaccination against causative agents. We need to focus on active intervention with measures involving pharmaceutical and immunological agents. Cancer is a large family of diseases involving abnormal cell growth with the potential to invade or spread to other parts of the body. Doctors, experts and evidences states that around 50% of deaths due to cancer can be prevented by avoiding carcinogenic agents, following cancer based preventive measures and by avoiding key risk factors. Avoiding tobacco products,

reducing alcohol consumption, maintaining a healthy body weight, exercising regularly and addressing infection-related risk factors (WHO-Cancer Prevention, n.d.).

In the Indian society cancer is usually considered as curse, and substantial lacuna in the knowledge, information and awareness about cancer generate a negative attitude towards this disease. In the words of Cohen “The Media may not be successful in telling their readers what to think, but are stunningly successful in telling their readers what to think about” (Cohen-1963, n.d.). There has been intensive discourse and debate as regards impact of Media in creating awareness about Cancer and Cancer prevention and also for effecting attitudinal and behavioural changes in masses towards People Living with Cancer (PLWC)/Cancer Patients. This study is an attempt to investigate this phenomenon in India. As a developing country, India has been struggling to overcome its socio-economic backwardness due to low literacy rate, low standards of living, low per capita income and lack of health and sanitation facilities, etc.

In this context communication can integrate knowledge, information and awareness, which motivates people to thrive in order to lead a better life. Communication can also make development initiatives by employing different communication strategies and techniques that address fruitful changes for local, regional, national and international levels of people’s action (Bank, 2007). Therefore, there is a great demand for accurate and relevant communication strategies, which have been credited with advocacy, behaviour changes and social mobilisations to combat these issues. In order to remove obstacles from health promotion programme, Mass Media can play a very prominent role in the field of healthcare and development.

Media Interventions are defined as activities or projects that secure, challenge or acquire media power for tactical and strategic action.

Media can disseminate information with regards to different health issues and a effect on human behaviour as well. Documentaries assert through their informative function to influence beliefs, attitudes and values which influence people to do away with outmoded perceptions or cognitive dissonance so that they can adopt modern and scientific technologies, ideas etc. In the process of health promotion, the access and availability of means of communication are important for betterment of socio-economic status, health education and also for participation of masses in the process of development. A documentary, due to its entertaining feature has tremendous impact on

the public sphere and it may impact health behaviour of the target group in a significant way.

Thus, this study is an attempt to examine the effectiveness level of strategic communication interventions and its efficacy to encompass good Cancer related information, knowledge which influences individual or community decisions that will enhance, motivate and mobilise them towards the use of good health practices and responds to care interferences.

### **1.1.2 Health Behaviour and Process of Attitude Change**

Attitude can be defined as an action performed by the targeted audience in a certain context at a specific period of time. Behaviour is a person's reflection, and for bringing out change regarding health seeking behavior requires creating a new behaviour. Prior to applying effort for health behaviour change, the investigator must identify the beliefs and existing behaviour. (Yzer, 2009) studied methods for identification of beliefs. He was of the opinion that investigator should use open ended questions to elicit beliefs. In his study, the participants were asked to list all advantages and disadvantages of performing a particular behaviour. For identification of normative beliefs, investigators asked the participants to list the people who would approve and who would disapprove their performing behaviour and also to describe whether they think about doing or not doing these behaviours themselves. For identification of self-efficacy beliefs, participants were asked to list the factors that would favour or impede their performing behaviour.

To achieve new health behaviour, mass media must dispel existing beliefs. Mass media can dispel these beliefs by offering messages so that the target group can perceive the susceptibility and seriousness of the consequences attached to risky health behaviour. This implies that a person through communication exercise should be put in a situation where he/she performs a cost-benefits analysis before engaging in any health behaviour.

### **1.1.3 Advocacy of Mass Media for adopting a Desirable Behavior:**

Audio-Visual Media is one of the most powerful media tools of mass communication. It is an important tool for cultivating scientific ideas and shaping up modern Indian society. After identification of existing beliefs and behaviour, the next task for the audio-visual media is to dispel existing beliefs and advocate adoption of desirable

behaviour, because each behaviour has a unique set of underlying beliefs. In order to affect desired attitudinal and behavioural changes, the audio-visual media messages must make people aware of the advantages and disadvantages of different behaviour patterns. (Yzer, 2009) suggested that mass media message does not directly affect beliefs, attitudes, perception, perceived norm and self-efficacy of masses. Although mass media directly affects specific beliefs that people hold about performing particular health behaviour. The success of mass media messages will be enhanced if people's beliefs are under these two categories- 1: Those beliefs that most strongly correlate with the intention to perform recommended behavior, changes in beliefs produce great change in intention. 2: Those beliefs that do not correlate with intention, but already are favourable towards recommended behaviour. The health message that successfully changes these two types of beliefs should have a strong impact on intention thereby influencing individuals to ultimately adopt recommended behaviour.

#### **1.1.4 Statement of Problem**

Cancer, the most dreaded disease needs awareness, because large majorities remain ignorant about it and perish; Media can play a positive role in making the public aware of cancer and its impact on the lives of the masses. "Role and Impact of Media Interventions on creating awareness about Cancer among masses" is an attempt to highlight efficacy of documentary based Media Interventions on Cancer patients and awareness among masses.

#### **1.1.5 New Communication Technologies**

New communication technologies have opened an extraordinary range of avenues for influencing health behaviour. "E-health" is the use of emerging information and communication technology, especially the internet, to improve or enable health and health care. The term refers to an emerging field in the intersection of medical informatics, public health, and business (Eysenbach, 2001). It bridges clinical and non-clinical sectors, and includes both individual and population health-oriented tools.

Major benefits of e-health strategies are increased reach (the ability to communicate to broad, geographically dispersed audiences), asynchronous communication (interaction not bounded by having to communicate at the same time) the ability to track, preserve,

and analyze communication (Computer records of interaction, analysis of interaction trends), user control of the communication system (the ability to customize programs to user specifications), and interactivity (e.g., increased capacity for feedback) (Health, 1999).

Educational and behavioural interventions employing new communication technologies are forging new ground and therefore benefit from the perspective provided by theories of health behaviour. Like communications in other media, e-health interventions can address issues at the individual, group, or community/societal level; different theories may be appropriate, depending on the project's goal.

Innovative e-health projects are expanding the range of tools that planners can use to develop Cancer control and other interventions. National Cancer Institute has published data from its Health Information National Trends Survey (HINTS). The HINTS programme helps survey researchers, programme planners, and social scientists understand how adults 18 years and older are using different communication channels, including the Internet. According to HINTS data, when asked where they would go first if they had a strong need to get information about cancer, 34 percent of respondents said they would go to the Internet. The HINTS data illustrate consumers' increasing reliance on the Internet as an easily accessible source of health information. The internet has been characterised as a "hybrid technology" because it has the potential to reach millions of people with information that can be tailored to individual needs and preferences (Cassell, Jackson, & Chevront, 1998 Jan-Mar). E-health interventions frequently offer information, education, and support directly to consumers. The Association of Online Cancer Resources (ACOR), a collection of online communities designed to provide timely and accurate information in a supportive environment, is one case in point. ACOR delivers 1.8 million Cancer messages each week (Institute of medicine).

Interactive games offer another vehicle for intervention. (Lieberman, 2001). designed a series of Nintendo video games to improve children's and adolescents' prevention and self care behaviours for asthma, diabetes, smoking prevention, and other health topics. The games were based on well-established theories of learning and behaviour change, such as Social Cognitive Theory. The result of the study was that video game based intervention reduced players' urgent care and emergency medical visits by as

much as 77%, which demonstrated the effectiveness of new communication technologies.

While both leadership and management are needed to move any population-based health program forward, serious problems will arise when an intervention strategy requiring leadership and learning to produce fundamental institutional changes is reduced to a series of predefined management tasks that fail to consider the local context (Vijayendra Rao, 2004).

### **1.1.6 Stigma and Discrimination**

Stigma is a quality that significantly discredits an individual in the eyes of others (Goffman, 1963). From the moment scientists identified Cancer, the social responses of fear, denial, stigma and discrimination have accompanied the epidemic. Discrimination has spread rapidly, fuelling anxiety and prejudice against groups most affected as well as those living with Cancer. This stigma and discrimination associated with HIV/AIDS may be examined within the broader social, cultural, political and economic framework rather than at a narrow individual level (Joint United Nations Program on HIV/AIDS, 2003). Due to the association of HIV / AIDS with commercial sex, drugs and men having sex with men (MSM), the disease has acquired a stigma that is difficult to overcome in any society. Those infected and affected by HIV/AIDS have faced discrimination and alienation. Thus, it goes without saying that HIV/AIDS is as much about social phenomena as it is about biological and medical concerns.

Worldwide, people living or associated with HIV and AIDS (PLWHAs) are subjected to stigma and discrimination. The endemic of cancer has been accompanied by fear, ignorance and denial and it is leading to stigma and discrimination. PLWC face threat from society and the society treats them like persons of low virtue and deprives them of the basic needs and fundamental rights as enjoyed by the common people.

Individual level stigma affects an individual's decision to take the Cancer test because he fears that stigma and discrimination may lead to identity crisis, isolation and loneliness. Due to fear of identity expose individual access the health care services withhold information about their status from family members and friends. The fear of

stigma and discrimination limits the efficacy of Cancer prevention programme and it also prevents individual from taking Cancer test.

### **1.1.7 Cancer Awareness**

In order to enhance awareness level among masses in urban as well rural areas, Government of India has decided to use Mass Media mediums in a more creative, intensive and interactive manner. Doordarshan has impressed upon all its production centres the need to give due importance to programming aimed at creating awareness regarding Cancer in their regular fixed-point charts. These centres formulated informative and interactive programme such as live phone-in programme, studio interactions, short and long-duration dramas, panel discussions involving experts, docu-dramas, serials etc. in local languages and dialects towards raising awareness about Cancer and Cancer prevention.

Doordarshan in partnership with the Ministry of Health and Family Welfare, Government of India, also produced a weekly health magazine titled “Kalyani” in three languages, i.e., Hindi, Oriya and Assamese which was launched in 2002 and continued up to the year 2011. Kalyani was telecast in nine states of India; the program was also telecast in Chhatishgarhi, Nagpuria, Awadhi, Bhojpuri and Maithili dialects. Kalyani focused on tuberculosis, cancer, malaria, reproductive and child health issues, use of tobacco, sanitation and hygiene and HIV/AIDS (UNAIDS, 2004).

### **1.1.8 Audio-Visual Media for Attitudinal and Behavioural Changes in Relation to Cancer, Cancer Prevention and PLWC**

Audio-Visual Media is an effective tool of communication for all people either literate or illiterate. It is ubiquitous in Indian life and is a popular medium for entertainment and information found in every household, rural as well urban. There have been numerous researches about the portrayal of culture on television and its effect on communities. Going hand in hand with popular belief, television did turn out to be the most popular and effective mass medium for health communication (J.A. Flora, 2010). Extant scholarships highlight the predominantly negative effects of culture portrayed by television. The negative effect has been generalised to the realm of health with a large number of studies investigating role of television in context of the portrayal of

drugs, alcohol, substance abuse, violence and western culture. According to Rogers (Rogers, 1995), mass media and for that matter, television can promote the diffusion and adoption of many technical and social innovations. Television can shape opinion and behaviour in different ways – 1: television can form the opinion of the masses and influences decision making process by carrying advocacy about health related issues; 2: television can create awareness, educate, influence attitudes and mobilizes individuals, groups, communities, opinion leaders, religious opinion leaders and government and non government organisations towards recommended behaviour; 3: it can convince masses for behavioural change through reinforcing messages and by facilitating favourable environment towards recommended health behavior.

Cancer is totally an unacknowledged problem among people. Misconceptions, embarrassment related to it, beliefs and behavioural attitudes toward this phenomenon are found ridiculous. According to these studies, Cancer in India is in a dismal situation. It is really depressing that in 21<sup>st</sup> century this issue is still considered as a taboo subject in the rural areas as well as in the urban areas too. The major problem is a communication gap which should be minimised in order to promote the healthy practices and better understanding regarding health seeking behaviour among females and males, both. Today Cancer and Cancer prevention has become one of the top national agenda of development.

Thus, better communication strategy well credited with advocacy, behaviour changes and social mobilizations is required in combating this issue. These strategies seek to change the social climate to encourage healthy behaviours, create awareness, change attitudes and motivate individuals to adopt recommended behaviour. Thus, the study of different literature on the subject showed that Mass Media could create favourable environment for acceptance of health messages. Media brings issues to the public notice, and helps to create a favorable social climate, counter hostile propaganda, dispel rumours and clarify doubts and misunderstandings about health related issues. Mass Media mediums are powerful tools for informing, influencing and motivating people about health related issues. It can effectively raise public awareness and motivate people towards achieving desired goal. Media has an enormous audience which is uncounted and scattered. Large numbers of people access its information, through a variety of television programs on social, development and health related issues.

Documentaries entertains people as well as informs and educates them on social, development and health care related issues.

## **1.2 Objectives of the study**

The main objectives of the proposed study are:

**1.2.1** To identify the socio-cultural myths related to Cancer among masses.

**1.2.2** To examine the information consumption pattern among masses regarding cancer related information.

**1.2.3** To study the attitudinal changes among targeted audience after the strategic Media intervention.

**1.2.4** To test the effectiveness of strategic media interventions messages for attitudinal and behavioural changes with regard to Cancer, Cancer prevention and People Living With Cancer (PLWC).

**1.2.5** To identify/assess attitude, behaviour and biasness of the masses towards PLWC.

## **1.3 Theoretical Framework**

The theories relevant to the use of mass communication/mass media for health communication primarily connect the communication process for health awareness and for attitudinal and behavioural changes pertaining to health issues in target groups. Mass media plays an important role in creating awareness and to mobilize people towards positive change in health behaviour (Randolph and Vishwanath, 2010). Some of such theories are - Theory of Reasoned Action (TRA), Theory of Planned Behaviour (TPB), Social Cognitive Theory (SCT), Health Belief Model (HBM), Diffusion of Innovation and Cultivation Theory. Health communication theories indicate four factors that could influence individual intention and behaviour:

- a) Perceived susceptibility of the individual to an illness or disease;
- b) Individual's attitudes toward a particular health behaviour;

c) Perceived norms, in turn, influenced by the group and the community environment in which an individual operates;

d) Self-efficacy, an individual's confidence in performing behaviour.

Together, these four set of factors can decide the success of a mass media health campaign. The mass media health promotion campaigns based on these theories are - Colorectal cancer screening in USA; campaign against drinking alcohol; promoting walking in West Virginia; Sensation Seeking Targeting (SENTAR) prevention approach to reduce use of drugs among adolescents in Fayette County, USA etc (Palmgreen, Donohew, Lorch, Houle, & Stephenson, 2001) . The campaign planners used Social Cognitive Theory (SCT) to develop a health promotion campaign to promote colorectal cancer screening (Jorgensen et. al., 2001) while campaign against alcohol consumption was based on the Theory of Reasoned Action (TRA). The campaign focused on dispelling irresponsible social norm as a component to change health behaviour; these irresponsible social norms are alcohol consumption, smoking in public places, throwing waste in open places etc (Oh, et al., 2002). The campaign to promote walking in West Virginia was based on the Theory of Planned Behaviour (TPB). The campaign achieved huge success in increasing level of physical activities among people. Most of these campaigns used mass media like radio and television to spread messages along with other supplementary materials (Roger, Cooper, Booth-Butterfield, Smith, & Bauman, p. 2002).

The present study has been taken up with the following theoretical framework. There are a myriad of theories and model of communication which support the study as follows:

### **1.3.1 The Individual Differences Theory**

The Individual Differences Theory (L Melvin De-Fleur, 1976) suggests that each individual has a distinctive quality that's why they react differently to messages. The individual responses to media are based on the levels of intelligence, beliefs, opinions, values, needs, moods etc. of the person.

Further, Social Cognitive Theory which is also known as Social Learning Theory (Bandura, 1977, 1986, 1997) explains behaviour as a result of three reciprocal factors: behaviour, personal factors, and outside events. Any change in any of these three factors is expected to determine changes in the remaining ones (National Cancer Institute and National Institutes of Health, 2002). According to SCT, three main factors affect the likelihood that a person will change a health behaviour: (1) self-efficacy, (2) goals, and (3) outcome expectancies. If individuals have a sense of personal agency or self-efficacy, they can change behaviours even when faced with obstacles. If they do not feel that they can exercise control over their health behaviour, they are motivated to act, or to persist through challenges (Institute of medicine). SCT evolved from research on Social Learning Theory (SLT) which asserts that people learn not only from their own experiences, but by observing the actions of others and the benefits of those actions. Behaviour is viewed to be influenced by a combination of personal and outside factors and events. This theory has been used successfully as the underlying theory for behaviour change in areas ranging from dietary change (Baranowski, et al., 1993) to pain control (Lorig, et al., 1999).

### **1.3.2 Communication Theory**

Communication Theory explores “Who says what, in which channel, to whom, and what effects.” It investigates how messages are created, transmitted, received, and assimilated. When applied to public health problems, the central question theories of communication seek to answer is, “How do communication processes contribute to, or discourage, behaviour change?” Focused on improving the health of communities rather than examining the underlying processes of communication, public health communications is the scientific development, strategic dissemination, and evaluation of relevant, accurate, accessible, and understandable health information, communicated to and from intended audiences to advance the public’s health (Bernhardt, 2004).

Public health communications can increase knowledge and awareness of a health issue; influence perceptions, beliefs, and attitudes that factor into social norms; prompt action; demonstrate or illustrate healthy skills; increase support for services; debunk misconceptions; and strengthen organizational relations (Bethesda, p. 2001).

### 1.3.3 Media effects

Media effects research investigates not only how the media influence the knowledge, opinions, attitudes, and behaviours of audience members affect the media. Because audience members are active seekers and users of health information, the content transmitted through the media reflects their needs, interests, and preferences. Two questions are central to understanding the effects of media on audience members: 1) What factors affect the likelihood that a person will be exposed to a given message ? 2) How do media effects vary with the amount of exposure to that message? (Institute of medicine).

### 1.3.4 P-Process Model

For developing an effective Media intervention tool, the P-Process Model of Communication is one of the most respected tools for designing a health campaign. The P-Process has provided a concrete structure for planning strategic based health communication programmes (P T Piotrow, 1997). In this study the P-Process framework will be used collaboratively as a guide to designing a strategic health communication media intervention for cancer and cancer prevention.

P-Process Model

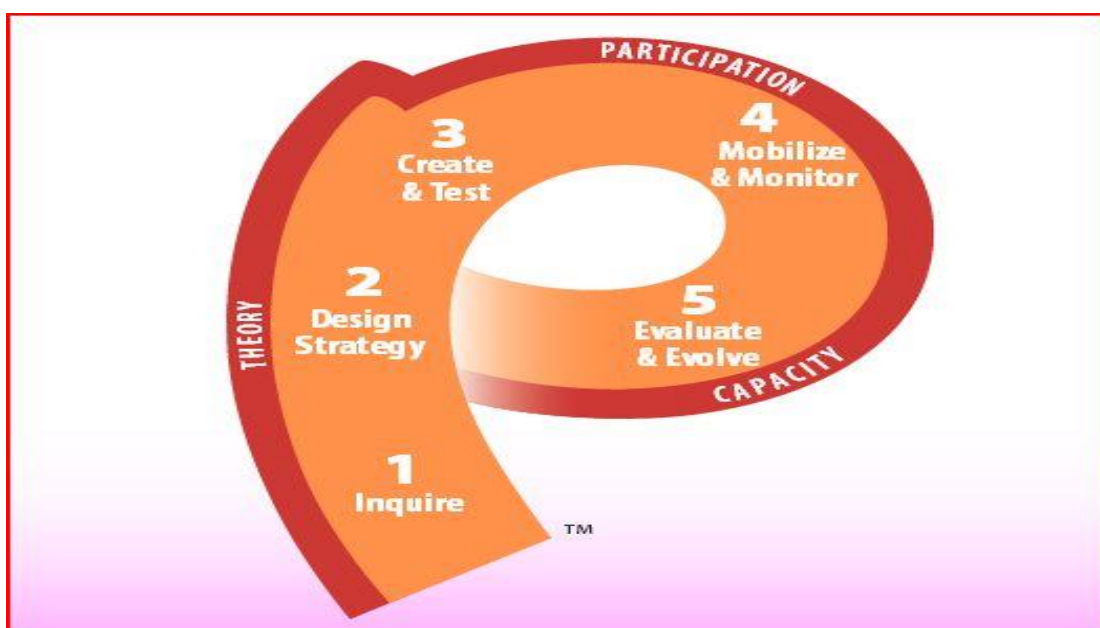


Figure-1.1- P-Process Model; Source: (Earth Institute Columbia University, 2004)

P Process Model: Updated in November 2013 by the Health Communication Capacity Collaborative (HC3), P Process is a tool originally developed by “Johns Hopkins Bloomberg School of Public Health Center for Communication Programs (JHU-CCP)” in 1982 (Earth Institute Columbia University, 2004).

### **1.3.5 Health Belief Model**

The Health Belief Model (HBM) was one of theories of health behaviour, and remains one of the most widely recognised in the field. In 1950’s a group of social service psychologists from the “United States Public Health” tried to explain why lesser people were participating in programmes to prevent and detect disease. Researchers expanded upon this theory, eventually concluding that six main constructs influence people’s decision about whether to take action to prevent, screen for, and control illness. They argued that people are ready to act if they:

Believe they are susceptible to the condition (perceived susceptibility)

Believe the condition has serious consequences (perceived severity)

Believe taking action would reduce their susceptibility to the condition or its severity (perceived benefits)

Believe costs of taking action (perceived barriers) are outweighed by the benefits

Are exposed to factors that take prompt action (e.g., a television ad or a reminder from one’s physician to get a mammogram) (cue to action)

Are confident in their ability to successfully perform an action (self - efficacy)

Since health motivation is its central focus, the HBM is a good fit for addressing problem behaviours that evoke health concerns (e.g., high-risk sexual behaviour and the possibility of contracting HIV). Together, the six constructs of the HBM provide a useful framework for designing both short-term and long-term behaviour change strategies.

## The Health Belief Model

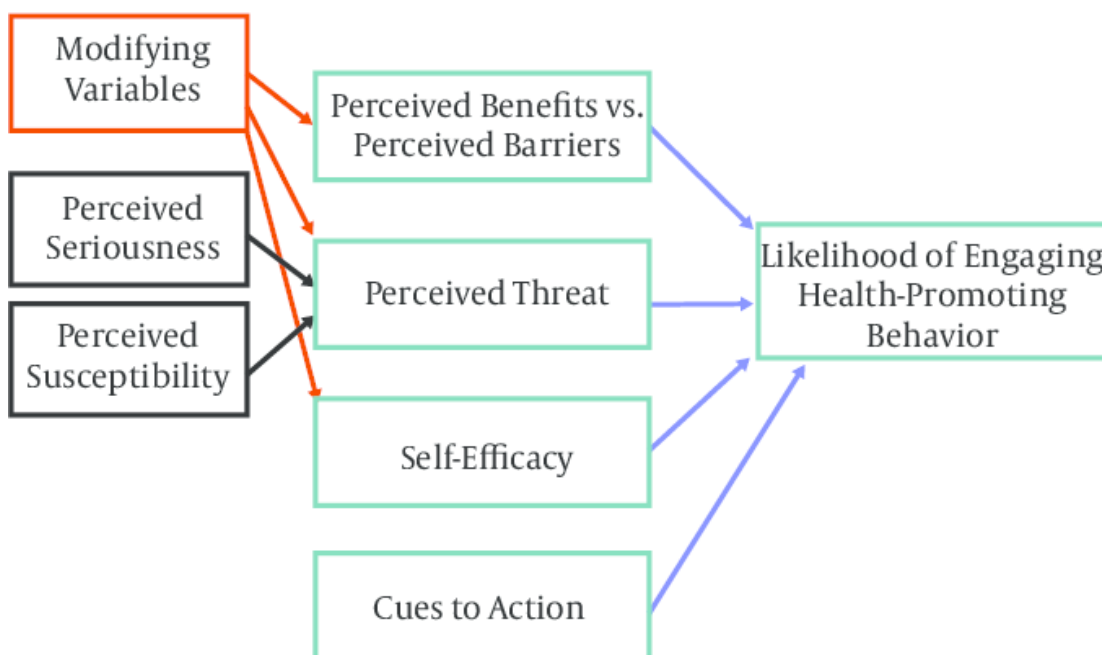


Figure-1.2-The Health Belief Model-Source: (Maliheh Dadgarmoghaddam, 2016)

The health belief model (HBM) addresses the individual's perceptions of a threat posed by a health problem (susceptibility severity), the benefits of avoiding the threat, and factors influencing the decision to act (barriers, cues to action, and self-efficacy).

### 1.3.6 Precaution Adoption Process Model

“The Precaution Adoption Process Model (PAPM)” specifies seven distinct stages in the journey from lack of awareness to adoption and/or maintenance of a behaviour. It is a relatively new model that has been applied to an increasing number of health behaviours, including: osteoporosis prevention, colorectal Cancer screening, mammography, hepatitis B vaccination.

In the first stage of the PAPM, the individual may be completely unaware of a hazard (e.g., radon exposure, the link between unprotected sex and HIV). The person may subsequently become aware of the issue but remain unengaged by it (Stage 2). Next, the person faces a decision about acting (Stage 3); may decide not to act (Stage 4), or may decide to act (Stage 5). The stages of action (Stage 6) and maintenance (Stage 7) follow. According to PAPM, people pass through each stage of precaution adoption

without skipping any of them. It is possible for people to move backwards from some later stages to earlier ones, but once they have completed the first two stages of the model they do not return to them. The PAPM recognizes that people who are unaware of an issue, or are unengaged by it, face different barriers from those who have decided not to act. The PAPM recognises that people who are unaware of an issue, or unengaged by it face different barriers from those who have decided not to act. The PAPM prompts practitioners to develop intervention strategies that take into account the stages that precede active decision making.

### 1.3.7 Precede Proceed Model

When practitioners begin the process of planning an intervention to promote health or change health behaviour planning models such as PRECEDE-PROCEED and social marketing, help practitioners develop programme step-by-step, integrating multiple theories to explain and address health problems.

## PRECEDE-PROCEED Framework

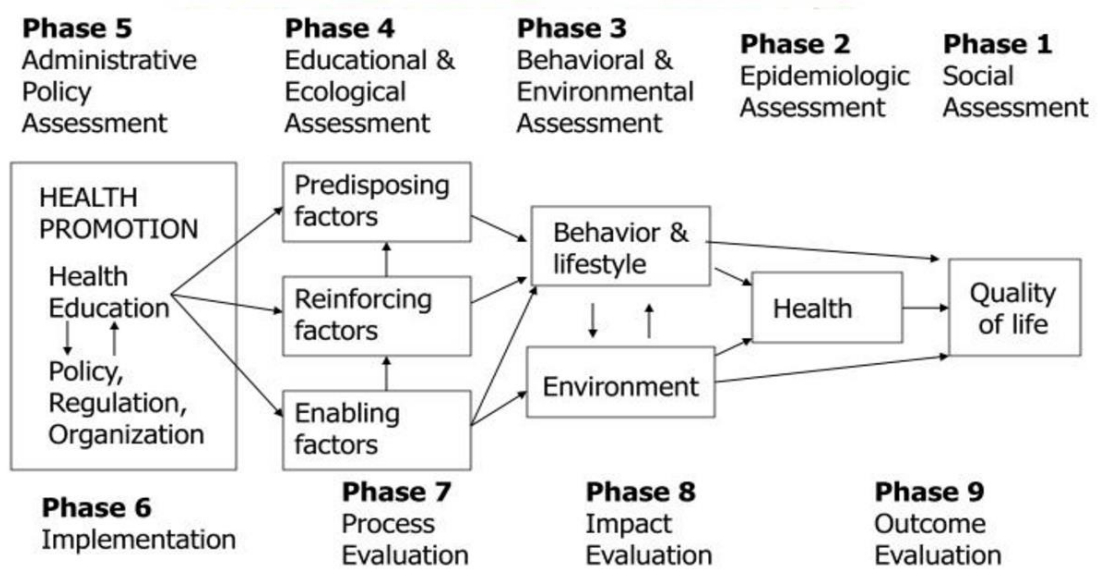


Figure-1.3-The Precede-Proceed Model-Source: (Jhonson, 2016)

The PRECEDE-PROCEED model instruct the practitioner to begin the planning process by assessing the target audience's needs at multiple levels of a health problem. In PRECEDE-PROCEED, it includes carrying out epidemiological assessment; behavioural, educational, environmental, and organizational diagnosis; and

administrative and policy assessment. Both planning models combine behaviour change theories for greater impact and use them as a basis for evaluation. Developed by Green, Kreuter, and associates in 1974, PRECEDE-PROCEED provides a road map for designing health education and health promotion programme.

### **1.3.8 Agenda Setting Theory**

The mass media can illuminate and focus attention on issues, helping to generate public awareness and momentum for change. Agenda setting involves setting the media agenda (what is covered), the public agenda (regulatory or legislative actions taken on issues) (Dorfman & Krasnow, 2013). Research on agenda setting has shown that the amount of media coverage an issue receives correlates strongly with the public's opinion on how important that issue is.

Thus, the above theories and models have supported this study.

## **1.4 – Research Questions and Hypothesis**

### **1.4.1 Research Questions**

- **RQ1: Are there ways out to prevent Cancer?**
- **RQ2: Why are there myths regarding Cancer and Cancer prevention?**
- **RQ3: What is the main source of information about Cancer and Cancer prevention among masses?**
- **RQ4: How does communication assist the attitudinal changes among masses on the issue of Cancer and Cancer prevention?**
- **RQ5: Is strategic Media interventions effective in creating Cancer awareness among the masses?**
- **RQ6: What is the awareness level of the masses regarding different Cancer prevention policies and programs by the government.**
- **RQ7: Is there any gender bias in relation to attitude and behaviour of the masses towards PLWC?**

### **1.4.2-Hypothesis for McNemar- Bowker Test:**

- **H<sub>0</sub> (Null Hypothesis):** there is no difference in the proportion of participants' response pre and post media intervention

- **H<sub>1</sub> (Alternative Hypothesis):** there is the difference in the proportion of participants' response pre and post media intervention

## **1.5 Scope and Research Methodology**

### **1.5.1 Scope**

Communication has a vital role in developing good health practices. Without communication it is difficult to visualise the promotion of healthy choices among people. Effective communication strategies will increase the knowledge and awareness of a Cancer and Cancer related health issue, problem, or solution among targeted group. It will influence perceptions, beliefs, and attitudes of people that may change social norms regarding Cancer and Cancer prevention. Therefore, it will be beneficial to reinforce the knowledge, attitude and behaviour of a person which advocate a position on a health issue. The present study analyses the effective communication strategy for maintaining good health practices related to Cancer and Cancer prevention among masses. Since a proper communication strategy will influence the peoples towards positive healthy attitudes. Further, this study can also be implemented to combat other health related issues.

This study also examines effectiveness of strategic Media intervention for creating awareness about Cancer and Cancer Prevention and for shaping attitude of common people towards PLWC. The objective of the study is to find out role of strategic media intervention in reducing Cancer related stigmas and discrimination among masses. The study examines the awareness level of masses about transmission and prevention of Cancer. The entire research study focuses on the communication strategy for Cancer and Cancer prevention, awareness and role of strategic Media intervention to educate community about transmission, prevention and treatment of Cancer and dispel myth and misconception about Cancer and PLWC. Awareness is an important tool to fight and prevent Cancer as it is said that if Cancer is detected early it can be cured easily. The proposed research study is significant because in addition to investigating the role of strategic media intervention for creating awareness about Cancer and Cancer prevention, it also focuses on stigma and discrimination being faced by PLWC and what the role of Mass Media plays in effecting attitudinal and behavioural changes will be in regards to PLWC.

### **1.5.2 Methodology**

Research methodology is the major part of any research which constitutes research design, methods, variables, tools etc. The Present study entitled, “Role and Impact of Media Interventions in creating awareness about Cancer among Masses”, is mixed Research in nature because it is being based on formative and summative research.

Formative Research uses qualitative and quantitative methods to provide information for researchers to plan intervention program (Gittelsohn, et al., 2006). Formative research is carried out before (Pilot Study) and during the project to determine and refine the project planning process, provides accurate and up-to-date information to strategically to develop the project on a sound and improved basis. Formative research is the process by which researcher or public health practitioners define a community of interest, determine how to access that community, and describe the attributes of the community that are relevant to a specific public health issue (NCHHSTP/DHAP/BCSB, 2013)

Summative research or conclusion research on the other hand is done at the end of a project and is used to determine its success. Summative assessment is used as an evaluation technique in instructional design. It can provide information on an intervention’s efficacy (its ability to do what it was designed to do). Summative evaluation judges the worth, or value, of an intervention at its conclusion.

The proposed study is carried out as a formative research as well as summative research, so it is mixed research study in a nature.

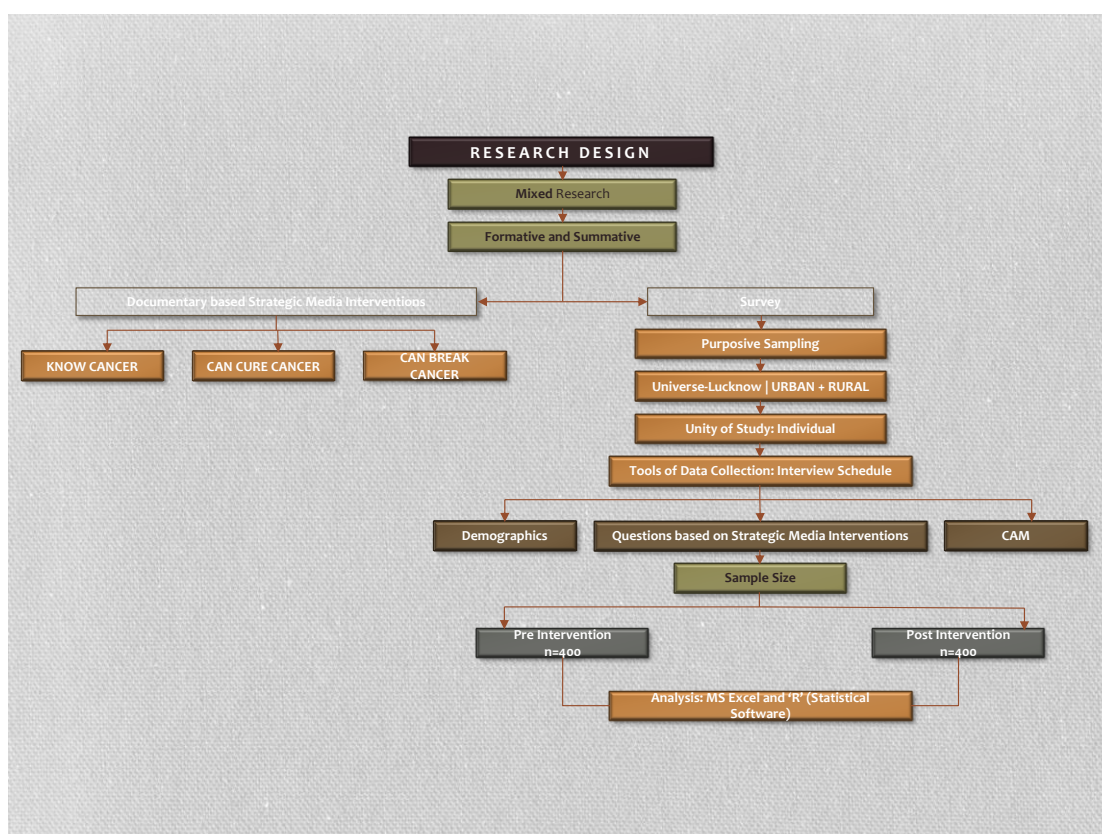
The study is formative research in nature because this research has gain insights into health seeking behaviour regarding cancer through strategic media intervention. For the evaluation of the formative study needs assessment has been followed for pilot study as well as while designing strategic communication intervention. Needs assessment determines who needs the program, how great the need is and what might work to meet the need.

The study is summative research as efficacy and outcome of the strategic media interventions are studied. For the evaluation of the summative study outcome

evaluations and impact evaluation was followed. Outcome evaluations investigate whether the program, technology or intervention caused evident effects on specially targeted audiences. Impact evaluation assesses the overall or net effects of the strategic interventions.

### 1.5.2.1 Research Design

Flowchart of Research Methodology adopted



**Figure 1.4- Flowchart of Research Methodology Adopted**

### 1.5.2.2 Universe

The Universe of the Study is Lucknow (urban and rural areas of Lucknow district), as oncologists in the country see Uttar Pradesh as the emerging Cancer capital of India. Findings of the Population Based Cancer Registry functioning under the “*National Cancer Registry Programme*” of the Indian Council of Medical Research, suggest that Uttar Pradesh accounts for more than 16% of cancer patients in India. Figures show that more than 10.55 lakh cancer cases were reported in the country in 2011. Of the

total, 1.71 lakh patients hail from UP (Times of India, 2013). Lucknow being the capital of Uttar Pradesh has a big concern related to Cancer and Cancer prevention.

### **1.5.2.3 Unit of Study**

Unit of study is an important part of research because whole research based upon it. In this study an individual (An Adult) is being considered as a unit of research.

### **1.5.2.4 Sampling**

A sample is some part of a larger body especially selected to represent the whole. Sampling is the process by which a particular part is being chosen, sample then is taken as portion of a population or universe which acts as the representative of that population or universe. Non Probability Sampling- “Purposive Sampling” is being used by the researcher for this present study.

Purposive sampling is being

### **1.5.2.5 Sample Size**

Sample size is 400 people (Adults), Pre Intervention 400 respondents, post intervention 400 respondents.

### **1.5.2.6 Data Collection Tool**

For data collection it is necessary to choose right form of data collection tools, keeping the research objectives into consideration qualitative data is being collected in the form of audio visual recorded interviews from doctors, oncologist, Pharmacologist, and Cancer Survivors. On the basis of these respective interviews three different documentaries have been made by researcher whose impact on masses is being studied. Experts whose audio-visual interview are recorded for the present study are:

- **Prof. Shubhini Saraf**, Professor- Department of Pharmaceutical Science, Babasaheb Bhimrao Ambedkar University, Lucknow.
- **Dr. Rohini Khurana**, Radiation Oncologist, Department of Radio Oncology, Dr. Ram Manohar Lohiya Institute of Medical Sciences, Lucknow.
- **Dr. Geeta Khanna**, Gynecologist & Obstetrician, Ajanta Hospital, Lucknow.

- **Dr. Anand Mishra**, Professor- Department of Endocrine Surgery, King George's Medical University, Lucknow.
- **Dr. Sudhir Singh**, Associate Professor- Department of Radio Therapy, King George's Medical University, Lucknow.

Three Documentaries based Strategic Media Interventions are:

1. **Know Cancer** (encompasses information about Cancer, its Symptoms and Carcinogenic Agents)
2. **Can Cure Cancer** (showcases different types of treatment availability in Lucknow with regard to Cancer)
3. **Can Break Cancer** (Showcases Journey of three different Cancer Survivors; namely; Gluab Jahan-Eye Cancer survivor; Ram Singh-Blood Cancer Survivor and Sanjog Walter-Mouth Cancer Survivor).

Keeping into consideration the various objectives of the research, Interview schedule has been adopted as a tool of data collection from the respondents. Interview schedule consisted of both close-ended and open-ended questions for survey among masses. Pre Intervention and Post Intervention, Interview Schedule is being used to collect data, including CAM -Cancer Awareness Measure. Data was collected during January 2019 to March 2020.

#### **1.5.2.7 Variables of the Study**

The research study has independent and dependent variables:

##### **1.5.2.7.1 Dependent Variables**

- Effects on 'gender, warning signs and symptoms, risk factors, attitudes towards help-seeking, awareness of the link between cancer and carcinogenic agents, age, are dependent variables of the study.

##### **1.5.2.7.2 Independent Variables**

The strategic documentaries- based media interventions for Cancer awareness and Cancer prevention has been taken as independent variable.

### **1.5.2.7.3 Data Analysis**

**1.5.2.7.3.1 Statistical and Mathematical Techniques:** Percentage Method and McNemar Test

**1.5.2.7.3.2 Software's Used:** Microsoft Word Microsoft Excel and R Statical Software

**1.5.2.7.4 Presentation of Data:** For the presentation of data, researcher has used pie charts and tables to present the data in an explicit manner.

## **1.6 Significance of the Study**

Communication is a key component of many aid programs to improve living conditions of people. Health communication is a strategic application of communication technologies and processes to promote social change. Effective health communication strategies are vital as they provide the public with the tools and knowledge to react appropriately against poor health situations. As this study is focused on Cancer and Cancer prevention factors, therefore, a better cancer based communication strategy is essential to overcome this dismal situation. Cancer and Cancer prevention communication strategic media interventions will catalyse the attitudinal changes on a societal level which will further stimulate the whole community into taking positive actions that are related to good health and healthy practices. By taking the essential steps and methods at the right time, it will promote them to have a healthy life out of the fallacies and attitude which are related to Cancer and Cancer prevention.



## **Chapter 2**

*Literature Review : Relevance  
of Media Interventions in  
Creating Awareness about  
Cancer*



## *Chapter 2*

# *Literature Review : Relevance of Media Interventions in Creating Awareness about Cancer*

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Global media has affected many facets of our society from getting up to sleeping. Due to technological advancements, mainstream outlets have grown across our culture over the years; we already have the ability to control such mass media with one touch. Health and the mass media have played an important part in affecting a healthy lifestyle as one of the topics in our culture. This tool is often used to educate people about the benefits of adapting a healthier lifestyle. This is especially beneficial if they are at risk of a disease. People take decisions with the information provided by the media.

Carmelo Anthony (Anthony) once said, “It is my life's greatest decision to make any decision.” Every decision that we make in our lives, in particular medical decisions, depends on our interpretation of knowledge, which we receive. Medical decisions are the most difficult because an incorrect decision can complicate the rest of our lives. It is important to understand how people have developed over time to be unfavourably aware of progress in medicine. Due to various mass media, various people connect with it in their own way and find it convincing through famous icons that foster this specific mode of life. Medical tests are a great tool for disease prevention and well-being.

In reality, via the different media, medical tests have gained popularity over the past few years. Medical tests have become more popular over the years; however, the mass media don't relay data correctly. Most people only know the test side and take the tests without any recommendation or complete knowledge. Various media have various methods, but manipulating them is not the right approach to promote a scientific development in our society, which is highly relevant. There are very few people who search the media outlets, so most of the time people do not become cynical regarding facts. This is why the consequences of not transmitting information properly are important to understand. Mass media is certainly an excellent way of sending

information to everybody, but that should be done correctly. An analysis of popular media methods shows that support for medical screening, in particular breast cancer screening, has a powerful impact; but, it's still crucial to remove all misleading information from the mass media. Asia accounts for nearly one-fifth of current cancer diagnoses (48.4 percent) and over fifth of cancer deaths globally (57.3 percent), according to the Regional Cancer Observatory (2018). Lung, colorectal, breast, stomach and liver cancers are the most frequent cancers (International Agency for Research on Cancer, 2018).

In terms of languages, beliefs, and currencies, Asia is a continent consisting of different nations. In most Asian countries, economies are developed and graded as Low or Middle Revenue (LMICs) (World Bank: World Bank List of Economies.). As most Asian countries have the LMICs (Fidler, 2016) the positive association between the Human Development Index and the age-standard cancer incidence in Asia is high. High levels of cancer mortality for LMICs may be reduced and several fatalities prevented by better test programmes to encourage early diagnosis (Sankaranarayanan, 2014). In most Asian countries, population-based screening programmes do not exist, and late detection is often contributed by less than optimum availability of screening facilities.

One of WHO's goals is to reduce non-communicable diseases' premature death, like cancer, by 25% by 2020 (Cancer Early Diagnostic Handbook). One of the first steps towards an early diagnosis is, according to the WHO and the other experts, raising awareness on cancer symptoms and signs and encouraging the search for help. Programs that promote awareness of the warning signs and symptoms of cancer and the advantages of early detection therefore need to be prioritized. In those countries that lack resources for population-based screening, especially for colorectal and breast cancers, this form of secondary prevention should be implemented (Lertkhachonsuk, 2013). Mass and media programme evaluations in western countries have produced promising findings in promoting healthy behaviour, (Mosdøl, 2017) increased knowledge about cancers and enhancing screening rates (SNYDER, 2004) (Wakefield, 2010) and earlier cancer diagnosis (Ironmonger, 2015). However, the available evidence on the efficacy of media campaigns to improve health-related symptoms in Asia must be identified, evaluated and summarised [Hou S-I et al (2011)]. The information provided is not only available but also implementable.

Social media include television, radio and magazines, advertisements, flyers and the Internet as well as smart media (i.e.) targeted at attracting other individuals (Brinn, 2010) (Dominick, 2003). Mass media was often utilised for the government (Dominick, 2003). The primary medium is the web. The main targets are small media to individuals rather than groups (e.g., mailed letters, other mailed information, telephone calls, emails, SMS messages, CDs or CDs intended for individual or small group viewing, etc. (Brouwers, 2011). Small media usually targets individuals rather than groups. The goal is to decide if mass media and small media programmes have raised understanding and recognition of cancer signs, changed cancer screening behaviours, through vaccination, self-screening, and cancer detection rates in Asian countries.

### **2.1 Social Media: A Platform for Hope**

Susannah Fox (S, 2011), former head of technology at the US Department of Health and Human Services has named the social media "a platform for hope," and has stated that the clinical trial community has a "ethical obligation," by sharing information with researchers on the Internet, to understand social media and act ethically in conjunction with patients. Fox claimed that it is frustrating that late-stakeholders, including academics, doctors, physicians and medical experts, participate in the debate in social media. In seeking out how social networking might affect clinical research, she encouraged them to reach out to patients and supporters. She characterized clinical trials as "a good few want to purchase" at the time, stating that "people don't want what researchers offer." Fox observed that before the rise of social networking, no clinical trials researchers were educated. Fox has reference to statistics and data from the Pew Research Center (Social Media Fact Sheet., 2018) and has noted trends in Internet access, mobile access and social platforms to illustrate the capacity or reach of the Internet and social networks. In 1996, 14% of the adult population had access to the internet, while in 2018 89% of the adults had access to the internet.

A cultural shift has taken place, and people now expect to have access to information on request at all times. For older adults, one of the most difficult to reach clinical trial populations is: 82% of adults aged 65–69 and 75% of those aged 70–74 use the web. 44 percent of those over 80 years of age use the Internet. She found, not unexpectedly, older adults with college degree and higher income families are far more

likely to utilise the Internet than those with less education and lower incomes. In comparison with 49 percent of older adults with high school diplomas, 92 percent have internet access. Yet, Fox was swift to alert people not to neglect elderly adults' offline; safety records would certainly be accessible to their guardians and relatives online.

In addition, Fox (S, 2011) noted 9 in 10 adults who use their mobile phones, with 80% of adults older than 65, 45% of those over 65 who use their smartphone. Fox claimed that 7 out of 10 people on social networking sites had an online identity (e.g. Facebook, Twitter, and Instagram). The number of adolescents is higher. Such developments opened the knowledge flow.

She explained that the web has made it easier for researchers and clinicians to flow information faster into patients. However, information needs to be transferred from patients to medical doctors and scientists. This is where clinicians and scientists often see resistance. The challenge is not knowledge exposure, but one another's exposure. Clinician and scientist must be motivated and reassured because patients hear about them and about their friends. We should try our best to connect through mass media platforms involving as many people we can. Social networking would allow patients to learn what's going on in clinical trials. It's not impossible for patients to engage in clinical studies because their curiosities and expectations are addressed.

Fox explained in a single emotional moment how her dad was diagnosed in 2016 with stage IV melanoma. Sadly, he had numerous side effects shortly after the infusions began, and the trial had to stop early. Fox said that the proceedings were "cooked up". The term "cooked up" as she described represents the feeling of her father. Like a wave that washes his father across his boat and down to the sea. And because they never got to meet the researchers again, they felt really lonely. Fox claims she should have scored her father's trial with one star if yelp ratings for clinical trials existed. She suggested that trials might be rated.

In response to the suggestion by Fox that researchers listen to the patient's discussion to better understand the experiences of patients; Participants expressed concern that "hearing where you don't want would not be ethical." For instance, on SmartPatients.com, a platform that facilitates patient participation in clinical trials, there are separate forums for clinicians and patients. The moderators of the forums look

for patient input for clinicians and ask users for their approval to do so if moderators find a message they wish to communicate with clinicians.

### **2.1.1 Connecting trials to the community**

Session chairman Andrea Denicoff, RN, head of operations for NCI 's National Clinical Studies Network, spoke about the challenges of increasing cancer trials and the ways in which social media can help, with (Cancer Moonshot<sup>SM</sup>. (n.d.), 2018), (Eijk V, 2017). Her hope was to improve the use of social media as a tool to inform and educate patients and ultimately encourage more people to take part in clinical trials. Denicoff provided information to participants about historical challenge in accrual conditions, such as lack of community participation in clinical studies, lack of interest in studies, lack of clinical trial awareness, and doctors' failure to recommend studies to patients.

She said the problem is to understand the role of social media in helping patients to raise awareness of trials, encourage doctors to recommend studies, and improve researchers' ability to communicate to the public in order to enhance their study understanding. Denicoff stated that, in earlier this year, a Twitter page was developed by the Cancer Therapy Appraisal project, to provide NCI patients and sources with more knowledge on clinical trials and to educate clinical trials.

In the course of online communications Denicoff identified the following question to suppliers and sites:

- What is the purpose of social network use?
- How can I use it for our assistance?
- Who's the correct focus group?
- Which social network forms will be used?
- How are measured successes?

During her lecture, Wendy Lawton of SWOG Communications and PR (formerly the SWOG) indicated that some of the issues with the recruiting of patients in clinical trials were unfair and ambiguous. There has been a huge explosion of international trials. Lawton cited figures from ClinicalTrials.gov (Eijk V, 2017), revealing that ClinicalTrials.gov has 8,588 studies reported in 2003. This number rose

to 274,183 in June 2018. The test language is at the same time confusing and full of scientific terms and pharmaceutical names that people cannot understand. In fact, crucial knowledge, like how to contact for more details, isn't necessarily shown prominently. In order to alleviate uncertainty and improve access of NCI research, Lawton proposed that the online cancer study would “look at a 38-page English menu and when you want of order, there is no waiter in sight.”

Encouragement of high intensity oncology clinical projects of the NCTN and the NCI Society Oncology:

- To be aware of trials – not to sell them
- NCTN show interest and public effects
- In all online venues use plain language
- Build blogs and Internet search resources based on patients.
- Exceptional client support available through an expanded NCI Contact Center

Don Dizon, MD, Life-Span Cancer Institute director of women cancers and Rhode Island Hospital medical oncology director, talked about the importance of community development and clinicians' support. He agreed with Fisch that it was neither easy nor effective to call colleagues at the social media table. One survey showed that many clinicians never use social media or rarely do so. 60% of the physicians who replied the survey did not find it necessary, but saw benefit for the patients.

According to Dizon, healthcare practitioners see social networking as a waste of resources and as a massive challenge of an uncertain benefit. They don't see and treat social media as scientific. By demonstrating the importance of utilizing social media, he recommended that clinic peers be interested. SWOG, whose Chairman is Dizon, has included digital engagement in its range of communication channels. SWOG defined digital engagement as a two-way interaction tool. The mission is to increase communication with the community and improve links between SWOG and the public and to improve the research enterprise, SWOG Committee on Digital Engagement. The Committee must review its interactions with both primary and secondary targets as a multimedia resource to assess if the priorities are well-defined, the approach well-designed and whether the strategic strategy is successful.

Dizon is a member of Oncology's Results Collaboration on Social Media. The collaboration focuses on clinical cooperation, the definition of best practices and research and empirical research results to establish or refute the benefits of social media. To date, it has been promoting hashtags online and publishing numerous articles. Dizon emphasised the need for such job, as patients would carry the details to their medical personnel electronically. If the clinician does not know where the patient got the details, he noticed that they do not start talking at a reasonable location.

## **2.2 Online engagement of patient communities**

An emotionally moving session on online communication resonated with Fox's earlier comment on social media as a platform for hope. Patient advocates, members of the family and survivors discussed how after the diagnosis patients use social media to support their lives.

Janet Freeman-Daily, M.S., an online patient community co-founder of ROS1ders, is a cancer survivor. The information she finds in social media has saved her lives. After a uncommon type of lung cancer, which alts the ROS1 gene and is disappointed by the reality that there is little knowledge on genetic testing and electronic clinical trials, Freeman-Daily extended her work to see what she was capable of. She heard of a research study that she was registered for in a patient group on social media. She took part in the trial and now has no evidence of the condition. Clinical studies "not just science" are hope for her and other patients. Online patients are able to find a number of online tools, including forums, group networks, Facebook and Twitter hashtag groups. As Freeman points out. This can offer hope, support, education, capacity building and relationships with other patients. Patients may use these forums to feel less isolated and to publicly share things that their families may want to communicate from others. Social networking sites like Facebook, Twitter, Instagram, LinkedIn etc. "allow patients to contact the team," said Freeman-Daily. Patients don't want to be health experts, she added, they want expert partnerships. The awareness of patients will be used by scientists and researchers.

Freeman-Daily discussed how online cancer communities are also driving innovation:

- The education and provision of patients
- Doctors' study Research
- Patient-partnered study (for example, researchers begin a project but bring patients into conversation at an early stage on what is essential for the work)
- Patients' needs-driven research

Online communities can provide real-world data, which in rare cohorts is particularly useful. In just one percent of lung cancer patients, for example, a ROS1 mutation occurs, while only 35 new patients can be studied each year. In light of this, more than 200 patients in the ROS1ders are identified. Freeman-Daily identified ways in which researchers in clinical trials might understand social media:

- Have participants in the clinical study at the start.
- Remove certain pharmacy barriers to patient group's communication.
- Exchange preclinical details and the status of trial enrolment openly, because patients can also exchange this knowledge.
- Set patient-researcher relationship ethics standards.
- Educate doctors and supporters to become fully informed of the "evidence" of a clinical case.
- Create linked patient communities to facilitate dialog with other patients.

Smart Patients, an online cancer support network, was created by Gilles Frydman, whose wife had cancer. He encouraged researchers to place a human face to clinical experiments and introduce the actual people to the public understanding. Frydman presented three cases of medical dehumanization:

- Deficient care service — people do not consider role models or others around them as involved citizens, in particular minority people. He highlighted for instance a Google search for "patients" with pictures of white people in hospitals who look sick and sick.
- Deindividualization – no real images of people are brought up in Google's "clinical trials."
- Role Differences — a search by Google for "patients with clinical trials" shows people under doctors.

One of the main reasons for the absence of accrual in clinical trials is this dehumanisation. In the research, patients have to be absolute allies, not scientific topics. People have to see that trials with real persons – scientists, researchers, and patient participants – are a human effort. Frydman stressed his research with *One Citizen Nearby*, a collaboration to resolve the need to humanize trials. *One individual Closer* reveals tales from multimedia clinical trials, showing photos of nurses, scientists and physicians. Frydman presented three historical stories of important medical findings.

The United States Department of Health and Human Services, the national health organizations offer profiles of the first-time active therapeutic therapy scientists, clinical experts and patients who all became interested in the discovery and subsequent launch of medications such as Gleevec. Frydman pointed out that stakeholders must fully change how science and clinical trials are communicated. To put it into perspective, in 16 months, he compared CNN's 7,500 video views on a four-year clinical trial with the 5 billion views of the YouTube video for the song *Despacito*.

Jamie Holloway, Ph.D., a clinical research supporter in *Science 37*, a company focusing on developing networked patient-centric clinical research models. According to the social network, patient recruiting may play a significant role. She investigated Twitter users regarding obstacles to clinical trials, with the greatest barrier (over 70%) being the search for relevant trials. An additional key obstacle was the excessively strict eligibility criteria (70%). Geographical and time limitations (e.g. time off from work and travel) were involved in most other barriers.

In order to address geographical and patient time restrictions, *Science 37* conducts decentralized clinical trials. Holloway pointed out that it did a good job of effectively utilizing social media to move hospitals and clinical environments away from clinical trials. Patient recruitment is mainly done via Facebook and Instagram ads and online consent. In a local medical facility or home health service, all eligibility requirements are met. Once you register a patient, you will receive the medication and everything you need in the mail. The AOBiome research was, for example, the first one, completely on-site from beginning to finish. Social media ads have been used to recruit patients. More importantly, Holloway stated that minority participation in the study was "very unheard of," at 41%.

Holloway focused on the unconscious prejudice of other speakers. While much of the explanations for doctors' inability to provide patients with details on testing were altruistic (for example, they are attempting to take patients' interests and desires into consideration and don't perform trials which they feel are not in the family or money), this lack of knowledge often inhibits the offering of clinical trials to marginalized patients and patients in deprived populations. Research has shown that 'there are not clinical trials available to patients in the minority populations at the same rate as their Caucasian counterparts.' If a person does not know that the trial is present, they cannot participate. They don't have the choice if a doctor doesn't answer them. Holloway said this offers social networks an excellent opportunity to address this need. Ads on social media platforms can be searched using keywords and found online, regardless of the skin color of a patient or where they are living, she explained. Any patient quest should have the same ad or link and must judge for itself.

Holloway admitted that for every clinical trial decentralized models would not work. But she acknowledged that other properties of the decentralized model can be included in fixed site tests:

- • Geo-boundary barriers:
  - Group procedures and tests to restrict the number of visits in person
- Restrict the required procedures to consider certain off-site procedures (for example, blood picking in local laboratory and shipping to clinical laboratory)
- Take note of distance and time allowance
- Use social media coverage targeted:
  - Make it easy to find web presence
- Continue to involve patients after completion of the test

### **2.3 Mass Media**

It is important to understand how the mass media portrays medical progress in positive and negative light before analyzing specific examples of breast screening posts in media. Using mass media studies, I will highlight the importance of providing media consumers with accurate information and the reverse. Overall, when observing how the mass media portrays significant scientific advances, they are usually manufactured, where only the pros are highlighted and the inconveniences are not mentioned. A study

entitled "Unjustified optimism on media profiles of genetic work on addiction shadows Political, Ethical and Social Problems" was released in July 2016 by the Health Engagement Journal. Scientists have begun genetic research on addiction because of the increased rates of addiction in the United States. This article examines how this research, method and techniques are portrayed to the public by the general public. The article's reporters, Ostergren J. (Ostergren, J. E., Dingel, M. J., McCormick, J. B., & Koenig, B. A, 2015) looked at one hundred and forty-five news stories on media addiction genetic studies in the USA; both print and online outlets and found the articles about prevention highlighting vaccine development and the identification of individuals at genetic risk through population screening (Ostergren, J. E., Dingel, M. J., McCormick, J. B., & Koenig, B. A, 2015). Articles on therapy "fostering existing drug solutions and emphasizing the possibility of adapting therapy to certain genetic variants" (Ostergren, J. E., Dingel, M. J., McCormick, J. B., & Koenig, B. A, 2015). The authors are not focused on media outcomes, reporting only the positive aspects of the advances and avoiding reporting on the risks and consequences.

This article focuses on the importance of presenting accurate facts, explicitly communicating to people on both sides of a treatment decision so that when a person is reading media stories they are reading on both sides and not being blindsided by the other. Promoting a test which can prevent patients from suffering a horrible disease in the future is always important. But nowadays, assessments are so readily available; some are even safe, that nobody really understands their importance unless they are in that situation. Right-technology mass media can be a convenient way to promote disease screening examinations that occur far too often in our society. David, a Journal of Health Communication author, published an article examining the effectiveness of a mass media campaign to encourage HIV testing. This article addresses the usage of telephone hotlines and other media outlets to facilitate HIV testing for some young, African American people.

David states the success of these methods of promoting HIV testing, and increasing information among the population about HIV itself. If media expresses the details in the right way, as defined in the HIV Testing campaign, the general public will always be updated successfully. All the information is readily available; the communication is difficult.

Because of the tremendous effect mass media has on the lives of people today, it's important to remember how much of a difference there is between media doing the work extensively and media that doesn't. There is a big distinction, and the disparity will have a tremendous effect on the life of other people in a good or harmful way. Therefore, if work is conducted comprehensively, it can help our society; else, the implications may be dangerous, particularly for medical screening examinations.

#### **2.4 Screening exams**

To understand the importance of reporting thorough information on medical screening examinations, specifically breast cancer screening examinations, it is important to understand how they were developed, as well as the process of a patient undergoing the entire screening examination process; including the risks of screening for breast cancer. At times patients know only the up side of the examination, and not the risks associated with the examinations. Health diagnostic research is a smart way to reduce the incidence of preventative illness. Cancer, particularly in women suffering from breast cancer, is the leading cause of death. Breast cancer screening was introduced in the late 1990s, allowing doctors to detect cancer earlier so they can treat it and prevent it from happening. Breast cancer screening entails both the dangers and advantages. Risks include failure to obtain accurate results; anxiety caused by inaccurate results; risks from exposure to radiation and over diagnosis. Benefits include a fall in mortality rates and breast cancer survival. Indicating benefits enables us to understand how important it is to relay this knowledge to our culture. Even though a psychiatrist recommends this to an at-risk patient, a patient is more likely to take it lightly because they have heard or witnessed this procedure being performed or promoted using mass media. Although a doctor's recommendation certainly has weight, if people hear it through different mediums, the suggestions are more relevant or connect more with people than just a doctor telling them to. This also does not mean that the suggestion of a professional should be replaced with the media, but as Rimer (Rimer, 2000) states, "encouraging professionals in communications to use particular strategies, alone or in combination, based on their objectives and theories, what they know about their audiences, the messages that they are trying to convey, and the available resources. We should build a foundation based on evidence, which can be used to inform communications decisions. (Rimer, 2000).

The National Cancer Institute (NCI) (Cancer Moonshot<sup>SM</sup>. (n.d.), 2018) recently concluded that cancer communications are so important that a significant increase in engagement and investment in this area is required. It is critical to communicate the risks and benefits to a patient when referring a test. Mostly all related diagnostic testing come with both cost and benefit. The cost of the breast cancer screening has accumulated over time.

The principal cause of breast cancer is over-diagnosis. There are two outcomes of the mammographic test: one where there is no false-negative, which suggests breast cancer and the other is false-positive, which indicates breast cancer. Many occasions when mammography tests indicate wrong findings, a woman may or may not have cancer. Most physicians also want to take the next move of their diagnosis if the findings are wrong positively, which may be needless. This leads to even more problems and causes a patient's life to fail. Social media is a perfect way to increase awareness about critical illnesses and scientific advancements, or educate our community. Mostly everyone has access to all kinds of social media and nowadays Twitter is one of the most popular. Twitter is a special forum where users express themselves in one hundred forty characters. Twitter is particularly good at spreading information through a hash tag and this is a great way for medical organizations to promote awareness about certain diseases.

For the most part, companies want to collaborate with celebrities in order to encourage and allow people to connect. The information passed through these social media campaigns does not appear to be the most effective because what happens is not relevant or basic information that everyone already knows is disseminated, but the full picture is still not conveyed to our targeted community members. In 2013, (Thackeray, 2013), 'Breast Cancer Screening use Twitter: Breast Review' looks at the most famous awareness case, Breast Cancer Awareness Month (BCAM). BCAM's monthly outreach activities have been related to expanded media attention, mammography screening and online knowledge quest. Social media has expanded mainstream mass media reporting. This was a cross-section, descriptive study. The Twitter application programming interface was used to compile tweets relating to breast cancer from 26 September until 12 November 2012. Then Twitter user organisations, individuals and celebrities were divided into: every tweet was original or re-tweet, with a mention, meaning a reference to another user named Twitter user. They found that the tweets increased by a huge margin in the first few days of death. The average number of tweets per user was 1.69.

Most of the users were individuals. Almost all of the tweets were original. Organisations and celebrities have been posted more often than individuals. On an average celebrities created much more impressions; they were also retweeted more frequently, and their posts were more apt to contain comparisons. Individuals were more inclined to submit a message to a single individual. Organisations and actors promoted sponsorship, early warning, and prevention when people talked about wearing black. Overall, Twitter is used as a one-way communication tool to spread the message about breast cancer, in particular, general awareness and fundraising, but never discussed anything about the dangers and effects of breast cancer screening. Twitter is a massive communications network where one tweet will touch millions of users, so every person is different regardless of their medical history, and with all the details being shared, it can potentially be deceptive and contribute to the blindside on all sides of the tale.

This research is a cross-sectional analysis, and it just focuses at a particular period of time, and a more recent study by looking at the use of mainstream media over time might have changed overall, but over a certain period of time this analysis has been achieved by mass media reporting breast cancer screening to its full extent (Thackeray, 2013). "Using Twitter for Breast Cancer Prevention: Breast Analysis. A wrong decision for a patient can mean dealing with serious consequences for the rest of life. Overall media is a powerful way to raise awareness of breast cancer, but as we see in various media, cancer awareness campaigns raise awareness of what cancer is and how you should be tested. But there is no background information about who would be the ideal patient from a particular disease, why one should check, and the importance of understanding the risks. The campaigns for these advances in medicine tend to mislead patients and might encourage them to make the wrong decisions.

## **2.5 Television**

Now we can delve into a representation of this after exploring what breast cancer screening is, how it is represented through mass media and understand the importance of transmitting the complete picture. A TV show is a medium that creates a fictional world in which members of the audience connect to each other on an individual level. Every episode has a different impact on the lives of each person. This is also a great way to relay information through those characters to the audience. Two such shows that relayed breast cancer screening information, include *Sex and the City* (Gray, 2007) and

Grey's Anatomy (Glatter, 2005). Through the analysis of these shows one can understand the results of media representation on the breast cancer screening audience members.

Sex and the City has an episode which showed how the main character Samantha was diagnosed with breast cancer and how she dealt with the whole process. In the episode, Samantha finds out about breast cancer when she goes to the doctor to see her breast enlargement, then the storyline follows her as she is being treated. A retrospective study was performed to examine what the public had experienced about this narrative, the multiplicity of audiences in their own way was linked to the character. While reading the viewers' opinions, most of them commented on how appreciative it was to introduce the subject of breast cancer through a serial, and how serious the disease is. Others also commented on connecting with Samantha's pain as she went through her treatment, such as chemotherapy, However, no one really understands who is an ideal breast cancer candidate or the advantages and risks of breast cancer screening. The episode's storyline focused mostly on what the patient went through following their diagnosis, but not before their treatment or just before their treatment. This episode does a better job at the beginning of the discussion on breast cancer, as it is a tough subject to address, but it is still relevant for the episode to educate the viewer of what breast cancer screening is, why it should be done, what are the downsides to screening tests, etc. (Edwards) While this show was broadcast a long time ago, it did a great job at the outset.

Allowing one of the central protagonists, all of whom are very loosely related, to receive intensive medical care, helps viewers to become conscious of their wellbeing and allows patients to know about a condition that is very prevalent among many mothers. While it is still important to realize that if the show took a step towards starting a conversation, an extra step to inform audience members about breast cancer screening, the risks, benefits and demographic risks that are most associated with them would be good information to relay to members of the audience, even if it may not be as exciting as having no risks or consequences. Now, looking at a more recent show, Gray's Anatomy one finds how a show can relay this type of information in a better way than the show discussed earlier. In this TV series, there is one episode in which a young woman finds it difficult to choose to undergo preventive surgery as a result of a positive BRCA1 test. In the episode, a character named Savvy tests positive for the BRCA1 gene and also has a family history of breast and ovarian cancer. Therefore, she

wants her ovaries, breasts and uterus removed in order to reduce her cancer risk. Doctors advise her to think twice about her decision. According to doctors, though she has a family history, it doesn't necessarily mean she has cancer. Doctors also lay out a few other options, other than removing her female organs. Throughout the episode, one of the resident physicians continually advises her to rethink her options. The patient, on the other hand, has a firm mind and is set to go through the surgery. Overall, the show did a decent job of making a perfect scenario for breast and ovarian cancer, but there was a lack of focus on the complications that the woman was about to face.

Although the show did not delve too far into the complications, as compared to much of the other mainstream media advertisements on breast cancer, *Gray's Anatomy* has a portion of the plot that told audiences of the nuances of preventive surgery and the value of second opinions. Mentioning these main points is a perfect way for people to consider whether every cancer screening or preventive procedure can have risks. It would have had a greater impact if the storyline had spent a little more emphasis on this subject than the emphasis on the process of going ahead with the surgery because of the benefits. In the episode, the couple came up with a disagreement on the decision Savvy had taken on the positive result of the BRCA 1 gene test. The couple are friends with two doctors, one with a neurologist, Shepard and the other with a gynaecologist, Allison. Savvy is able to convince her two friends and ask them to convince her husband to support her in the decision she has taken. Already, the starting stage is leaning more towards moving ahead with the surgeries and focusing less on the possible risks of the patient's decision to take. As the show progresses, an intern doctor who has been placed on her case does not appear to grasp that Savvy is getting surgery and asks her to rethink her choices. Although Savvy reconsiders her decision for a moment, she has a firm mind and chooses not to back out. The rest of the scenes in the episodes are a good reminder for the audience to really understand that when you're a patient volunteering to perform a medical procedure, it's important to consider all the other options and then proceed with the procedure. The setback of this episode was not a focus on risks; Allison identified risks in a firm tone at the beginning of the episode, but then the episode did not explore other options or alternatives with the patient on an ongoing basis. The intern doctor also made it very clear to Savvy that she was not going to be able to experience motherhood, but the episode told the story of how the patient felt that she was afraid of getting breast cancer in the first place. The show was not fair to exhaust all of the patient's treatment options, especially since the patient had not had breast cancer yet, she was only trying to prevent herself from having the disease. The

episode was intended to emphasize the rate of patients who were tested positive for the BRCA1 gene but did not end up with breast cancer or the rate of complications of preventive surgery because the removal of the most important organs in the female body could lead to a variety of complications.

Gray's Anatomy (Glatter, 2005) did a great job of relaying important facts compared to Sex and the City (Gray, 2007), but if the media were to show a story with complications resulting from preventive breast cancer care, this would help to add perspective to the audience. Let us understand that not every story sometimes ends with a happy ending. Allowing members of the public to see this will make this issue more real and will do justice to providing accurate information to potential patients with breast cancer.

Television shows have such an effect on any individual's existence, whether they feel a link to a character or a plot or a video. Each show can have a powerful impact on how a person chooses to live their lives, and whether or not we realize that mass media has a huge impact on these decisions. It is so interesting to look at the role of television in the lives of the viewers and see what a positive outcome of a well written episode might be. It is crucial that we look at what material is conveyed to the viewer.

## **2.6 Cancer Awareness Measure 2017**

### **Methods**

Questions include:

- Recall (unprompted awareness) of signs & symptoms, risk factors
- Recognition (prompted awareness) of signs & symptoms, risk factors and cancer screening programmes
- Perceived barriers to seeking help
- Awareness of age-related risk
- Differences between survey years 2014 and 2017 tested for statistical significance using multivariate logistic regression
- Adjustment for demographic characteristics (including gender, age, relationship status, ethnicity, education level and country)
- Percentages are weighted to account for age, sex, regional and non-response bias.

2.6.1 Decreased recall of some key symptoms

Q. There are Many Warning Signs and Symptoms of Cancer. Please Name as Many as You Can Think of.

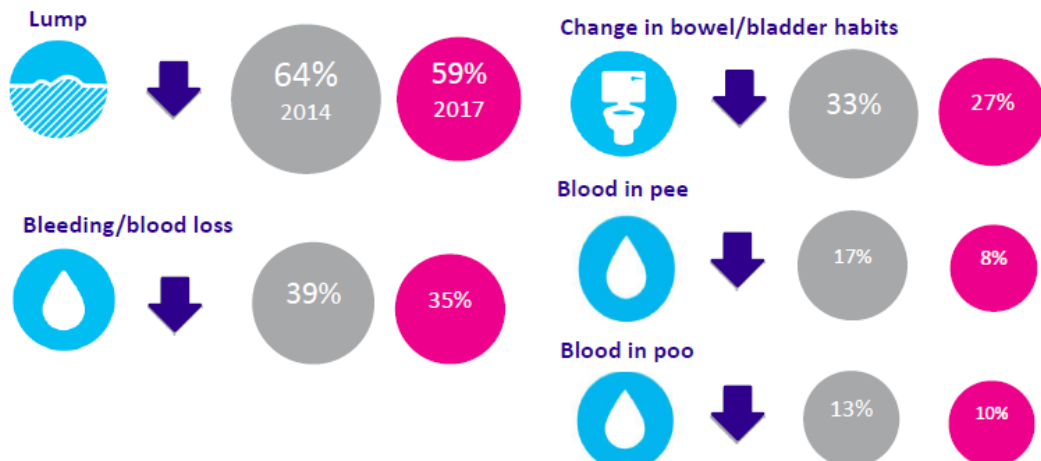


Fig- 2.1 Warning signs & symptoms of Cancer. Source- CAM 2017

Note. ‘Change in bowel/bladder habits includes mentions of ‘blood in pee/poo’

Q. There are Many Warning Signs and Symptoms of Cancer. Please Name as Many as You Can Think of.

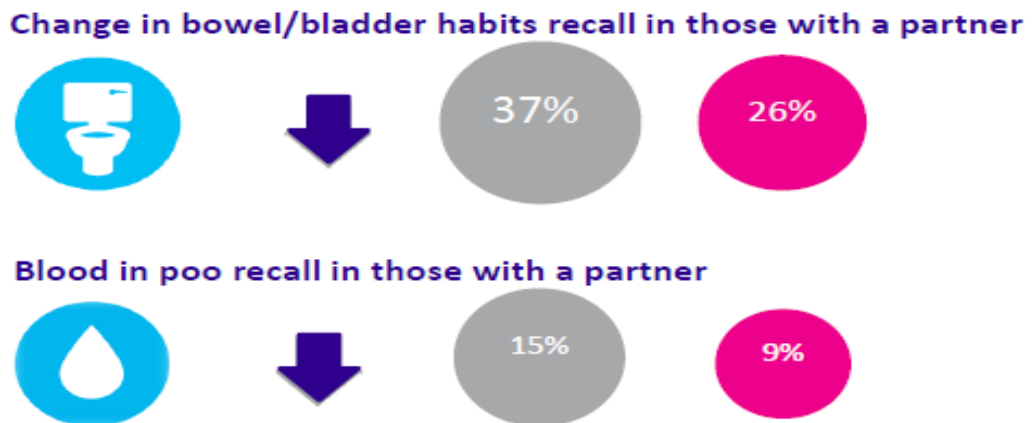


Fig-2.2 Many Warning Signs of cancer (Source-CAM 2017)

### 2.6.2 Increased Awareness of Vague Symptoms

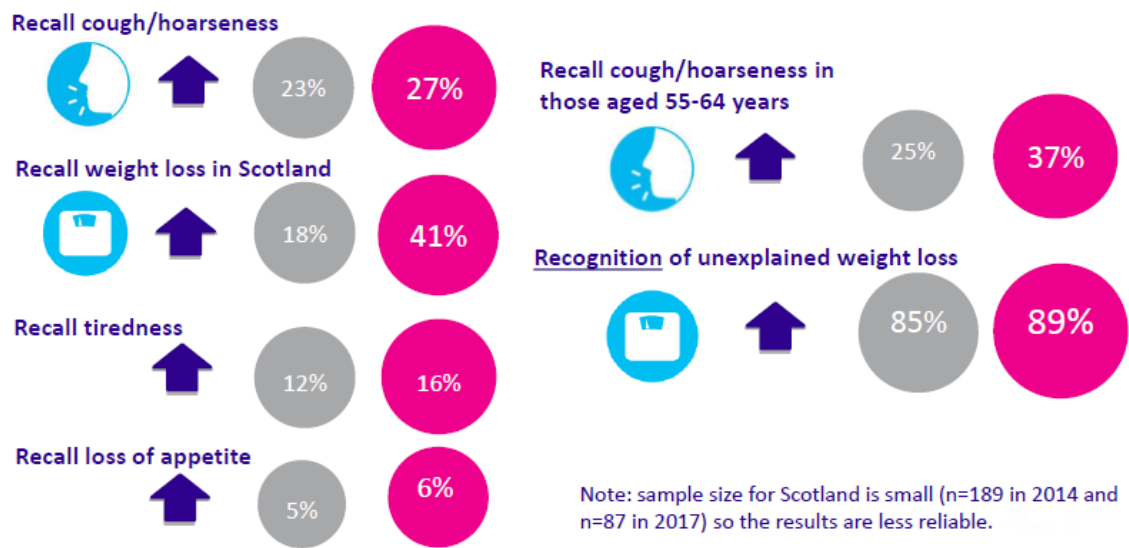


Fig- 2.3 Increased awareness of vague symptoms (Source-CAM 2017)

### 2.6.3 Increased Awareness of Some Risk Factors

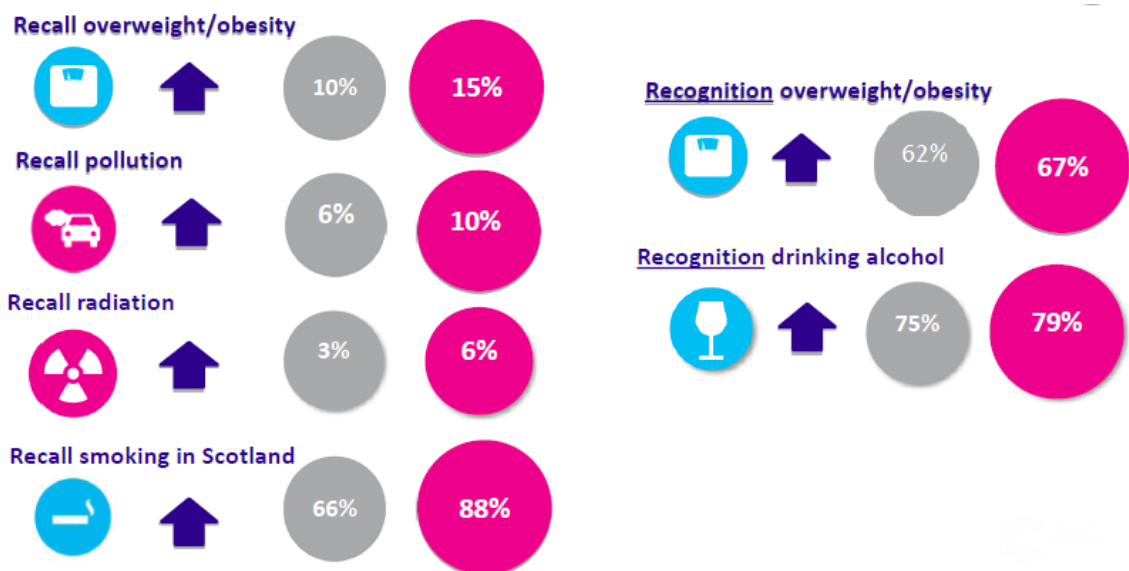


Fig-2.4 Increased awareness of some risk factors (Source-CAM 2017)

2.6.4 Little Change in Attitudes towards Help Seeking

Q. Which Of The Following Might Put You Off Going To The Doctor?

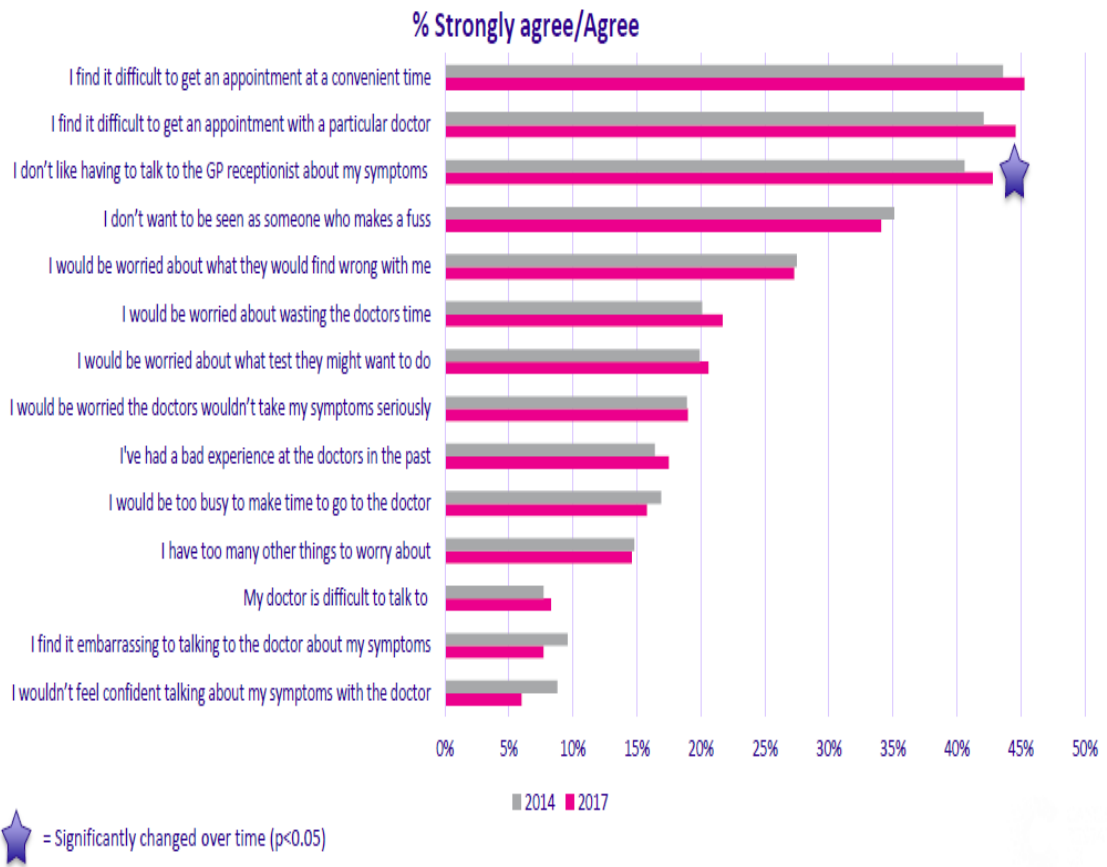


Fig-2.5 Change in attitudes towards help seeking (Source-CAM 2017)

2.6.5 Small Increase in Belief that GP Receptionist Could Be a Potential Barrier to Seeking Help



Fig-2.6 G.P. receptionist could be a barrier (Source-CAM 2017)

### 2.6.6 No Change in Awareness of Bowel Screening

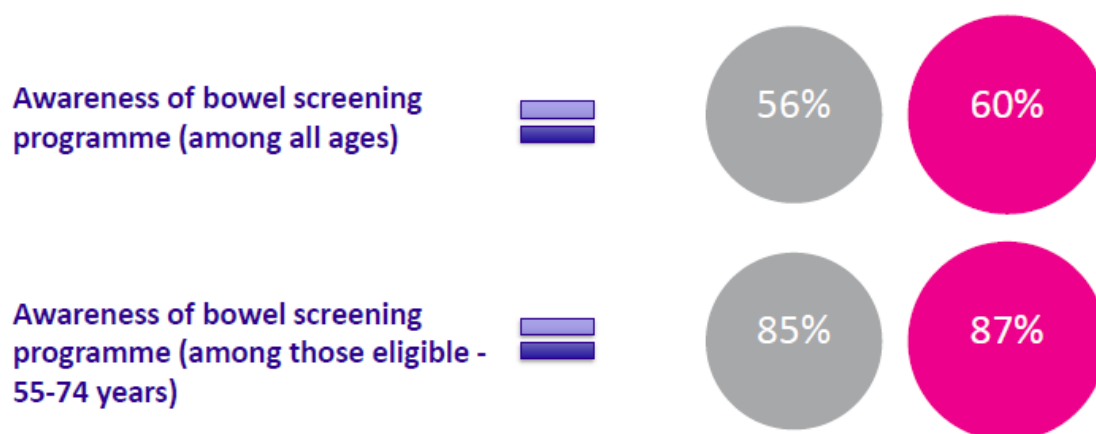


Fig-2.7 No change in awareness of bowel screening (Source-CAM 2017)

## 2.7 Cancer Awareness Measure (CAM) key findings report: Comparing data collected online and face-to-face

### 2.7.1 Primary research aim

To identify the extent to which public awareness of cancer and attitudes to help-seeking vary by data collection methods (face-to-face vs. online probability sample vs online panel) and sampling method (random vs. non-random).

### 2.7.2 Research objectives

1. To explore whether online data collection can produce a representative sample of the UK population.
2. To compare awareness of signs and symptoms and risk factors for cancer, awareness of bowel screening programmes and barriers to help seeking between data collected online and face to face.
3. To explore whether any relationships observed between awareness and socio demographic variables were consistent across samples.

### 2.7.3 Results

#### a) Responders

4075 responders completed the CAM between January and March 2017, 20% (n=819) via face-to-face interviews and 80% (n=3256) online (Agency A, n=1190; Agency B, n=2066).

*Objective 1: To explore whether online data collection can produce a representative sample of the GB population and to look at differences between the groups.*

The demographic characteristics of online and face-to-face responders as well as the GB population. When weighted the three samples were generally representative of the GB population for each demographic variable studied (Table 1).

The representativeness of the Office for National Statistics and Agency A samples were similar. The Agency B sample included a larger proportion of responders with a White ethnic background, with a degree, and with frequent use of the Internet in comparison to the GB population.

**Table 2.1: Demographic characteristics by survey provider and compared with GB population statistics** (Source-CAM 2017)

		Face to face		Online				GB population
		ONS		Agency A		Agency B		
		UW %	W %	UW %	W%	UW %	W %	
	18-24	4.5%	10.2%	2.9%	8.4%	10.2%	12.0%	15.1%
	25-44	28.3%	33.8%	28.9 %	33.4%	24.6%	32.1%	32.1%

		Face to face		Online				GB population
		ONS		Agency A		Agency B		
		UW %	W %	UW %	W%	UW %	W %	
Age Groups	45-54	17.2%	18.0%	20.5 %	17.9%	24.5%	20.9%	17.2%
	55-64	19.5%	15.1%	20.9 %	16.9%	19.8%	16.9%	13.9%
	65+	30.4%	22.8%	26.5 %	23.1%	20.9%	18.1%	21.7%
	Missing			0.3%	0.2%			
Gender	Male	47.1%	49.1%	44.8 %	49.9%	48.1%	48.0%	49.3%
	Female	52.9%	50.9%	55.2 %	50.1%	51.9%	52.0%	50.7%
Ethnicity	White	91.7%	87.9%	93.0 %	87.5%	93.7%	92.7%	86.0%
	Non-white	8.3%	12.1%	7.0%	12.5%	6.3%	7.3%	14.0%
Country of residence	England	85.1%	86.6%	87.5 %	84.7%	84.3%	86.3%	86.5%
	Scotland	10.6%	8.3%	8.2%	10.2%	10.5%	8.7%	8.6%
	Wales	4.3%	5.1%	4.4%	5.1%	5.2%	5.0%	4.9%
Higher Education Qualifications	Degree	27.4%	30.5%	32.9 %	26.4%	36.3%	32.2%	27.2%
	Below degree	39.9%	42.7%	56.7 %	55.7%	51.1%	54.1%	44.7%
	No qualifications	18.9%	12.7%	9.0%	15.5%	5.7%	6.6%	23.0%
	Other	13.8	14.1%	1.3%	2.3%	5.5%	5.5%	5.2%
	Don't Know					1.5%	1.6%	
Marital Status	Partner	44.6%	50.5%	61.8 %	62.6%	63.1%	61.7%	50.9%
	No Partner	55.4%	49.5%	38.2 %	37.4%	36.9%	38.3%	49.1%
Long Term Illness	Very good	32.7%	37.0%	21.1 %	20.1%	15.7%	15.6%	Very good/ Good: 76%
	Good	41.6%	42.0%	49.6 %	48.5%	47.0%	47.4	
	Fair	18.3%	15.9%	23.4 %	23.7%	28.4%	28.3%	
	Bad	5.0%	3.6%	4.9%	6.4%	7.4%	7.1%	Very bad/ bad: 7%
	Very bad	2.0%	1.3%	0.9%	1.3%	1.4%	1.6%	
	Refused	0.4%	0.3%	0.1%	0.1%			

		Face to face		Online				GB population
		ONS		Agency A		Agency B		
		UW %	W %	UW %	W%	UW %	W %	
Internet Usage	Several times a day	57.5%	64.2%	64.5 %	65.6%	79,9%	79.9%	At least once a day: 80%
	Once a day	14.4%	14.3%	16.1 %	13.2%	14.5%	13.7%	
	4-6days a week	3.7%	3.1%	4.0%	2.9%	2.9%	3.0%	
	2-3days a week	2.3%	3.7%	5.1%	4.2%	1.4%	1.6%	
	Once a week	2.7%	2.1%	2.4%	2.4%	0.4%	0.6%	At least weekly 8%
	Less than once a week	2.3%	1.3%	1.9%	2.2%	0.4%	0.4%	Less than weekly 2%
	Never	13.2%	9.2%	6.0%	9.5%	0.5%	0.8%	Did not use in the last 3 months: 10%
	Don't Know	0.6%	0.9%					
	Refused	1.0%	1.3%					

### b) Differences between online and face-to-face samples Age

The Agency A survey had fewer responders aged 18-24, with just 8.4% of responders falling into this age group. Both online samples contained more adults aged over 65 than the OLS sample and the GB population.

### c) Gender

The GB population is 49.3% male and 50.7%, this was largely matched across all samples.

### d) Country of residence

The proportion of responders recruited from England, Scotland, Ireland and Wales mirrored the GB population in all three samples, although Scottish responders were slightly over represented by Agency A.

**e) Ethnicity**

All samples included a higher proportion of white responders than the GB population (GB pop; 86%; Agency A; 87.5% Agency B, 93% white)

**f) Educational attainment**

All three samples were more educated than the GB population. Participant in the Agency B sample had highest educational attainment levels with 32.2% having a degree of higher, compared to 27.1% of the GB population. Just under a quarter (23%) of the GB population reported no educational qualifications, this was much lower in all three collected samples (OLS 12.7%, Agency A, 15.5%; Agency B; 6.6%).

**g) Marital status**

Both Agency B and Agency A had a larger proportion of responders with a partner (63% and 62% respectively) compared to the GB population (50.9%). The proportion of responders with a partner was very similar between the Office for National Statistics sample (50.5%) and the GB population.

**h) Self-reported health rating**

Office for National Statistics survey responders were more likely to say they had 'very good' health (37%) in comparison to online samples (Agency A: 20.1%, Agency B: 15.6%). Online responders were more likely to say they were in 'good' health (Agency A: 48.5%, Agency B: 47.4%) than the Office for National Statistics responders (42%). Online responders were more likely to say their long-term health was 'fair' (Agency A: 23.7%; Agency B: 28.3%) in comparison to Office for National Statistics responders (15.9%). Office for National Statistics responders were less likely to report their health as bad (3.6%) than the online responders (Agency A: 6.4%; Agency B; 7.1%) or the GB population (7%).

**i) Internet use**

The Internet Access Survey (2017) reported that 80% of the general population use the Internet daily. Just under 80% of Office for National Statistics (78.5%) and Agency A

(78.8%) responders reported using the Internet at least once a day. Over 90% of Agency B responders reported using the Internet at this frequency (93.6%).

*Objective 2 - To compare awareness of signs and symptoms and risk factors for cancer, barriers to help seeking, awareness of bowel screening programmes and age-related risk between data collected online and face-to-face.*

Comparing awareness data collected online and face to face on Cancer awareness

### a) Recall of signs and symptoms of cancer

On average, Agency A responders recalled significantly more signs and symptoms of cancer than other responders, with an average recall of 5 signs and symptoms of cancer compared with 3 for Office for National Statistics and Agency B responders. There were also more Agency A responders recalling all signs and symptoms compared to the Office for National Statistics (ONS) and Agency B (Table 2).

**Table 2.2: Number of signs and symptoms recalled across each survey provider**  
(Source-CAM 2017)

	0	1	2	3	4	5	6	7	8	9	10	11	12
ONS	9.3% (76)	12.3% (101)	17.8% (146)	24.6% (198)	17.6% (144)	9.0% (74)	5.3% (43)	3.2% (26)	0.7% (6)	0.0% (0)	0.2% (2)	0.1% (1)	0.2% (2)
Agency A	3.8% (45)	4.2% (50)	6.5% (77)	12.0% (143)	15.1% (180)	14.3% (170)	16.1% (191)	10.3% (122)	6.5% (77)	4.1% (49)	3.7% (44)	1.5% (18)	1.3% (15)
Agency B	14.0% (289)	10.0% (206)	13.8% (285)	18.1% (374)	16.6% (343)	11.2% (232)	8.6% (178)	2.6% (53)	2.3% (48)	1.3% (27)	0.8% (16)	0.6% (13)	0.1% (2)

A higher proportion of Agency B responders answered “don’t know” when asked to recall warning signs and symptoms for cancer than any other group (Agency B: 6.1%, Office for National Statistics; 0.2%, Agency A; 1.8%). See Table 3.

Lump was the most frequently recalled sign/symptom in all three samples with 58.6% of Office for National Statistics responders, 75.1% of Agency A responders and 64.2% of Agency B responders recalling this sign. In comparison to Office for National Statistics responders, Agency B responders were less likely to recall bleeding/blood loss (29% vs. 35%) and sore (1.5% vs. 2.7%). Agency A responders were more likely

than Office for National Statistics responders to recall lump (75% vs. 59%), pain (48% vs. 34%), bleeding/blood loss (46% vs. 35%) and blood in pee (18% vs. 8%). Responders from both online samples were more likely than Office for National Statistics responders to recall change in bowel/bladder habits (Agency A: 46%, Agency B: 34% vs. Office for National Statistics: 27%), blood in poo (Agency A: 26%, Agency B: 17% vs. Office for National Statistics: 9.6%) and tiredness (Agency A: 28%, Agency B: 22% vs. Office for National Statistics: 16%).

**Table 2.3: Recall of warning signs of cancer in ONS, Agency B and Agency A samples and ONS data from 2014** (Source-ONS data 2014)

	ONS 2017		Agency A		Agency B		ONS 2014
	UW %	W %	UW %	W %	UW %	W %	W %
Lump	58.00%	58.60%	77.60%	75.10%***	63.70%	64.20%	64.10%
Bleeding/Blood Loss	36.26%	35.02%	48.82%	46.31%***	30.59%	29.48%***	38.60%
Pain	34.10%	33.60%	52.80%	48.30%***	37.20%	36.20%	32.60%
Change in Bowel/bladder Habits	26.50%	26.71%	53.11%	46.16%***	36.21%	34.34%***	32.10%
Unexplained Weight loss	27.60%	25.50%	41.60%	35.30%***	27.50%	25.50%	20.50%
Cough	24.30%	23.50%	36.60%	31.50%***	23.70%	21.70%	
Other	19.40%	19.20%	18.70%	17.10%	15.10%	14.30%***	
Mole	19.70%	18.80%	31.30%	26.70%***	19.50%	17.70%	22.60%
Tiredness	16.20%	15.70%	31.80%	27.50%**	22.70%	22.40%***	12.10%
Blood in poo	9.30%	9.60%	31.50%	26.60%***	18.50%	17.20%***	12.80%
Blood in pee	8.70%	8.30%	20.70%	18.20%***	10.20%	9.20%	16.40%
Feeling unwell	6.20%	7.60%	8.20%	7.30%	4.40%	5.40%*	5.70%
Breathlessness	6.50%	6.00%	12.40%	9.90%***	5.90%	5.50%	-
Loss of appetite	6.30%	5.90%	11.40%	11.50%**	5.70%	5.40%	4.50%
Changes to breast (specified)	5.10%	5.10%	4.70%	4.20%	2.50%	2.00%	-
Nausea	3.90%	4.70%	9.80%	9.10%***	5.20%	5.50%	4.90%
Coughing up blood	4.60%	4.40%	7.60%	6.80%**	3.70%	4.20%	-
Sore	2.90%	2.70%	4.10%	3.40%	1.40%	1.50%**	1.60%
Bruising	2.00%	2.00%	3.00%	2.30%	0.90%	0.90%	1.20%
Changes to breast (unspecified)	1.70%	2.00%	2.20%	2.60%	0.50%	0.50%	-
Blurred vision	1.80%	1.60%	4.50%	4.40%**	1.30%	1.10%	2.20%
Difficulty swallowing	1.95%	1.47%	5.88%	4.75%**	2.23%	1.67%	0.90%
Looser poo	1.00%	1.30%	2.10%	1.80%	0.90%	1.10%	0.90%
Vaginal bleeding	1.60%	1.30%	3.70%	3.10%**	0.90%	1.00%	-
Bloating	1.50%	1.10%	4.50%	3.20%***	3.00%	3.10%	0.80%
Skin in lesions	-	-	26.70%	22.50%	12.20%	11.10%	-
Nothing	4.40%	4.90%	0.50%	0.50%	0.10%	0.10%	-
Refused	4.80%	4.40%	0.10%	0.10%	0.00%	0.00%	-
Don't know	0.40%	0.20%	1.30%	1.80%*	5.70%	6.10%***	0.50%

### b) Recognition of signs and symptoms of cancer

Over half of Agency A and Agency B responders recognised all 9 signs and symptoms, compared with 45% of Office for National Statistics responders. Agency A responders recognised an average 8 of the 9 signs and symptoms of cancer, compared with Office for National Statistics and Agency B responders who on average recognised 7 (Table 4).

**Table 2.4: Number of signs and symptoms recognised across the three samples**  
(Source-CAM 2017)

Number of symptoms recognized	0	1	2	3	4	5	6	7	8	9
Agency A	0.3% (4)	0.1% (1)	0.3% (3)	0.5% (6)	1.8 (21)	2.7% (32)	7.7% (92)	12.5% (149)	19.7% (235)	54.4% (647)
ONS	2.1% (17)	0.7% (6)	1% (8)	1% (8)	1.7 (14)	4.9% (40)	6.3% (52)	12% (98)	24.9% (204)	45.4% (372)
Agency B	3.4% (70)	0.3% (7)	1.1% (22)	1.6% (34)	2.5% (51)	3.8% (79)	6.6% (136)	10.5% (217)	13.3% (274)	56.9% (1176)

Unexplained lump or swelling was the most commonly recognised symptom in all samples (Office for National Statistics; 94.7%, Agency A; 98.4%; Agency B: 94.7% Table 5). Agency A responders were more likely than Office for National Statistics responders to recognise lump (98% vs. 95%) and unexplained weight loss (96% vs. 89%). For other signs and symptoms there weren't any significant differences between Agency A and Office for National Statistics responses.

Agency B responders were less likely than Office for National Statistics to recognise lump (94% vs. 95%), changes in bowel habits (88% vs. 90%), persistent cough (83% vs. 84%), unexplained weight loss (87% vs. 89%), persistent difficulty swallowing (76% vs. 78%) and unexplained bleeding (86% vs. 88%). However, Agency B responders were more likely to recognise a sore that does not heal as a sign/symptom of cancer (70% vs. 63%).

**Table 2.5: Percentage of responders from each sample that recognised each cancer sign/symptom (Source-CAM 2017)**

% Yes, it could	ONS		Agency A		Agency B		ONS 2014
	UW%	W%	UW%	W%	UW%	W%	W %
Unexplained lump or Swelling	95.00%	94.70%	98.70%	98.40%**	94.80%	94.70%**	94.80%
Change in appearance of a mole	94.30%	92.90%	97.70%	95.90%	94.40%	93.90%**	94.00%
Persistent change in bowel or bladder habits	91.20%	89.80%	94.30%	91.40%	88.30%	88.20%**	84.80%
Unexplained weight loss	89.60%	89.10%	97.30%	96.40%***	87.70%	86.50%*	80.90%
Unexplained bleeding	88.30%	88.00%	91.10%	89.10%	87.60%	86.30%**	80.90%
Persistent cough or hoarseness	84.60%	83.70%	89.30%	86.70%	83.30%	82.80%**	66.00%
Persistent cough or pain	78.40%	79.00%	85.10%	82.00%	84.00%	83.80%	74.20%
Persistent difficulty Swallowing	80.30%	78.30%	80.10%	76.30%	76.50%	76.20%**	75.70%
Sore that does not heal	65.10%	63.00%	70.30%	66.60%	71.20%	70.00%**	58.70%

### c) Recall of risk factors for cancer

On average, Agency A responders recalled an average of 5 risk factors recalled compared with Office for National Statistics and Agency B responders who recalled an average of 3 (Table 6) Fewer Agency A responders recalled zero risk factors (3.2%) than Office for National Statistics (8.2%) or Agency B (11.6%).

**Table 2.6: Number of risk factors of cancer recalled across each sample.** (Source-CAM 2017)

Number of risk factors recalled	0	1	2	3	4	5	6	7	8	9	10	11	12	13
ONS	8.2% (67)	9.9% (81)	15.4% (126)	21.7% (178)	23.2% (190)	10.6% (87)	7.0% (57)	2.4% (20)	1.0% (8)	0.6% (5)	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Agency A	3.2% (38)	2.9% (34)	6.8% (81)	11.4% (136)	16.9% (201)	18.3% (218)	17.7% (211)	9.6% (114)	5.5% (66)	3.6% (43)	2.1% (25)	1.6% (19)	0.3% (3)	0.1% (1)
Agency B	11.6% (239)	7.2% (148)	11.6% (240)	18.7% (386)	19.1% (394)	13.4% (277)	11.2% (231)	2.4% (49)	2.3% (48)	1.7% (35)	0.4% (9)	0.2% (4)	0.3% (6)	0.0% (0)

The most frequently recalled risk factor within all samples was smoking, but recall was significantly lower in the Agency B sample (Table 7). The same pattern was seen for alcohol (Agency A; 55%, Office for National Statistics: 54%; Agency B: 43%). A higher proportion of Agency B responders answered “don’t know” to this question (5.4%) (Office for National Statistics:0.1%, Agency A: 0.9%).

**Table 2.7: Recall of risk factors for cancer from the three samples.** (Source-CAM 2017)

% mentioned	ONS		Agency A		Agency B		ONS 2014
	UW%	W%	UW%	W%	UW%	W%	W%
Smoking	81.20	81.90	84.60	81.50	70.50	68.60***	80.30
Alcohol	52.00	53.50	59.10	55.10	45.30	43.30***	49.50
Diet (unspecified)	34.40	36.20	56.00	50.30***	41.10	40.00	-
Sunburnt	23.20	25.00	36.70	30.10***	23.20	21.10	27.00
Being overweight	15.40	14.90	22.60	20.00*	26.70	25.60**	10.10
Exercise	13.30	13.80	26.60	24.10**	17.30	16.40	13.80
Occupational exposure	14.40	13.70	13.80	12.20	9.30	8.50***	12.30
Genes	11.70	11.50	26.10	23.80***	21.20	19.80***	10.70
Pollution	9.40	10.40	15.40	13.00**	8.20	7.80*	5.50
Family history	10.30	10.00	25.90	22.60***	16.20	15.20**	11.10
Lifestyle	9.90	9.60	18.90	18.10***	15.40	14.90**	-
Stress	7.80	8.40	13.70	11.70**	6.10	5.60*	6.90
Radiation	5.50	5.90	7.70	6.30	5.30	4.70	3.30
High fat diet	4.60	4.60	2.30	2.10**	1.00	1.00***	2.40
Red meat	2.90	3.70	3.90	3.90	3.60	3.30	3.30
Sun beds	3.30	3.70	4.80	5.30	1.90	2.00	4.50
Passive Smoking	3.70	2.70	2.30	3.10	1.40	1.50	3.30
Older age	2.20	2.30	7.50	6.10***	4.80	4.80**	2.20
Mobile phones	0.50	1.10	0.30	0.30	0.10	0.20	0.50
Many sexual partners	0.70	1.00	0.80	0.60	1.50	1.50	0.60
Other	12.58	12.90	24.03	24.52***	12.15	12.92	-

Nothing	3.30	2.80	0.00	0.00	0.40	0.40	-
Refused	4.80	4.40	0.00	0.00	0.00	0.00	-
Don't know	0.20	0.10	0.80	0.90	4.80	5.40***	0.20

**Table 2.8: Average number of risk factors of cancer recognised across survey providers. (Source-CAM 2017)**

Average recognition	0	1	2	3	4	5	6	7	8	9	10	11	12
ONS	2.2 (18)	0.5 (4)	0.6 (5)	4.3 (35)	6 (49)	7.6 (62)	8.7 (71)	14.5 (119)	11 (90)	12.2 (100)	13.8 (113)	11.5 (94)	7.2 (59)
Agency A	0.2 (2)	0.4 (5)	1.2 (14)	1.4 (17)	4.5 (53)	6.9 (82)	8.7 (103)	12.4 (148)	9.5 (113)	12.4 (147)	14.1 (168)	14.5 (173)	13.9 (165)
Agency B	2.9 (59)	0.6 (13)	1.3 (26)	2.4 (49)	4.9 (102)	6.7 (139)	7.5 (155)	8.8 (181)	9.4 (194)	9.8 (203)	10.5 (216)	12.2 (252)	23.1 (477)

**Table 2.9: Percentage of responders from each sample that recognised each risk factor for cancer. (Source-CAM 2017)**

%Yes	ONS		Agency A		Agency B		ONS 2014
	UW%	W%	UW%	W%	UW%	W%	W%
Smoking	96.60	96.30	98.60	98.60	95.70	95.40	97.90
Getting sunburnt	94.50	94.00	96.20	94.60	94.30	93.70	96.40
Exposure to another person's smoking	87.80	88.60	89.70	88.20	86.40	86.10	88.30
Drinking alcohol	76.60	78.90	80.30	78.60	78.80	78.60	75.00
Having a close relative with cancer	68.50	68.50	79.70	76.60***	77.80	76.60	71.70
Being overweight	66.70	66.60	73.80	72.80**	73.70	74.10	63.30
Being older	58.60	60.10	62.90	57.10	68.20	67.80***	58.90
Not eating many fruits & vegetables	50.30	52.80	57.60	53.30	55.00	53.60	48.30
Not eating enough fibre	53.10	52.60	57.60	53.30	55.00	53.60	48.30
Eating too much red or processed meat	49.50	51.50	62.00	57.90***	62.50	61.00	49.40
Not doing much physical activity	48.40	49.70	57.40	56.10**	56.60	55.10**	48.20
Infection with HPV (human papillomavirus)	28.10	29.20	42.90	41.30***	48.90	48.90**	29.40

**Table 2.10: Percentage of responders that endorsed the following barriers to going to the doctor.** (Source-CAM 2017)

	UW%	W%	UW%	W%	UW%	W%	W%
I find it difficult to get an appointment at a convenient time	44.10	45.30	46.40	49.70	46.00	49.00	42.90
I find it difficult to get an appointment with a particular doctor	44.30	44.60	46.80	46.70	45.60	47.10	42.10
I don't like having to talk to the GP receptionist about my symptoms	43.70	42.80	50.30	50.90*	45.80	46.50	39.70
I don't want to be seen as someone who makes a fuss	34.40	34.10	36.80	37.40	40.20	39.50	34.90
I would be worried about what they would find wrong with me	25.90	27.30	35.50	39.30**	37.70	40.30**	28.20
I would be worried about wasting the doctors time	22.60	21.70	28.30	29.30*	34.80	35.60**	20.00
I would be worried about what test they might want to do	17.60	20.60	24.10	28.70**	28.50	31.10**	20.20
I would be worried the doctors wouldn't take my symptoms seriously	17.50	19.00	26.10	29.70**	32.60	34.80**	19.00
I've had a bad experience at the doctors in the past	16.00	17.50	19.20	19.30	21.30	22.70	16.00
I would be too busy to make time to go to the doctor	13.10	15.80	18.80	20.70*	19.70	21.60	16.30
I have too many other things to worry about	13.80	14.60	20.70	23.50*	21.40	23.10	14.60
My doctor is difficult to talk to	8.20	8.30	10.80	12.40	13.50	15.00**	7.70
I find it embarrassing to talking to the doctor about my symptoms	6.80	7.70	15.40	16.20**	22.00	24.00**	10.30
I wouldn't feel confident talking about my symptoms with the doctor	6.70	6.00	12.20	14.80**	17.70	18.80**	8.70

Both Agency B and Agency A responders were significantly more likely than Office for National Statistics responders to endorse the following eight statements:

- I find it embarrassing to talking to the doctor about my symptoms
- I would be worried about wasting the doctor’s time
- I would be too busy to make time to go to the doctor
- I have too many other things to worry about
- I would be worried about what they would find wrong with me
- I would be worried about what test they might want to do
- I wouldn’t feel confident talking about my symptoms with the doctor
- I would be worried the doctors wouldn’t take my symptoms seriously

Agency B responders were more likely than Office for National Statistics responders to endorse the statement “*my doctor is difficult to talk to*” but the difference between the Agency A and Office for National Statistics responders was not significant for this statement.

#### 2.7.4 Awareness of age-related risk

The proportion of responders who said cancer is unrelated to age varied across the surveys. Agency A responders were more likely to say that cancer is unrelated to age than Office for National Statistics responders, however there was no significant difference between Agency B and Office for National Statistics responders.

**Table 2.11: Awareness of age-related risk from responders from all surveys**  
(Source-CAM 2017)

	ONS		Agency A		Agency B	
	UW%	W%	UW%	W%	UW%	W%
Cancer is unrelated to age	61.10	60.90	67.30	71.30***	59.80	59.80
Someone in their twenties	0.10	0.00	0.20	0.20	0.30	0.30
Someone in their thirties	0.20	0.30	0.10	0.10	0.70	0.70
Someone in their forties	2.70	3.40	1.70	2.40	2.50	2.50
Someone in their fifties	8.20	8.60	5.30	4.60	7.30	7.30
Someone in their sixties	8.20	8.00	7.70	6.40	10.10	10.10
Someone in their seventies	5.40	5.00	4.80	3.80	5.30	5.30
Someone in their eighties	5.60	5.60	6.30	5.30	4.80	4.80
Don’t know/not sure	7.90	7.20	6.60	5.90	9.10	9.10
Refused	0.60	1.00	-	-	-	-

\*p<0.05, \*\*p<0.01, \*\*\*p<0.001

**Question: Looking at these options, who do you think is most likely to develop cancer?**

### **ONS- Office for National Statistics**

*Objective 3. To explore whether any relationships between awareness and socio demographic variables were consistent across the samples*

### **2.7.5 Relationship between awareness and socio demographic variables across samples**

#### **Awareness of signs and symptoms of cancer**

a) **Recall:** For responders living Scotland, those recruited by Agency B were significantly less likely to recall bleeding/blood loss as a sign of cancer compared to responders recruited by Agency A. For male responders, those recruited by Office for National Statistics were significantly less likely to recall difficulty swallowing than those recruited by Agency A. In addition, male responders recruited by Agency B were less likely to recall cough as a sign of cancer than males recruited by Office for National Statistics. There were significantly less men recalling cough in the Agency B survey in comparison to the Office for National Statistics survey. No other significant interactions were observed.

b) **Recognition:** There were no significant interactions between the type of data collection and different demographic groups for recognition of signs and symptoms of cancer.

#### **Awareness of risk factors for cancer**

a) **Recall:** Significantly less women recalled alcohol in the Office for National Statistics survey in comparison to the Agency A responders. Significantly more people with a degree or 'other' qualification recalled diet as a risk factor for cancer in the Agency B survey compared to the Office for National Statistics survey. A higher proportion of Agency B responders with an 'other' type of qualification recalling "being overweight" as a risk factor in comparison to Office for National Statistics responders with an 'other' type of qualification.

b) **Recognition:** When the variables interact (i.e. an interaction between survey provider and sex, and an interaction between survey provider and country) it shows there were significantly fewer responders in both England (83%) and Wales (3.7%) that recognised family history as a risk factor of cancer in the Office for National Statistics survey compared to responders in England and Wales in the Agency B (England: 84%, Wales 5.5%) and Agency A (England: 88%, Wales: 4.4%) surveys. However, of those responders in Scotland, the highest proportion to recognise family history as a risk factor were in the Office for National Statistics survey (13.0%, Agency B: 10.4%, Agency A: 7.5%). There were also differences by sex, with significantly fewer females (54.2%) recognising family history as a risk factor in the Office for National Statistics survey than female Agency A (59.0%) and Agency B (56.6%) responders. There were significantly fewer responders in the Office for National Statistics survey with ‘other’ qualifications recalling “*not eating many fruits and vegetables*” as a risk factor in comparison to those in the Agency A and Agency B surveys with ‘other’ qualifications. Male Agency A responders were more likely (46.7%) to recognise “*not doing enough physical activity*” as a risk factor in comparison to Agency B male responders (45.1%).

### **2.7.6 Awareness of bowel screening**

There were no statistically significant differences between demographic groups across the samples.

### **2.7.7 Barriers to seeing a GP**

Office for National Statistics responders with a partner were more likely to agree that difficulty getting an appointment at a convenient time would be a barrier compared to Agency B responders with a partner.

### **2.7.8 Awareness of age-related risk**

Agency A responders were more likely than Office for National Statistics and Agency B to say ‘cancer is unrelated to age’.

## **2.8 Magnitude of the problem**

Cancer is a black spot on the face of humanity in this era of science and technology. Presently, several classes of anti-cancer drugs are available in the market, but issues such as toxicity, low efficacy and solubility have decreased the overall therapeutic

indices. Thus, the search for new promising anticancer agents continues, and the battle against cancer is far from over. In the century, cancer is still a problem. It is a disease that progresses via development of multistep carcinogenesis with the participation of various physiological systems in the human body, such as cell signalling and apoptosis, and as a result, cancer is extremely complicated to combat. Generally, cancer begins as a local disease, but it metastasizes over time, making it difficult to cure. It is the leading cause of death in developed countries. The possible signs and symptoms of cancer are new lumps, abnormal bleeding, prolonged cough, unexplained weight loss, and change in bowel movements, among others.

Globally, cancer is the second leading cause of death, and it is the number one cause in the US. From all over the world, cancer has drawn unusual attention, and an extensive research (radiation and chemotherapy) has been devoted towards the development of effective anticancer modalities. As per the prediction of the World Health Organisation in 2012, the number of annual cancer cases will rise from million to another million within the next decades. Breast and lung cancers are the common causes of deaths (a total of deaths in 2012) in women and men, respectively. These two types of cancers are most frequently diagnosed in various countries. Despite the accessibility of several anti-cancer drugs, common problems like multi-drug resistance, less therapeutic efficacy, solubility, adverse side effects, and/or poor bio availability issues necessitate the development of new anti-cancer agents.

## **2.9 Burden of the disease**

Cancer is one of the main causes of death among adults in India, annually accounting for about new cases and deaths in 2008 (IARC, 2018). The most frequent sites of cancer among men in India are head and neck including cancers of lip, oral cavity, nasopharynx, pharynx and larynx ( new cases and deaths annually), lung ( new cases and deaths), stomach ( new cases and deaths) and colorectal cancer ( new cases and deaths) The most frequent sites of cancer among women in India are cervix uteri ( new cases and deaths annually), breast ( new cases and deaths), head and including cancers of lip, oral cavity, nasopharynx, pharynx, and larynx ( new cases and deaths), ovary ( new cases and deaths) and oesophagus ( new cases and deaths) (Ajay Mahal, 2020).

### **2.10 Risk factors and causes**

Lifestyle related factors, viral infections and exposure to carcinogens in environment are the important causes of cancer. Tobacco use, excessive alcohol use, unhealthy diet and physical inactivity are other lifestyle related factors. Among infections human papilloma virus (HPV), hepatitis B virus (HBV) and hepatitis C virus (HCV) infections are most important. Environmental exposure to radiation and chemicals (pesticides, dyes) also constitute an important group of carcinogens.

### **2.11 Disease characteristics and management**

Most cases do not exhibit specific signs and symptoms during the early stages. When the disease is advanced one or more of the following signs/symptoms may be seen:

- Rapid and significant weight loss
- Persistent cough or hoarseness of voice
- A change in bowel habits or blood in the stool
- A swelling or growth anywhere in the body
- A swelling or lump in the breast, changes in the skin texture, discharge from the nipple or change in direction of the nipple
- Difficulty in swallowing
- Unusual bleeding from any orifice including vagina
- Non healing patches or ulcers in any external part of the body or visible internal part eg: mouth.

### **2.12 Early diagnosis**

Screening tests are applied to population groups, which do not have any symptoms so as to identify individuals with abnormalities suggestive of pre-cancer and further referral for prompt diagnosis and treatment. Population based screening by pap smear (Ashtarian H, 2017) or visual inspection with acetic acid (VIA) for cancer cervix and examination for oral cancer in tobacco users have been shown to be effective.

Laboratory based diagnostic services consisting of histopathology, cytology, immunohistochemistry and tumour markers are available at most cancer centres across

the country as are radiological services like X-ray, computerized tomography (CT scan), magnetic resonance imaging (MRI) and mammography. Advanced facilities for molecular testing, nuclear imaging and positron emission tomography (PET) scans are available at select centres.

### **2.13 Treatment**

Treatment with surgery, radiotherapy and chemotherapy is currently available at all regional cancer centres and several medical colleges and private treatment facilities across the country. Advanced radiation therapy services are available at selected centres. (Ajay Mahal, 2020) High survival and cure rates are seen in childhood cancers such as leukaemia and lymphoma at centres where appropriate treatment is provided. Prompt institution of treatment of cancers that can be detected early- breast cancer, cervical cancer, oral cancer and colorectal cancer- result in higher cure rates when treated according to best practices. Due to late diagnosis of cancers, a large proportion of the cases require palliative care. Palliative care is treatment to relieve symptoms caused by cancer, rather than cure. Improved access to oral morphine is a crucial need for cancer pain, suffered by over 80% of cancer patients in terminal phase.

### **2.14. Public Health Measures for Prevention and Control**

Strengthening health systems, Cancer awareness and screening for cervical, breast and oral cancer should be introduced at the primary health care level in the National Rural Health Mission (NRHM), Diagnostic and management facilities for above three cancers should be introduced at the district level, Specialised treatment services for cancers should be strengthen in medical colleges and other hospitals, home support for palliative and rehabilitative services should be introduced at the primary health care level.

#### **2.14.1 Population level interventions**

- Avoidance of risk factors should be promoted such as, avoidance of tobacco and alcohol, consumption of more fruits and vegetables, regular physical activity and avoidance of infections by adopting universal safety precautions in health care settings and safe sexual practices.

- Protection from occupational carcinogens.
- Protection against HBV and HPV by vaccination.

The National Cancer Control Programme (NCCP) was launched in 1976 and was revised in 1984. This programme has now been integrated into the National Programme for Prevention and Control of Cancer, Cardio-vascular Diseases, Diabetes and Stroke since 2011. The data on cancer is collected by hospital and population-based cancer registries, collated and published by the National Cancer Registry Programme (NCRP) of the Indian Council of Medical Research (ICMR).

#### **2.14.2 Cancer prevention campaigns and Internet access**

The Web has become the most popular health-related information source (vPowell J, 2002). An approximate percent of the US adult population finds health information on the internet (TR., 2008). Approximately million older adults are expected to use Internet forums to get health information (GA, 2005), and this growing demographic is more and more interested in lifestyle issues. The Internet is cited as the second-largest source of cancer data (FretzP C, 2003). Therefore, the number of sites stratifying cancer risk is rising, although the overall quality of the documents is still low (Ekman A, 2005 ).

The Internet remains a valuable source of knowledge years after cancer diagnosis, according to a retrospective analysis of women with breast cancer, while other sources of information (such as health practitioners or books) rapidly become less valuable after initial diagnosis. Raupach and Hiller conclude that women with breast cancer were mainly pleased with the Internet data (89%), while smaller proportions of patients were pleased with television (46%) and other media data (Raupach JC, 2002). The Internet has many advantages over other outlets. Unlike TV and print media, Internet can decide accurately the number of visitors who can concentrate their attention on particular topics. It also provides methods to assess the total audience of a web page and to define the particular topics pursued on it. This data is generated by log files that visitors leave after visiting websites (B., 2006).

Besides the number of visitors, it is also possible to calculate on average how long they spend reading the material, the days and days of the week with more "traffic," etc. Given its unquestioned capacity for disseminating information, there is still little

literature that characterises the web as a valuable resource for evaluating activities and promoting public health. Numerous applications of log file monitoring have been demonstrated in the past decade by several studies: to assess e-learning, to determine how to help health professionals or lay people, to observe the interest created by cancer-related public awareness items and to help patient information.

### **2.14.3 Methods**

#### **2.14.3.1 Sentinel pages**

The largest and most complete cancer-related guide for lay people is the Brazilian National Cancer Institute (Instituto Nacional do Cancer- INCA), a Ministry of Health (MOH) agency (AP, 2005). INCA is the only government information centre for all cancer-related topics in Brazil, from preventive strategies to treatment protocols. The INCA website was studied as "sentinel sites" source, pages that should be especially well known and provide a wide amount of authoritative information on a specific issue. Maintained by INCA and the MOH, this site is Brazil's largest concentration of authoritative cancer data. It lists lay web searches (<http://www.google.com>), beginning from the word "cancer" (in Portuguese, the dominant language in Brazil).

The audience of the platform was associated with the annual promotions that are held and commonly declared in major urban areas on 31 May (International No-Tobacco Day), 29 August (Brazilian National No-Smoking Day) and 27 November (National Day against Cancer). In view of the great interest in the latter shown in the large number of e-mails with concerns regarding cancer diagnosis and treatment, the aim was to observe exposure to prevention-related pages relative to the disease itself, as opposed to the limited interest shown in preventive steps.

The three "prevention pages" selected were: "How to prevent cancer," "Breast self-examination" (recommended as an important preventive measure by the MOH at the time) and "cancer prevention tips", while the three diagnosis / treatment pages were: "Cancer types," "When does cancer appear?" And "Breast cancer". Log files were collected from September 1999 to August 2001 to identify annual audience trends relevant to those years. Based on these studies findings, a content redesign process was initiated in September 2002.

### **2.14.3.2 Measuring audience by log files**

There are commercial software packages that provide statistical data on the number of hits (recorded in a single user access), the length of visits and other information (days of the week with most traffic and most downloaded documents). Data was classified into "browsing indicators" representing random searches not strongly oriented to any specific issue and "capture indicators" rev.

The software package used in the current study was Web Trends' Log Analyzer (release) (WebTrends homepage, 2006). Measures used in this analysis are: "visitor sessions" (absolute and mean); "proportion of page access for general access". Expressing the ratio of the number of views to the sum of the web (shows the "sensitive" pages most viewed relative to the rest); and "the length of time spent on pages". These metrics have been chosen from among many others because they are comparable and allow for reciprocal comparisons.

Health communication involves the analysis and use of communication methods to educate and impact health-enhancing individual and group decisions. This connects communication and health realms and is increasingly recognized as a critical element of efforts to enhance personal and public health (National Cancer Institute (NCI), 1989). Health communication can relate to all aspects of disease prevention and promotion and is important in a variety of ways, including health professional-patient interaction, access, search and use of individuals. Effective health communication can help raise awareness of health risks and strategies for individuals, provide the inspiration and skills required to minimize these risks, help them find support from other people in similar circumstances, and influence or improve attitudes.

Health communication can also increase demand for appropriate health services and decrease demand for in this may offer information to help make difficult decisions, such as choosing insurance policies, care providers, and treatments (Piotrow, Kincaid, Rimon, & al, 1997). Health communication can be used for the community to influence the public agenda, advocate for policies and programs, promote positive changes in socioeconomic and physical environments, improve the delivery of public health and health care services, and promote social norms that benefit health and quality of life. Another is to strengthen interpersonal and group experiences in clinical settings by

educating health providers and patients in appropriate communication skills (eg provider-patient, provider-provider, and among members of a health care team) (Eng, 1999).

Collaborative partnerships are strengthened when both participants are able to communicate effectively. Another field is the distribution of health messages through public education initiatives aimed at improving the social environment to promote healthier habits, build awareness, improve perceptions, and inspire individuals to adopt prescribed behaviours (Backer, Rogers, & and Sopory, 1992). Initiatives have historically focused on mass media (such as billboard, radio, and television public service announcements), many initiatives combine mass marketing and community-based services. Many campaigns used social marketing methods. Health promotion programmes are increasingly taking advantage of digital technology, such as CD-ROM and the World Wide Internet (Internet), which can target audiences, customize communications, and involve people in engaging, ongoing health exchanges (Street, Gold, & and Manning, 1997).

Social networking is an evolving field to promote community-centred prevention. Community-centred prevention transfers focus from the person. To some degree, a collection of Leading Health Indicators, which focus on key activities to improve health and are listed in *Safe People: Understanding and Improving Health*, all rely on successful health communication, reducing tobacco use, drug misuse, accidents, and violence would take a variety of research, education, and advocacy campaigns to encourage regular physical activity, healthy weight, good nutrition, and responsible sexual behaviour.

For example, lobbying campaigns to reform prices of tobacco and alcohol products have resulted in lower rates of consumption. Good clinical therapy and patient education require strong communication skills from health care professionals and patients. Public awareness campaigns encourage increased intake of fruit and vegetables (Daily for Improved Health), higher levels of preventive screening (mammogram and colonoscopy), higher rates of clinical preventive services (immunization), and higher rates of risk-reducing habits (Back to Sleep and Buckle Up for Safety).

Nevertheless, health communication alone cannot change structural health problems, such as poverty, environmental pollution, or lack of access to health care. Robust health communication systems should however, involve thorough analysis of all the factors leading to health and the methods that may be used to affect these factors. Well-designed health engagement strategies help people better understand the needs of their individuals and their groups and take meaningful steps to improve health (Freimuth, Stein, & and Kean, 1989).

### **2.14.3.3 Issues and Trends**

The health care climate has drastically changed. Such developments include significant rise in the number of communication platforms and the number of public health concerns as well as customer expectations for more and better-quality health information, and the increasing complexity of marketing and selling tactics over the time, such as direct-to -consumer advertisement of prescription drugs and selling of medical devices and medicines.

Expanding communication networks and public health problems increases competition for people's time and attention; at the same time, people have more opportunities to choose knowledge based on their personal interests and preferences. The trend toward Internet marketing indicates that digital media may follow the marketing paradigm of other mainstream media, which has major implications for the ability of non-commercial and public health-oriented health messages to stand out in a cluttered health information environment.

Contact occurs in a variety of ways (e.g., education, home, and work); across a variety of networks (e.g., interpersonal, small-group, corporate, government, and mass media) with a variety of messages; and for different purposes. People don't pay attention to all messages they receive in such an environment, but selectively listen and actively seek information (Freimuth, Stein, & and Kean, 1989).

One of the key challenges in developing successful health communication systems is to determine the best contexts, platforms, content, and reasons that will enable people to pay attention to and use health data. A one-dimensional approach to health promotion, such as relying on mass media campaigns or other single-component

outreach practices, was shown to be ineffective to achieve program objectives. Successful health promotion initiatives are increasingly dependent on multidimensional approaches to reach broad audiences regarding specific health issues, and communication is combined with other elements, such as community-based services, policy reforms, and service enhancements and the health delivery system from the start (Backer, Rogers, & and Sopory, 1992) (Simons-Morton, Donohew, & Crump, 1997).

Evidence indicates that health communication best supports health Public-private alliances and collaborations will harness capital to improve multidimensional efforts. Collaboration will benefit from eliminating message noise and addressing health issues that public services or business opportunities alone cannot adequately solve. Evidence indicates that successful health promotion and communication strategies require an audience-centred viewpoint, which means that promotion and communication practices represent the preferred formats, platforms, and contexts of audiences.

These factors are especially important for racial and ethnic groups that may have different languages and sources of knowledge. For these cases, people with clear knowledge of the cultural characteristics, media patterns, and language preferences of target audiences must conceptualize and build public awareness strategies. Avoid direct translation of health knowledge or health promotion materials. Credible communication channels must be established for each big community. Television and radio targeting different racial and ethnic groups may be successful ways of transmitting health messages by taking account of targeted listeners' language, history, and socioeconomic circumstances.

The audience-centred view also represents the complexities of the everyday lives of people and their current habits, behaviours and beliefs. Some related common audience characteristics include gender, age, education and income, ethnicity, sexual orientation, cultural beliefs and values, primary language(s), and physical and mental functioning. Specific criteria include their health care system background, attitudes to various types of health conditions, and ability to use other types of health services.

Particular attention should be given to representatives of underserved populations. Targeting different demographic groups and tailoring individual messages are two ways to make health promotion practices meaningful to audiences. Examples

include direct use of social media advertisements for young girls at elevated risk of smoking; tailoring computer-generated nutritional information to help individuals minimize their fat intake and increase fruit intake. For instance, a breastfeeding promotion programme among Navajo women based on investigations of their cultural beliefs about infant feeding practices showed increased breastfeeding rates (Wright, Naylor, Wester, & al., 1997).

Interactive media can have some benefits over conventional mass media for health communication initiatives. Such advantages include, increased access to customized health information, access to health information, support and on-demand resources, and enhanced ability to distribute materials broadly and easily update content or functions, just-in-time expert decision support, and more customer choices. At least two major problems emerge from wide availability and use of digital health contact and telehealth devices. This is linked to the dangers of using low quality health information by customers to make decisions.

Concerns are about the Web making vast volumes of information accessible that may be deceptive, unreliable, or inappropriate, which could put customers at unnecessary risk. While many health professionals believe that the Internet is a blessing for customers as they have better access to far more information than ever, practitioners are still worried that informed decision-making could be undermined by the low quality of a lot of information on the Internet. These concerns drive the development of a quality standards agenda to help health professionals and consumers find reliable Internet websites and health data.

The other task is to protect personal health data's privacy and confidentiality. Personal privacy and health information security are major problems for consumers, and as information is collected, processed, and made accessible online, these concerns are magnified. As the popularity and variety of interactive health apps increase, consumer trust in the ability or purpose of developers to maintain privacy is questioned. Personal health information will be collected in the near future during clinical and non-clinical experiences in various environments, such as classrooms, mobile clinics, public places and homes, and made available for administrative, social, clinical and research purposes. While public health and health care research can require de-identified personal health information, privacy policies and procedures need to ensure a balance

between confidentiality and reasonable access to personal health information. The trend of rapidly increasing opportunities in health communication intersects with recent demands to evaluate more rigorously all facets of health care and public health delivery processes and evidence-based practices. Multiple provider-patient communication research supports the connection between provider-patient relationship quality, patient conduct, and health outcomes (RFP, 1997). As the knowledge base on provider-patient interactions increases, a need for better provider-patient communication to develop practice guidelines becomes apparent.

Additional research on health information-seeking process and the role of health information in decision-making is also required. Health communication campaigns may benefit from more comprehensive formative research and outcome assessment. Planned results should be a core element of campaign planning and consideration. New assessment strategies are developing as health communication increasingly includes electronic media. Considering the crucial role that communication plays in all facets of public health and health care, health communication and outcomes analysis will become more closely related in all fields of health communication.

#### **2.14.3.4 Disparities**

People with the greatest health burdens often have the least access to social services, communication technologies, health care and support. Even the most carefully planned public communication projects would have little effect if underserved populations lack access to critical health providers, facilities, and communication networks that are part of a community improvement initiative. Evidence suggests that low-educated and low-income groups remain less knowledgeable and less likely to alter behaviour than higher education and income groups even after targeted health communication initiatives, which creates an awareness gap and leaves some people permanently uninformed (Freimuth V. R., 1990). However, even with access to information and services, disparities may still exist because many people lack health literacy (Seiden, Zorn, Ratzan, & al., 1990). Health literacy is increasingly vital to help people navigate a complex health system and manage their own health better. Differences in the ability to read and understand personal health-related materials and to navigate the health system seem to lead to health disparities. Individuals with low health literacy are more

likely to experience poor health, have an inadequate knowledge of their health conditions and treatment, and are at greater risk of hospitalization.

The overall annual cost of health care for individuals with very low literacy (reading at level two or below) can be four times higher than for the general population. An estimated 75 % of people have health literacy (Williams, Baker, Parker, & al, 1998). Poor health literacy among elderly people is potentially a major problem as the population ages. Nearly half of the elderly has poor reading skills and reading ability tends to decrease with age (Williams, Baker, Honig, & al., 1998.). majority of general population could not read and understand simple materials including drug labels and appointments.

#### **2.14.3.5 Opportunities**

To help improve personal and community health during the first decade of the century, stakeholders, including health professionals, researchers, public officials, and the lay public, need to collaborate on a range of activities. These activities include initiatives to create a comprehensive health information system that provides equal access, development of high-quality, audience-appropriate information and support services for specific health problems and decisions related to health for all segments of the population, especially underserved persons, training of communication science health professionals

A National Health Information Infrastructure (NHII) provides a framework that stakeholders can use to communicate with each other and turn data into useful multi-level data. Efforts are underway to build interconnected national and global health knowledge infrastructures to promote progress in health. In the United States, the National Committee on Vital and Health Statistics (NCVHS) advises the Health and Human Services and Congress on the country's health information needs. The NCVHS describes NHII as all the technology, standards, procedures, programmes, principles and laws that promote human safety, health and public health. The public and private sectors are discussing concerns related to technical standards, privacy and confidentiality, and regulatory guidelines (NCVHS, 1999). Technology enables people not only to access health information created by others, but also to build tools to control their own health and affect the health of their communities. For instance, community

groups could use computers to gain access to quality-of-life survey data in their neighbourhoods and apply this information to create an action plan to present to local elected and public health officials. Knowledge is a vital element of informed engagement and decision-making, and effective and inclusive quality information and support services for everyone.

As patients and consumers become more knowledgeable about health information, services, and technologies, health professionals will need to meet the challenge of becoming better IT communicators and users. Health professionals need a high degree of interpersonal skills to communicate with diverse cultural, linguistic, educational, and socioeconomic communities and patients. Health practitioners will need more practical instruction and expertise with both computer and telecommunication technology. Patients and customers continue to use technology to address health issues in addition to looking for facts, and health professionals need to be ready to respond. Research and evaluation of all forms of health communication will be necessary to build the scientific base of the field and the practice of evidence-based health communication to support an increase in health communication activities. Collectively, these opportunities represent critical places for personal and community health changes.

#### **2.14.3.6 Interim Progress toward Year 2000 Objectives**

Many health care organisations and agencies use the Internet as one of their main channels for information delivery. Access to the Internet and subsequent technology is likely to become important in order to obtain access to health records, to contact health care providers and health practitioners, to receive services remotely, and to engage in efforts to enhance local and national health (Eng, 1999) (Harris, 1995). The incorporation of digital media means that health information can be accessed electronically not only through phones, but also through Wi-Fi. To access this knowledge, technological literacy or the ability to use modern technology and applications will be necessary. Internet connectivity in the home is a significant predictor of equal population access.

A growing number of people, such as libraries and community centres, have access to the Internet at work and public facilities, but several limitations affect the use

and support of online health information in these settings. Many companies track electronic mail and employee-visited pages. Access in public settings may be problematic due to concerns about privacy and confidentiality and access may be required when such services are inaccessible. Connection at home is important due to the highly vulnerable nature of Internet health-related uses. While the proportion of people with Internet access has risen significantly since, many parts of the population lack access, such as low-income and rural households; people with less education; and some racial and ethnic groups. The rates of Internet access differ considerably based on income. Only 11% of households earning or less have access, while 19% are connected to among those earning 30% have access among those earning of households with an Internet connection income of or higher. Barriers to Internet access include cost, lack of infrastructure, restricted literacy; Public and private sector stakeholders, especially government agencies and technology corporations, should be involved in initiatives to promote universal Internet access.

### **2.15 Pages that aroused most interest**

Although access typically increases after the campaigns, these oscillations across the site pages were not homogenous. There was less exposure (in absolute and relative terms) to "prevention sites" containing information on protective behaviour and lifestyle improvements. None of them reported campaign-related viewer upturns, and the smallest oscillations were relative to the lower mean number of accessions. On the other hand, pages on carcinogenesis, diagnosis and treatment "How cancer occurs", "Breast cancer" and "Forms of cancer" (a page that links to one that explains the most common types of cancer) were intensively searched (in absolute and proportional numbers). The web design was "horizontal," that is, almost all pages connected to the welcome page.

### **2.16 Number of views**

Prevention sites had the lowest audience by large margins. They oscillated little during the elections, besides the lower number of views, with the trend not deflecting much from annual averages. The most important variations were found on page "tips to avoid cancer," which averaged just views, compared to "Types of cancer," which averaged views overall. Of all metrics (views, time spent, return rate and percentage of views

site-wide), the "disease pages" ("How cancer occurs" and "Breast cancer") returned similar oscillations. We noticed a general upward trend on the disease pages, in greater proportions than on the "educational pages." Total mean views on "When cancer occurs" were (over times more than those on the prevention pages); unlike the "Self-examination" list, the "Breast cancer" list exceeded, with just views.

### **2.17 Proportion of page access to overall site access**

Such metrics represent the number of page views compared to total site access. The more "sensitive" pages (and the less "sensitive" ones) appear to have higher ratings, thereby confirming preferences. The most remarkable example is the page "tips to avoid cancer" which showed a downward trend that started in months with the most extreme traffic on the Internet, thereby confirming low relative and absolute audience. In November of the second year of the report, the "Breast cancer" page saw strong growth (peaking at 1.0% of total visits) relative to the average mean per page of that year of 0.7% of visits. Nevertheless, the "Breast self-examination" page accounted for 0.41% of visits over the same time (below the annual mean of 0.44% in 2000), and maybe it remained unresponsive to official campaigns. In November the breast cancer page scored 0.74%, almost equalling the overall mean (0.75%), which was comparatively depressed by the extraordinary proportion of breast cancer. All "information" pages retained the plateau or descending trend during tobacco and cancer events.

### **2.18 Time spent on pages**

There was a similar trend of time spent on pages. Pages with carcinogenesis data, "When cancer appears"-obtained an overall average of, thereby increasing the time spent on preventive information. The same trend was found on pages with information on "Breast cancer", which attracted focus to, "as opposed to for" Breast self-examination.

### **2.19 Return rate**

Significant increases in monthly return rates were observed on the disease-related "Cancer Types" pages and diagnostic and treatment technologies, this may be because "Types of cancer" is the point of entry to which everyone returns if they want to learn

about various forms of cancer. Media-announced promotions and events did not impact returns to pages on carcinogenesis. However, the reverse was found on pages on breast cancer and other types of cancer, where returns peaked in May, July and November, with a significant number of returns (visitors accessed page times, with returns).

## **2.20. Study Data and Methods**

The Pew Hispanic Healthcare Survey, a nationally representative sample of Latino adults studied, the key dependent variable which was the product of combining three variables listed under one questionnaire element, was an index measure of health decision-making and medical advice-seeking behaviour. Respondents were asked: "Reflecting on the past year, did any media data you find:

- a) affect a judgment on how to treat a disease or illness;
- b) React to new questions from a doctor or other medical professional;
- c) What do you think of food or exercise? (Yes / no) All "yes" answers were registered, and all "no" answers as Added the scores of each variable to the index of health decision-making and medical advice-seeking conduct. Lower index scores represented greater media impact on health decision-making and consulting conduct. The primary independent variable, also an index, calculated the amount of health-related information provided by each respondent from four media sources: radio, Television, Web, and print media (i.e. newspapers and magazines). Respondents were asked:

In the past year, how much information did you get from?

- a. doctor or other medical professional,
- b) family or friends,
- c) radio,
- d) Internet,
- e) television,
- f) church or civic group, and
- g) newspapers or magazines

Respondents indicated the amount of health-related information they provided (i.e., a lot of information, a little or none at all) for each source. In this report, the content of our key dependent variable was only based on media outlets. An index analysis of health information from all four media outlets was developed. Higher scores showed greater amount of data. The three additional independent variables were health literacy index, English proficiency index, and Spanish proficiency index. The Pew Hispanic Healthcare Survey measured health literacy by combining three items:

1. "How often do you have someone to help you read hospital materials — would you say never, sometimes, often, or always?"
2. "How confident are you yourself-would you say extremely, quite a bit, somewhat, a little bit, or not at all?"
3. "How often do you have trouble knowing about your medical condition?"

### **2.21. Discussion**

Disease prevention, like cancer, has been a significant component of health promotion and education for decades. Health institutional programmes were prewritten focused on "evidence" of prevention, with information sharing techniques as the primary method of shaping lifestyle choices. Internet, TV and print media strategies have been recommended as a means of disseminating knowledge, as well as a shortcut to inducing behavioural changes, as a matter of personal enlightenment that would neutralize pernicious habits. A variety of health education models emphasize knowledge finding a "preparation step" or an example of "self-management reinforcement" as a preliminary stage in behaviour change. Building on the same premises, this study considers that one aim of institutional initiatives is to promote awareness on cancer prevention. The findings obtained show that the distribution of information on cancer prevention through institutional initiatives appears to attract attention to issues relevant to cancer diagnosis and care. This may be due to the news media's "technology mentality," which is more suggestive of encouraging illness than prevention.

Strong focus on developments in cancer diagnosis and treatment in the current academic setting may be considered a cause and, at the same time, a consequence of this trend. Indiscriminate media attention on the more dramatic aspects of experimental therapies may contribute to undue confidence in curative abilities. The popularization

of diagnostic and treatment technologies by the sensationalist press seems to suggest that discovery of the definitive cure is imminent. In fact, the voices of unqualified producers of health knowledge rise dramatically above those of authoritative documents, rising the noise level of misinformation. In such a setting, superstitions and myths thrive, wreathing in mystery as to their roots. It is important to note in this context that supporting safety requires choices that are not solely in the domain of log files can easily and inexpensively produce valuable data. What material makes sustained and regular visits? Will connecting prevention messages to diagnostic technology data be helpful? Can Internet websites be called a "show case" with health information on sale as on a customer data processing model? If they can, will institutional managers not be warning when interest is highest in their products? There are several theories that explain the variety of factors that can and affect human behaviour. Current health education models can be defined as focused at the adult, interpersonal or community level. Tailoring means making a message more important to a recipient by using established information that belongs to a person or community. Custom messages tend to be more important individually and therefore receive more attention. Although any clear link between web audience and behavioural change attracts criticism, we think some of the differences could be captured through qualitative reception studies. Thus, campaign assessment using mixed quantitative and qualitative approaches should be widely considered as the final step of any health promotion plan, evaluating which techniques or activities perform well and which factors influence them, and recommending ways to develop an effective health communication system.

Another economically usable resource for planning future institutional communications is the research made possible by log file records (in addition to providing useful feedback to the full reformulation of the INCA website in 2002). The patterns uncovered by historic sentinel page log file analysis allowed the website to be properly refined. More studies are required to extend our understanding of ways of interpreting cancer-related knowledge through the cultural context.

When social media platforms are integrated with health communication based messages, it adds on a catalytical value and has a positive impact on people as these health based messages affects the health based decision making power and their health seeking behaviour in particular.

We are presently in a scenario of Information age where patient has now turned out themselves into the category of “an active patient” which has changed the entire equation and relationship between a doctor and a patient. Health based strategic media interventions serves as an important basis for action, encouraging individuals to make some health-related decisions and receive more clinical guidance from their respective doctors.

Mass media health contact has proliferated in recent years across numerous media outlets, including TV, print (newspapers/ magazines), radio, and the Internet (Kline, 2003). Such media outlets have immense potential to radically change how health information is disseminated and accessed (Hesse, 2005).

Media based data can even to reach data from health professionals as physician patient dynamics move from “passive patient model” to “an active patient model” (Peña-Purcell, 2008) (Wolfe, 2002). Studies clearly document differences in media channel use by specific populations for health-related data. For example, evidence points to a "digital divide" in Internet access, with decreased Internet access among racial and ethnic minorities, disabled people, rural people, and younger, older, and less educated people (Chang, 2004). A recent Pew report indicated that while 83% of adult Internet users in the U.S. have sought health information online, only about 35% of Hispanic adults report that they use the Internet to obtain health information, most of which is in English (Livingston, 2008). In Spanish, a majority of the Hispanic population receives media-based health information mainly via television (68%) and print media (51%) (Livingston et al). Evidence is mixed on whether media-based health data exposure affects health-related behaviours. For example, a study by Hay, Coups, Ford, and DI Bonaventura found that non-Hispanic whites who reported greater Internet usage and access to health information from both Internet and print media also reported higher rates of knowledge of preventive strategies for skin cancer and higher use of sunscreen and shade-seeking.

Although several studies have explored the association between access to health information to similar mass media outlets and actual health-related behaviours across the general population, there is little research on the effect on health decision-making and medical advice-seeking actions among Hispanic adults to exposure to mass media-based health information across different platforms. Therefore, the primary aim of this

article is to determine whether exposure to mass media-based health information influences health decision-making and medical advice-seeking behaviour among Hispanic adults, who rely heavily on health information media channels. Specifically, it was reported that Hispanic adults who report having a lot of media health-related content (radio, Internet, television, newspapers / magazines) are more likely to say that this exposure affected a decision about how to treat a disease / medical condition, led them to ask new questions to a doctor or other medical professional, and changed the way they felt they had a medical problem. It was further hypothesised that, above the impact of health literacy and Spanish and English language proficiency, amount of media-based health knowledge will be the best predictor of health decision-making and medical seeking activity in this population.

As expected, the amount of health knowledge from media outlets is above and above health awareness and English and Spanish language skills in predicting health decision-making and medical advice-seeking actions. Thus access to multiple media best health information has a vital action for Hispanic adults to form their sure health based choices. Such results are consistent with a Cochrane review investigating the impact of mass media on health service use. The analysis concluded that while data is small, evidence suggests that the use of health care is significantly affected by mass media advertising campaigns and extensive media reporting of particular health-related issues (Grilli, 2002). Another research found that although patients were being contacted by health campaigns and drug advertisements, unplanned, untargeted advertising details did not (Eriksson, 2005). Other studies of health communication show that mass communication channels increase health awareness and knowledge (e.g., Baker, Wagner, Singer, & Bandore, Hay et al, Pena-Purcell), but both media and interpersonal communication are needed to change health behaviours. The fact that access to media-based health information was more likely to impact those who were less literate in health and those who were more fluent in Spanish and English also indicates that this information is a significant guide to action for populations who can read the written information and/or understand the verbal information, but a provider interpreting the health in will need support. Thus, the availability of mass media-based health information has the potential to raise awareness among those who are passively exposed to it, which in turn prompts individuals to pursue more opportunities for interpersonal health contact with a health provider, especially those who have a low

level of health literacy and are fluent in English and Spanish. Conversely, individuals may be obtaining much more medical knowledge and may be actively engaging in decisions concerning their health as the doctor-patient relationship is gradually moving towards a more involved patient model (Hesse, 2005) (Santana, 2011) (Wolfe, 2002)

Audience increased marginally across all pages over the 24 months of observation. The observed trends indicate annual cycles of decreasing access at the start of the year, followed by gradual recovery in the first semester before April / May (International No-Tobacco Campaign) and July / August (Brazilian National No-Smoking Campaign) when the annual mean is surpassed. Access falls after this time before a partial recovery occurs in November (Brazilian National Cancer Campaign). The trend is downward from this point on until the next recovery phase in April / May of the following year. In March 2001, a significant increase in access was observed around the hole site (including the pages studied), likely correlated with governor's cancer death of Sao Paulo State which earned comprehensive media coverage.

## **2.22. Ways to Increase Impact of Media in Cancer and Strategic Intervention**

In the mass media, the abundance of information has considerable potential to raise general health consciousness for those passively exposed to it, as well as among those actively pursuing information (Hay, 2009). A positive avenue to encourage individuals to seek more knowledge and advice from a health professional is FDA-regulated media-based health communication that encourages reliable health information and enhances understanding of health problems and dangers, prevention, and treatment options. Mass media health communication can serve as a tool to improve public health and thereby reduce inequalities in health.

### **2.22.1 Improve the health literacy of persons with inadequate or marginal literacy skills**

Responses from the National Adult Literacy Survey show that approximately million Indian adults have poor or marginal literacy skills. Written information is not the only way to communicate about health, but the use of print materials, typically written at the 10th grade level and above, is structured around a lot of health education and promotion. Such resources are of no interest to those with poor reading skills. As a

result, the full benefits of health knowledge and programs are unavailable to a very significant portion of the population.

Closing the health literacy gap is a fundamental issue of fairness and equity and is key to reducing health disparities. Public and private efforts must be made in two areas: the production of suitable written content and the enhancement of literacy skills of those with reduced literacy. There is awareness to build reliable, culturally and linguistically relevant, plain language health communications. Professional journals and Government guidelines provide the requirements for combining and implementing organizational, writing style, layout and design concepts for successful communication. These standards should be widely communicated and used. Many organisations such as public and medical libraries, charitable, technical, and community associations, and schools may provide health literacy services aimed at developing skills for low-literacy and restricted English professionals. If appropriate resources exist and people are educated to use them, then significant changes will occur in health literacy for the least literate.

### **2.22.2 Increase the proportion of health communication activities that include research and evaluation**

Health Owners; National Health Council. Strong health communication systems are based on sound assessment and analysis. Meaningful analysis and assessment are vital parts of initial programme design, not afterthoughts. Research offers the ideas and resources to plan and carry out formative, process and result assessments to enhance patient communication activities, assess the degree of progress that has taken place, and recognise programmes or components of programmes that do not work. Research and assessment routinely collect knowledge that can be used to refine the plan, development, implementation, adopted. The required level of analysis and evaluation should reflect the costs, scope and potential effect of the proposed communication operation (in terms of gain or harm). Adequate audience testing for need, cultural and linguistic competence, comprehension, and receptivity should be expected at a minimum. Assessment criteria and expectations for grant-supported communication projects may be set and included in funding applications and grant programme guidelines, as well as projects directly funded and implemented by public or private sector entities by incorporating research and evaluation activities in their work plans.

**2.22.3 Increase the proportion of health-related World Wide Web sites that disclose information that can be used to assess the quality of the site**

Significant questions arise about the quality, adequacy, and possible health effects of these sites with the increasing amount of health information, ads, goods, and services available on World Wide Web pages. People use the Internet to look up information, buy drugs, communicate remotely with doctors, and maintain their personal health records. Approximately million people in the United States use the Internet for health-related purposes, and the potential for harm is substantial from incorrect information, low quality products, and inadequate services. Several efforts are underway to determine effective and feasible strategies to assess online health sites. Professional associations issue guidance and recommendations. Regulatory agencies such as the Federal Trade Commission vigorously track and prosecute inaccurate or deceptive website owners, and online health content developers and buyers are an additional consistency mark to be present on a website relates to the functionality of the site for all users. Site content should be viewed in a way that disabled people and low-end technology may access it.

**2.22.4 Increase the number of centres for excellence that seek to advance the research and practice of health communication**

A research and training framework is required to develop, model, and organise activities to broaden the knowledge base of health communication and integrate it into health promotion practice. To meet scientific and functional needs, centres for excellence located in academic schools, national agencies, or research centres will be instrumental. Centres will be responsible for a number of tasks, such as encouraging the implementation of health communication ideas and practices in health care, disease prevention and health promotion programmes, developing and disseminating quality standards, organising efforts to establish a consensus research agenda, designing mechanisms to define and assess health communication.

These centres will offer key competencies in health communication and media technology to specialists, model curricula, properly designed media laboratories, educational workshops, graduate education and distance learning courses, and training and placement services to widen the range of communication skills for health

practitioners and health educators. The centres could also build repositories that archive items such as quantitative studies and reports on formative and results and could collaborate to make data publicly accessible through existing governmental distribution networks. Federal grants, foundations, or private sector health care organisations may finance centres for excellence in health communication.

### **2.22.5 Increase the proportion of persons who report that their health care providers have satisfactory communication skills**

Effective provider-patient contact leads to better health status and quality treatment. Patients' evaluation of the communication skills of their caregivers is essential for patients with a regular source of treatment as well as those without, who may have less frequent interaction with the medical care system. Research suggest that patients find it difficult to communicate with their health care providers and complain that providers do not provide them enough information, even though they highly appreciate the information and want to learn more. Simple, candid, reliable, culturally and linguistically competent provider-patient contact is important for prevention, diagnosis, treatment, and management. Good communication underpins clinical-level prevention and screening strategies as clinicians have the ability to participate in one-on-one consultation and provide culturally and linguistically relevant knowledge conveyed at the level of person's health literacy. Diagnostics and therapies allow clinicians to decide what to do with patients. The quality of physician-patient contact can impact multiple outcomes, including patient adherence to guidelines and health status. Good knowledge and contact with a doctor can not only relieve the anxieties of patients but also help patients appreciate their options, allow them to engage in informed decision-making, and better manage their own health issues.

### **2.23. Conclusion**

Mass media is definitely the most effective medium of communication nowadays, but it is important to also concentrate on what information is communicated and how the information is conveyed to an individual. Whereas, collecting knowledge, knowing the benefits and drawbacks of these assessments is important for a patient to decide whether or not they wish to pursue the study, more information can be conveyed correctly and

reliably as various media outlets consider the impact of the manufacture of scientific testing and information.

Overall, when we examine mass media, some media issues are conveyed accurately to information, while certain subjects are blown out of proportion or are not adequately represented. Medical advances are also an important topic to tackle, as our society is still not able to debate such issues in public, where the media does a better job at the beginning of discussions. However, when you look more deeply at the way medical tests are portrayed, you see a variety of information that is extremely important and is not transmitted to our culture. People talk about screening for breast cancer, but not so many are aware of the fundamental facts. However, the media can have a major impact on our community by transmitting information properly; it can make people aware of health problems, which they probably haven't considered before, as it did not appear relevant.

In fact, it is important to understand how mass media portray screening for breast cancer that screening for breast cancer provides more advantages in comparison with the costs. The importance of risk, however, is important not only to screen breast cancer itself, but also to diagnose the options available after a patient is diagnosed.

It is also important to understand and understand the risks related to the operation of breast cancer preventive operations. The benefits may seem golden, but before considering a medical procedure, it is important for a patient to exhaust all its options. Sometimes, people do not know all the facts and may rely on media outlets to educate themselves, thus providing truthful details is vital to the public. It is important to realise that every day change is happening constantly. And every day there are new technologies, new social media platforms and new shows that inform people of the medical developments in our world. We can see how the media play their part in shaping our culture through time, both risk and benefit. Media are improved when comparing different media and their approaches. However, when it comes to informing us about a medical question, media can still do much better. Instead of just beginning the discussion on breast cancer, media need to concentrate more on fundamental factual information and discuss fundamental risks and benefits and procedure. This change would have an immense effect on our society and on their lifestyle and health choices.

Health and hygiene factors are always to be linked with the action which will be taken by individuals or communities (Phaswana-Mafuya and Shukla, 2005). For development it is very necessary that each individual should have adequate knowledge and information to maintain healthy practices in their daily routine.

Propagating hygienic practices and channelising the communication gap on health related issues matters a lot. In this case, health communication plays a central role by using various strategies and interventions to influence individual and community decisions that enhance good health practices attitudes and behaviour to repress those which place life and health in jeopardy. Communication strategies include a range of communication activities and intervention like public relations, entertainment, education, media advocacy, opinion leaders, mass media channels etc. that can occur at the individual, small group or mass media level. Rogers and Storey (1987) explain that health communication campaigns have four defining characteristics i.e., generate specific outcomes or effects in a relatively large number of individuals usually within a specified period of time and through an organised set of communication activities. Health communication campaigns that rely on mass media outlets frequently consist of a series of television and radio public service announcements (PSAs) or paid commercials with collateral print materials such as posters, booklets, and brochures which are more impactful.

It was noticed by most health communicators that there are some common set of variables which are considered in the development of a mass media health communication campaign. These common set of variables are reasonably expected as a result of a communication experiences. Communication development or independent variables can be categorized into four broad areas: psychosocial attributes of the receiver, the source or spokesperson, settings, channels, activities, materials used to disseminate the message, the message itself, including content, tone, and type of appeal, audio characteristics, and visual attributes. Taken together, any combination of these four independent variables constitutes a communication strategy (Sutton, Balch & Lefebvre, 1993; McGuire, 1989; Flay, DiTecco & Schlegel, 1980; Flora & Maibach, 1990). The dependent variables of a mass health communication endeavour may be categorised into six key areas i.e., 1) Exposure, 2) Attention, 3) Comprehension, 4)

Yielding, 5) Attitude Change, and 6) Behaviour (Petty, Cacioppo & Schumann, 1983; Backer, Roger and Sopory, 1992; McGuire, 1989; Flay, DiTecco & Schlegel, 1980).

It has been found in several studies that mass media, especially television, has the power to sway huge audiences in the desired direction. Television brings issues into the public agenda and helps to create a favourable social climate, counter hostile propaganda, dispel rumours, clarify doubts and misunderstandings about health-related issues. The success of mass media campaign depends on: (a) Whether the transmitted communications are effective in changing attitude of recipients in the desired direction and; (b) Whether these modified attitudes influence people's behaviours. Many social and behavioural scientists have studied this phenomenon around the world. Brown & Singhal (1999) in their work titled "Entertainment Education Media Strategies for Social Change: Promises and Problems" (Brown & Singhal, January) discussed potential advantages offered by entertainment-education programs over contemporary programming alternatives. The researchers identified various characteristics of the entertainment genre which makes them particularly acceptable for transmission of development messages that offer educational and advanced development goals, that make them especially appropriate for transmitting educational development messages that provide education and advance development goals. These characteristics are – perennial, persuasive, popular, personal, pleasurable, pervasive, passionate, profitable and practical (Brown & Singhal, January). Peltzer et al. (2012) showed in their study that social and behavioural communication interventions are critical component of HIV/AIDS prevention. The study aimed to assess the reach of HIV/AIDS campaign in conjunction with contributions to knowledge, attitudes and risky sexual behaviour. The study found that greater exposure to HIV/AIDS mass communication programs was associated with greater knowledge about HIV/AIDS transmission and prevention and less stigmatizing attitude towards PLWHAs.

Li et al. (2009) concluded in their study that mass media sources, such as television, newspaper and magazine were more frequently identified as the channels for acquiring HIV/AIDS related information. They suggested that the exposure to mass media messages was more significant so as to raise awareness level and reduce HIV/AIDS related stigma.



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# **Chapter 3**

*Cancer and Strategic  
Communication Mass  
Media for Attitudinal and  
Behavioural Changes*



# *Chapter 3*

## *Cancer and Strategic Communication Mass Media for Attitudinal and Behavioural Changes*

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*Disease desperate grown  
By desperate appliance are relieved,  
Or not at all.*

*-William Shakespeare, Hamlet*

(These lines said by Claudius in the play *Hamlet* is a clear example of how Hamlet's anti disposition is mistaken as a disease. He stresses that disease like what Hamlet suffers from must be treated immediately or it cannot be treated at all.)

Cancer begins and ends with people. In the midst of scientific abstraction, it is sometimes possible to forget this one basic fact.... Doctors treat diseases, but they also treat people, and this precondition of their professional existence sometimes pulls them in two directions at once.-June Goodfield (MUKHERJEE, THE EMPEROR OF ALL MALADIES, 2011)

### **3.1 Introduction**

Cancer, we now know, is a disease caused by uncontrolled growth of a single cell. This growth is unleashed by mutations- changes in DNA that specifically affect genes that incite unlimited cell growth. In a normal cell, powerful genetic circuits regulate cell division and cell death. In a cancer cell, these circuits have been broken, unleashing a cell that cannot stop growing (MUKHERJEE, THE EMPEROR OF ALL MALADIES ABIOGRAPHY OF CANCER, 2011).

The first medical description of Cancer was found in an Egyptian text originally written in 2500 BC: "a bulging tumor in (the) breast ... like touching a ball of wrappings." Discussing treatment, the ancient scribe noted: "(There) is none". (MUKHERJEE, THE EMPEROR OF ALL MALADIES, 2011, p. OPPOSITE 288)

Cancer is being labelled as “rentless and insidious enemy” and “A monster more insatiable than the guillotine” among human diseases (MUKHERJEE, THE EMPEROR OF ALL MALADIES ABIOGRAPHY OF CANCER, 2011).

With increase in awareness throughout the scientific advancements and medical research an interdisciplinary approach for cancer prevention and cancer management should be added into the domain of cancer based patient centered communication in order to optimize the worth of new and present cancer based medical discoveries, particularly in the field of personalized patient based medicine.

While the research into patient communication has historically focused on results such as patient satisfaction, understanding, and change, we need to understand better how these effects affect health behaviour and disease outcomes. "Patient-provider interactions play a key role in deciding who is expected to take part in a health-enhancing life-style that minimizes the risk of cancer, as highlighted by the latest study carried out by the NCI designated Cancer Centre Directors Acceleration Success against Cancer.

Studies to assess effect and effectiveness of patient based communication are needed in order to monitor and track the progress of communication initiatives in the NCI Strategic Plan for the Leading Country, stressing the requirement for psychological and communication research. After its inception in 1997, the Cancer Control Division of NCI has been a major leader in this critical field of research

It's important to understand how patients / family and the healthcare team can optimize the communication process in order to reduce cancer burdens. The teams of researchers and clinicians will continue to establish communications strategies for patient-oriented cancer, and we hope that this research will help to improve your own communication science.

### **3.1.1 The Cancer Information:**

We hear a lot about Cancer, Mass Media bombards us with various information about Cancer, its treatment, prognosis and symptoms.

Unfortunately, for most of us Cancer will not remain a distant threat. Three out of every four families will experience first-hand. A person who discovers a Cancer symptom or is a newly diagnosed Cancer patient encounters an even more confusing world full of terms like metastasis, radiation therapy, chemotherapy, and clinical trials. Faced with a myriad of choices, the result may be no action taken or action taken too late to maximize chances for survival and cure. We know, for example, that many people with symptoms wait from 3-12 months before they see a physician. Some of those who begin cancer treatment drop out before completing it.

### **3.2 Cancer**

Cancer is a term used for a group of diseases in which the cells in the body grow and divide in an uncontrolled manner to produce abnormal cells, which invade other body parts and may spread to other organs thereby affecting their respective functioning. This process of spread to distant organs is called metastasis which is a major cause of death in cancers. Cancers can affect any part of the body. Cancers are also known as malignancies and neoplasms.

The change of a normal cell into a cancer cell is the result of the interaction between genetic factors of individual and external cancer producing agents called carcinogens such as:

- Physical agents, e.g. ultraviolet and ionizing radiation;
- Chemical agents, e.g. Asbestos, components of tobacco smoke, aflatoxin (a food contaminant produced by a fungus) and arsenic (a contaminant in drinking water); and
- Biological agents, e.g. Infections from certain viruses, bacteria, or parasites.

#### **3.2.1 The History of Cancer: A Timeline**

Throughout its 4,000-year history, cancer has left doctors, scientists and patients with questions that the medical and science fields could not even start to address until recent decades. For centuries, the question has lingered: Will there be a time when we find a way to control or even cure this disease?

Today, researchers and scientists finally understood on a cellular level what cancer actually was and how it spreads. Scientists have discovered many successful, targeted ways of treating Cancer – surgically, medically and with radiation. Almost daily, new discoveries about cancer are made, critical ones like the key to cancer’s spread.

How did we get to this momentous time in the history of cancer? Based on “The Emperor of All Maladies: A Biography of Cancer” and Cancer Progress’ (Mukherjee, 2011) here are some of the most noteworthy cancer-related achievements and failures.

## **19<sup>TH</sup> CENTURY**

### **1840s**

“Anaesthesia,” the idea of making a patient unaware of pain, was first applied in surgery at Massachusetts General Hospital.

### **1850s**

After reading multiple similar reports, German researcher Rudolf Virchow published his report about a patient whose autopsy revealed massive amounts of white, milky cells above the red blood upon examination of blood specimens. He named the condition leukaemia from the Greek word *leukos*, meaning white.

Virchow discovered that cancer was, in its simplest form, the uncontrolled growth of cells, called hyperplasia. This led to the term neoplasia (neo meaning new), a term that is still used today to describe cancer.

### **1860s**

A Scottish surgeon named Joseph Lister recalled Louis Pasteur’s experiment, which found that meat exposed to air began to ferment. But the air was okay in a sterilized, sealed jar of meat broth. Lister realized bacteria would affect an open wound the same way, so he tried treating an open wound with an antibacterial agent and then closed it. It healed and resulted in another major discovery in the treatment of cancer: infection control.

**1890s**

William Stewart Halsted started collecting data on a new procedure for breast cancer, hoping to prove radical mastectomies would prevent cancer recurrence. A German lecturer discovered radiant energy that came to be known as X-ray. UVA Researcher Examines DNA. UVA researcher Tom Parsons examines DNA of viruses and cancer in 1983.

**20<sup>TH</sup> CENTURY****1900-1910s**

Marie Curie identified radium, named from Latin for light. The surgical community discovered that cancer recurrence was determined by whether the cancer had spread prior to a mastectomy, and how far, not by how invasive the surgery was.

**1920s -1930s**

Radiation therapy exploded in the United States; the extensive side effects of radium surfaced among workers – both acute, including skin, bone and tooth necrosis, and long-term, including cancers of the blood and sarcomas. President Franklin D. Roosevelt approved the establishment of the National Cancer Institute (NCI).

**1940s**

Sidney Farber, a pathologist turned clinician researched and tested chemicals (named chemotherapy) that showed promising results in treating leukaemia in children. A Greek pathologist named George Papanikolaou invented pap smear tests to prevent cervical cancer. Cancer became highly publicized and politicized – finally a topic of international discussion, resulting in abundant funding for research.

**1950s**

Farber raised more than \$150,000 for his own treatment center for leukaemia patients. Combination chemotherapy for leukaemia showed promise but had limitations. The U.S. Senate authorized the NCI to initiate a coordinated effort on the research of

chemotherapy drugs, called the Cancer Chemotherapy National Service Center (CCNSC).

### **1960s**

A four-drug regimen to treat leukaemia showed grossly toxic effects in trial populations. However, it could put patients in remission if they survived the side effects. Results based on St. Jude's and other research tests proved chemotherapy regimens could cure 80 percent of those treated. Based on numerous studies dating back to the early 1900s and data published by the American Cancer Society, the Surgeon General issued a report linking cigarette smoking to cancer. University of Virginia Cancer Center employees (year unknown)

### **1970s**

President Nixon signed the National Cancer Act and funds were poured into the trials of new chemicals for cancer treatment. The NCI designated 20 Comprehensive Cancer Centers, hospitals with dedicated cancer centers. Radioactive seeds for internal radiation were used for prostate cancer and other cancers (Brachytherapy). Genes re-emerged as the focus for researchers studying cancer.

### **1980s**

Researchers identified the roles of oncogenes and antibodies, and started using them as targeted cancer treatments. Advances in breast cancer research included the successful use of the hormonal drug Tamoxifen to achieve remission with little side effects. Doctors began initiating palliative care for many untreatable cancers, using opiates to reduce pain and anti-nausea drugs to relieve vomiting. Hospice care was established at hospitals around the world. H. pylori infection was found to be a cause of gastric cancer. Many hospitals began performing bone marrow transplants.

### **1990s**

Herceptin was proven a successful drug for breast cancer. Early detection and prevention showed promise, but data showed confusing and conflicting mortality rates

both across ages and by cancer type. No conclusions could be determined except that there was a great deal still to be learned about cancer.

## **21<sup>ST</sup> CENTURY**

### **2000s**

Historical medicine and research paired with modern science started to show an impact in the mortality rates of cancer. 24 new cancer drugs were brought to market. Targeted therapies showed promise, but were not reliable. Researchers shifted back to the focus on prevention and underlying causes of cancer. The Human Genome Project (sequencing of the normal human genome) was complete, allowing the sequencing of gene mutations for cancer types to be studied. By 2009, researchers revealed mutations in pancreatic, ovarian, and lung cancer and leukaemia.

### **2010s**

Major strides have been made in the areas of immunology, metabolism, gene regulation, and cancer metastasis. Clinical trials for targeted cancer treatments are available worldwide and offer opportunity for patients to benefit and for researchers to forge ahead in finding a cure based on what proves to be effective. Procedures such as “image-guided intraoperative radiotherapy” (only available at UVA Cancer Center) allow patients with early stage breast cancer to have surgery and radiation in a single visit.

The relatively new combination of imaging, radiology and surgery results in treatment options that are more convenient and effective and less expensive and invasive. Cancer survival rates have dramatically increased due to early detection through screening programs, preventative measures and advanced treatment options.

The secret to battling Cancer, then, is to find means to prevent these mutations from occurring in susceptible cells, or to find means to eliminate the mutated cells without compromising natural growth. Cancer is built into our genomes: the genes that unmoor normal cell division are not foreign to our bodies, rather mutated, distorted versions of the very genes that perform vital cellular functions. And Cancer is imprinted

in our society: as we extend our life span as a species, we inevitably unleash malignant growth (mutations in cancer genes accumulate with aging; cancer is thus intrinsically related to age) (MUKHERJEE, THE EMPEROR OF ALL MALADIES, 2011).

### **3.3. A Patient-Centred Approach to Cancer Communication**

Although the communication of cancer in other health contexts is very similar to contact, research into cancer communication is important for several different aspects in cancer treatment. If we look up at the broader area of cancer based communication it includes information about physicians and many treatment strategies (such as oral and intravenous drugs, chemotherapy, and surgery).

- Get bad news
- Manage a life-threatening disease's emotional impact
- Learn and recall structured data
- Contact multiple health professionals
- Understand prognosis statistics
- Incertitude with the preservation of hope
- Build trust in clinical ties in the long term;
- Make decisions about medication, including future clinical trials
- Adopt habits of wellbeing

Here we discuss patient-clinic contact that supports three key characteristics of "patient-centred" care: recognition of the interests, perceptions, and individual experiences of patients (Epstein RM, 2005). We define patient-centred communication in the patient-clinician interaction processes and outcomes: (Epstein RM, 2005)

- Establish, appreciate and confirm patient viewpoint (e.g., complaints, thoughts, and expectations)
- Knowing the patient in his / her own social and psychological sense
- Having a common understanding and treatment of the patient's question
- To help a patient by giving him or her active involvement in health decisions

Patient-centred contact often creates a closer partnership between patient and clinician contact characterized by mutual trust, loyalty, and dedication. Nevertheless, patient-clinician contact benefits must go beyond interaction; hopefully, contact must also help enhance the well-being of the patient and alleviate discomfort after leaving the consultation.

### **3.3.1 Communications System**

Contact to strengthen and mitigate discomfort should be able to engage in patterns of communication that contribute to a patient-oriented treatment strategy for doctors, patients and their families. As individuals, medical professionals and patients, each of them can interact competently; has sufficient knowledge, experience and understanding of what is required to communicate effectively and a suitable perceptive and linguistic capacity to establish and adapt positive communicative practices.

### **3.3.2 Motivating function**

It is fair to conclude that physicians generally have a deep incentive to provide high-quality patient care; this commitment may be undermined by many factors. Like in other forms of skills, the commitment of a person also decreases when exhausted, a factor that can lead to medical errors. Some clinicians may set priority over those of patients for their own needs; for example, rushing to get back on track for a consultation or avoiding a conversation on unpleasant or emotionally loaded topics. Among clinicians who value care and engaging in the patient-clinician relationship (West C, 1991) and view contact as not only exchanging knowledge but also as establishing relationships, the dedication to patient-centred communication appears to be stronger (Zoppi K, 2002). Patients must be encouraged, to express their doubts, worries, hopes and desires openly. Many patients purposely avoid talking on such subjects as they find it extremely displeasing and humiliating to discuss upon.

### **3.3.3 Expertise Role**

Meaningful communication in healthcare environments includes specific awareness, health status and the intent of the clinician and the patient to contact each

other. They will also share conversational expectations and acknowledge the contact role of each other. For clinicians to have a good understanding of the perspective of the patient, including their concerns, feelings, preferences, belief and values, constitutes a major challenge with respect to knowledge. With these insights, clinicians are better equipped to customize care decisions, use terminology the patient understands, explain and support or resolve the patient's emotional condition (Marvel MK, 1999). Some work suggests that misunderstanding problems can lead to harm, especially if the physician and patient differ in race or ethnicity (Balsa AI, 2001).

Although such information can be gained directly or vicariously through experiences or experience training, evidence suggests that clinicians frequently misjudge patients' viewpoints like their preferences (Bruera E, 2001), the likelihood of treatment, understandings of care and health convictions, (Leventhal H, 2001) or emotions.

In the case of patients, health awareness can be the greatest barriers to education. For example, in cancer consultations patients are more able to understand and discuss various problems with some comprehension of clinical terms and terminology (Street RL Jr V. B., 1995) this in turn increases the probability of patients contouring them. It ensures that patients have good knowledge of health as well as their medical conditions, diagnosis, and terminology.

#### **3.3.4 Role of skill: clinicians**

Two types of skills are frequently used to communicate with patients, both cognitive and perceptual. Some clinical practices can be defined as "patient focused" (Table 1.1). (Baile WF, 2005), (Bredart A, 2005) Research which shows them frequently correlated with patient satisfaction, adherence and improved health outcomes.

**Table 3.1 Patterns of Patient-Centered Clinical Behaviors (HEALTH, 2007)**

Nonverbal Behaviors	Verbal Behaviors
<ul style="list-style-type: none"> <li>• Maintaining eye contact</li> </ul>	<ul style="list-style-type: none"> <li>• Avoiding interruptions</li> <li>• Establishing purpose of the visit</li> </ul>
<ul style="list-style-type: none"> <li>• Forward lean to indicate attentiveness</li> </ul>	<ul style="list-style-type: none"> <li>• Encouraging participation of patient</li> <li>• Seeking patient's beliefs, and preferences</li> </ul>
<ul style="list-style-type: none"> <li>• Nodding to indicate understanding</li> </ul>	<ul style="list-style-type: none"> <li>• Generating and confirming the patient's emotions</li> <li>• Asking about family and social context</li> </ul>
<ul style="list-style-type: none"> <li>• Absence of distracting movements (e.g., fidgeting)</li> </ul>	<ul style="list-style-type: none"> <li>• Imparting sufficient information</li> <li>• Clear, jargon-free explanations</li> </ul>
	<ul style="list-style-type: none"> <li>• Looking for patient's understanding</li> <li>• Offering encouragement and support</li> </ul>

Some behaviours depend directly on one's motivation and patient orientation, particularly in the non-verbal area. For example, a clinician who takes care of patients and is genuinely interested in what they say would obviously have eye contact, be nonverbal attentive and deal with patients' topics. Additional habits, like the explanation of normal disease processes in clinicians, can be very new and thorough planning and practice would be mandatory before such behaviours. For example, research indicates that some clinicians share more knowledge on a regular basis, engage in the building of relationships, use supportive messages, including reassurance and motivation and more as if they were clinicians with a communication perspective.

Clinicians need ample analytical skills and self-confidence. There are a few trials focused on clinician awareness and self-monitoring, but the absence of these capabilities can lead to biases, lack of medical advice, and will lead to confusion between the patient and the doctor. (Balint E, 1973) Patient-centred clinicians will probably be able to monitor interaction dynamics better. These clinicians are also aware of the differences that exist between the patient's own explanatory models of patient welfare and can look into the model of the patient in order to identify potential

problems. As they are more broad-based about the patient's perspective and understand their own emotions, patient-centred clinicians will also be aware of their emotions.

In discussions on a careful practice that distinguishes the ability to pay attention to internal processes, confidence in the face of unpredictable outcomes and competent resilience, and the existence of the principles of self-control, self-calibration or self-warning were officially created. Of course, some situations, including a medical emergency or the self-destructive patient, permit the clinicians to use a communication style in which the nature of the interaction is closely monitored, health issues are addressed, closed questions are interrupted and patient decisions are made.

### **3.3.5 Role of skill: Patients**

Cancer patients need to be linked to their needs, desires, goals, concerns and perceptions in order to receive patient-centred care. Positive contact patterns such as asking, expressing concerns, exchanging thoughts and desires with others, posing subjects for discussion and telling their 'health stories' are of particular significance (Table 3.2).

Such behaviour, as it interpersonally interferes with patient's views and has the ability to impact the clinician's actions and policy. (JE, 1984) By comparison, little is being done by a patient who remains passive to express his wishes, concerns, expectations and preferences during a meeting. In these situations, clinical results are at risk and the experience does not satisfy patients' need to feel noticed, acknowledged, heard or fulfilled in the clinician's moral obligation to resolve the patient's fundamental needs to optimize cure.

Patients vary as communicators of progress. Although we know that we do not have studies that test contact with a single patient through consulting multiple clinicians, research indicates that patients' contact styles have a link with financial, cultural and personal factors. In other clinics, more active patient involvement is correlated to patient and professional relationship orientations, for example, the extent to which cancer patients are active participants in consultations was related to their educational level.

**Table 3.2 Effective Patient Contact Behaviour Examples** (HEALTH, 2007)

<b>Asking questions</b>	<b>To express worries and sentiments</b>
Opinions given	Emotions expressing
Preferences are specified	To communicate fears and concerns
If necessary, disruption	Frustration noticeable
<ul style="list-style-type: none"> <li>• Sharing wellbeing values</li> <li>• Presentation of topics for debate</li> </ul>	

### **3.3.6 Inferences for improving patient-doctor communication**

The most effective and efficient ways of improving doctor and patient communication capacities can be achieved by more and more conversation and dialogue between doctor and patient. In the case of a clinician and a patient, research is required especially in order to establish cultural models. On the other hand; the teacher may use several techniques for the achievement, such as role play and group discussion, testimonials, patient or expert views, self-assessment and practice. Therefore, patient contact conduct is more modifiable when patients are more effective with "activation" interventions:

- Belief in the legitimacy of care involvement
- Have some data on their options for health and treatment
- Develop unique methods of communication and actions to be used in clinical interaction
- Receive the input in time to enforce the proposals
- Culturally responsive patient response programs are also important as research has shown that patients with lower social economic groups are often less participatory than their opposites (JE, 1984) and some of these patient engagement approaches are less effective.

### **3.3.7 Health behaviour**

The application and study of health communication has developed rapidly over the last few decades. Earlier conceived in the Department of Medicine, health communication has now emerged as a multidisciplinary discipline varying from liberal arts to health sciences. Individual health behaviour is an important aspect of health.

The study of health communication has seen a dramatic rise since the mid -1970s. As a field, health communication first received formal recognition with the establishment of the Health Communication Division of the International Communication Association in 1975. Since that time, the discipline has continued to grow with the establishment of the speech communication association's communication on Health Communication, the journal Health Communication, many scholarly articles appearing in communication and allied health journals, and numerous textbooks to meet the growing curriculums at both undergraduate and graduate levels. All of these occurrences are positive signs of the emergence of health communication as an exciting area for communication scholars. It offers the opportunity to conduct timely, theoretically based applied research that really can make a difference in people's lives (RAY, 1993).

### **3.3.8 Case studies**

Case Studies are particularly appropriate for the study of health communication, because they provide a vehicle for applying theory, resulting in insight and understanding unattainable from other methods (RAY, 1993).

### **3.4 Communication Method**

Tables 3.1 and 3.2 often define the practices of patient-centered communication at the level of individual communicators, but successful (or ineffective) communication is primarily a function of the clinician's relationship with its members and the family. It is so because all parties collaborate to share, understand and preferably complement their respective medical experiences. Patient-centric contact exists. They use the word 'alignment' to illustrate the fact that good communication is a process that includes cooperation, coordination, inquiry, negotiation and reconciliation to achieve shared understanding, a consistent diagnosis and common goals, an effective care plan and a stronger patient / clinical relationship.

The collaboration process has three key concerns: communication is a shared control mechanism; clinicians and patients have to express their expectations and clinicians need to respond appropriately to their patient's needs. The coordination

function was seldom studied although individual factors were the subject of communication studies.

### **3.4.1 Communication as a shared control mechanism**

In all forms of communication, participants collectively construct interpersonal engagement while weaving communicative acts to create the conversation. If one person's communication affects the other person's communication, it completes the communication process. (Street RL Jr G. H., 2005) It is critical for patient-centred communication if interpersonal communication is a reciprocal control mechanism. When a patient believes that its perspective is not addressed, he or she may use proactive communication methods like questions posed, interrupted and issues posed that may increase the curiosity and the inquiry of a clinician. The patient, for example, provides information that the clinician may use to best meet the patient's needs by asking questions, raising thoughts or voicing concern. It also serves to show the clinician that communication content is needed. However, clinicians are much more conscious, accommodative, and respectful to patients' demands, concerns, thoughts and preferences. A clinician may much take partnering and other supportive acts such as asking patients for advice or grievances, or allow cancer patients to become passive. Usually, these practices contribute to more patient participation as the clinician's interaction legitimizes them and specifically asks for patient input.

### **3.4.2 Alignment of cooperation goals**

During clinical study, both the clinician and the patient anticipate contact. Such aims are for several factors in the consultations, contact goals can be troublesome. A broad range of research indicates that a consensus between patients and physicians is typically low even when these goals are clearly defined, preferably early in an interview (Greene MG, 1989). Mutually understanding preferences and expectations is important for patients and clinicians because research connects the lack of agreement to decreased patient satisfaction and quality. Although he or she may be irritated by the nature of the appointment, the patient may appear to be listening cooperatively, but does nothing to express the irritation to the clinician.

A single patient can try many different items in a particular series of consultations:

- Care for daily treatment
- Findings
- Exploring recovery choices
- Assessment of treatment effectiveness

Symptoms relief

- Causal symptom or illness diagnosis
- Dispelling fears of serious illness (the patient's or the family's)
- Considering current and future treatment options
- Administrative reasons (excuse of job, refill)

Still, a patient may want to learn. At the other side, doctors decide what to explore. As described earlier, in an effort to remain on track, they can avoid some topics. The need for the clinician and the patients to express the consultation goals is illustrated in patients with different and contrary objectives that cause a certain degree of uncertainty or vagueness. Further work is required to explain the impact on touch, decisions made and follow-up of clinicians and patient perceptions incongruity and malleability.

### **3.4.3 To satisfy the needs of the patient**

While mutual influence is characteristic of communication, such influences are often not understood. The clinician's capacity to monitor and effectively tailor interactions to meet patient needs is a key element of effective patient-centred communication. The above-mentioned analytical and perceptive skills offer guidance for how clinicians can properly improve their communication. The presentation of information as the patient knows is an obvious yet important form of adaptation. For example, when providing diagnostic information and rephrasing or restating information, an observer clinician can detect subtle, nonverbal signs of patient distress. The clinician can also agree on the need for communicative modifications through routine patient understanding assessments. A clinician is able to address the realistic cancer care choices rationally,

but acknowledges that the patient is depressed emotionally. A patient-centred clinician should test and evaluate patient's emotions and may want to spend longer offering support or assistance in the visit before continuing the discussion of the therapeutic options.

A second field of unity criticality is that patients agree to participate. Therefore, it is necessary to recognise these preferences and make suitable adjustments. Clinicians are not particularly good patient preferences for spontaneous participation in cancer decision making. (Bruera E, 2001) Whether he or she believes the patient needs this, he or she will assume more responsibility for an oncologist who consistently asks for and promotes patient involvement in decisions. This clinician will also actively urge patients to deal with their issues. Similarly, the question of "doing something" also appears when we speak about advance directives and revivals; yet family life always comes.

#### **3.4.4 Implications for improved contact between patients and clinicians**

Patient classes are distributed among physicians. Research has shown that some clinicians speak with female patients about relationships and emotions often, and give better-informed patients and white patients more knowledge (Roter DL, 1988). In addition, clinicians also talk to older patients and change their tone and length of appointments according to the severity of the patient's disease (Hall JA, 1998).

By consulting the clinician, more assertive patients introduce a new topic to chat. In situations like, pain, anxiety, stress, fear, the patient may be overwhelmed because the cognitive and emotional stress, (AW, *The Wounded Storyteller*, 1995). In these cases, physicians may adopt a different form of communication than would usually be suitable for the individual.

Clinicians can often be distracted, disconnected from the patient and not invoke or satisfy the patient's needs. In the event of ambiguous signs or bad prognoses, physicians are especially worried about communicative changes. Recent findings show that patients appear to be unnecessarily closed when symptoms ("medically unexplained symptoms") are raised, investigating these issues less carefully, and offer

less support and empathy. A compassionate clinician should seek to decrease his or her own anxiety or pat when a patient has incurable cancer.

### 3.5 Communication and Treatment Outcomes

A variety of results, including a partial list in Table 1.3, can be obtained by contacting the patient-clinician direct and indirectly. On a patient-oriented standpoint, patient-clinical interaction will positively lead to at least one outcome of three, the first two results (e.g. adherence, effectiveness in self-care), and the third results (improved longevity, subjective wellness and operation) leading to health outcomes.

#### 3.5.1 Encounter consistency

Judgements of good patient-clinician communication and quality of care from various viewpoints, patients, the clinician and third parties. Such are not necessarily empirical and congruent experiences. For example, an oncologist may assume that his work is good because he or she has received comprehensive data about the patient's treatment and the prognosis is optimistic. The patient may have been disappointed however, as the oncologist dominated the floor of the discussion and did not fully encourage the patient to express his concerns. All clinicians and patients may conclude that they have made joint decisions in the absence of convincing proof of such a decision when reviewing a video recording of the meeting.

**Table 3.3 Good Communication Outcomes (HEALTH, 2007)**

<b>Outcomes of coordination</b>	<b>Intermediate outcomes</b>	<b>Health outcomes</b>	<b>Societal outcomes</b>
Good family / patient relationships (trust, friendship, affection, family involvement, caregivers)	Heavy drug partnerships	Life without illness • Avoid and detect cancer early • Effective diagnosis and evidence-based care	• Good utilization of health facilities

<b>Outcomes of coordination</b>	<b>Intermediate outcomes</b>	<b>Health outcomes</b>	<b>Societal outcomes</b>
Good exchange of information (recalling, feeling known and understood)	Awareness of the patient	<ul style="list-style-type: none"> <li>• Sustain remission</li> <li>• Wellbeing quality of life</li> <li>• Technical, physical, behavioural, social, and position</li> </ul>	<ul style="list-style-type: none"> <li>• Reducing safety and socioeconomic gaps</li> </ul>
Emotion validation (e.g., empathy)	Self-care mental	<ul style="list-style-type: none"> <li>• Well-being: physicality</li> <li>• Views in wellbeing</li> </ul>	<ul style="list-style-type: none"> <li>• Ethical practice (e.g., consent)</li> </ul>
Recognition, awareness, tolerance for confusion	<ul style="list-style-type: none"> <li>• Health assessments of good quality (informed by scientific facts, unanimously supported by patient values)</li> <li>• Family and social activism</li> </ul>	<ul style="list-style-type: none"> <li>• Increased adherence, safety and self-care</li> </ul>	
Customer interest in decision-making	<ul style="list-style-type: none"> <li>• Patient self-efficacy and pride</li> <li>• Increased adherence, safety and self-care</li> </ul>	<ul style="list-style-type: none"> <li>• Access to treatment and efficient healthcare use</li> </ul>	
Coordinate treatment	Access to treatment and efficient healthcare use		

Finally, if there are signs of a lack of care on a diagram audit, a clinician and patient may believe they are trained in high quality. While the quality assurance of the patient can be improved by an approach to patient-centred care, our claim for cancer treatment is that the points of view of all stakeholders need to be considered as divergent patients, physicians, relevant third parties (for example, family members, clinic administrators).

The perceptions of effective communication by the clinician are also crucial. Such findings provide the following:

- Experience happiness
- Suitable patient understanding to direct more medical treatment (credits, beliefs, interests, preferences)
- Having good quality medical treatment (e.g. the patient is pleased, committed to a care plan and has a sense of direction, confidence and trust in the experience);
- Ratio of patients (confidence, partnership)

Many stakeholders may also calculate the quality of the experience. The quality of care expectations of family members is significant because the patient's assumptions can be reinforced or contradicted. If a family member's views vary from the patient's, family relations can be tensed, potentially reducing his or her quality of life or being an obstacle to his or her dedication to care. Administrators and insurers take a view on patient-clinical experience, particularly as it relates to the evaluation of treatment quality, the efficient and acceptable use of resources and the possibility of litigation, (e.g., adherence to guidelines, evidence of medical errors). Sometimes these views are contradictory and no work can be done to improve alignment. More studies are needed to assess and, most importantly, to define the interaction factors that influence their respective decision and the degree of congruence between patients, families or clinicians and other stakeholders.

### **3.5.2 Intermediate performance and contact**

Patient-clinician interaction may activate pathways which directly affect the health to help cure and alleviate cancer suffering. This chapter suggests that the most important health benefits of effective patient-clinician interaction are its role in achieving

intermediate effects (Table 3. 3). Smart clinical choices and patients with a greater sense of control, self-care and commitment to treatment compose these middle outcomes. For example, the interaction between the patient and the clinician who creates a greater awareness of the benefits of tamoxifen will in turn contribute to a more successful adherence to a treatment to prevent breast cancer from returning.

Clinicians and patients expect good contact, but cannot promise, to improve the patient's wellbeing or dietary behaviours. For most cases active patient involvement is a positive aspect of the relationships between patients and physicians, although some adverse effects do occur. When patients, for example, had different requests for antidepressants, doctors had increased their prescribing for not only severe depression, but also clinically ambiguous patients.

### **3.5.3 Communication and progress in wellbeing**

Improved longevity and quality of life would be the two primary outcomes for successful contact; in particular health related quality of life.

While improved communication can lead to better care decisions, there is little evidence of consistent linkages between actual interactions between patients and clinicians, and the changes in the survival or trend of the disease. Nevertheless, more and more evidence shows that touch can affect the emotional good and emotional symptoms of the patient directly. For example, when doctors were open to diagnosis and prognostics, (Lin CC, 2003) cancer adults had more optimism and children with cancer felt fewer anxiety and depression. According to Schofield et al., (Schofield PE B. P., 2003) interactions that could alleviate anxiety included arrangements for the patient for care and the delivery of detailed information to the patient. Empathy therefore reduces patient anxiety and emotional distress. (Zachariae R, 2003) Although patient-clinician experiences with the patient's emotional state can be exceedingly difficult to integrate. For instance, patients in cancer are often highly anxious about their physical symptoms and the use of reassurance by physicians may reduce this fear (i.e. the assumption of certain symptoms being associated with cancer). However, reassurance may intensify outcomes in certain cases if the patient's emphasis on anxiety

appears to be overlooked or provided in advance, before the patient may express his concern.

There is little awareness of the impact of patient interaction during consultations on emotional well-being. At the other hand, the patient's commitment to emotional distress will contribute to greater satisfaction.

In summary, it is far more important to establish how patient-clinician-family interaction affects health outcomes and different mediators directly.

### **3.6 Understanding Contextual Significance**

Patient / family care provider interactions are, as with all forms of contact, across many background layers including:

- Factors (e.g. cancer type, stage of illness)
- Climate and family
- Important background
- Press conditions (e.g. coverage of health problems, Internet data access)
- Medical programme
- Cultural considerations (e.g. social status, laws)

Obviously, attempts are not sufficient to simultaneously take account of all context factors that affect all aspects of communication and cancer outcomes. We also find that the inter-personal context — the actual relationship between clinician, patient and family — is a primary context for patient-centred communication processes.

Ultimately, the issues of contact and meaning for certain findings largely depend on whether the patient is at a certain point in the process of cancer: identification, screening, diagnosis, treatment, rehabilitation or life ending.

### **3.7 Framework for Patient-Centred Communication in Cancer Care**

For patient-centred processes and cancer care outcomes is structured around six main patient-clinician contact roles:

- Cultivating bonds of healing
- Sharing of data
- Respond to emotions
- Handling unclear
- Make decisions
- Patient self-management

For such functions, much more is known than others. There are hundreds of papers and numerous analyses of the information needs and sources of patients and their preferred positions in decision-making. There are also published papers on reacting to the feelings of patients and the general patient-clinician relationship. The ambiguity and enablement literature related to patient-centred communication in cancer related treatment is scarce, but the lack of prior research does not diminish the role of these factors in successful communication.

### **3.7.1 Fostering the Patient-Clinician Relationship**

Patient-centred cancer treatment requires trust and intimacy between patient/family-clinicians. Furthermore, both parties should consider each other's positions and obligations. Relationships are stronger as physicians strive to increase the probability of successful therapeutic interactions between patients and families. This will include addressing issues related to race, ethnicity, language, and literacy that can generate inequalities in treatment. Fostering healthy clinician-patient relationships often involves self-awareness and is linked to the health and well-being.

Healing relationships provide emotional support, encouragement, and understanding (JH., 1990), study states that cancer patients and their families claimed that they respected the enduring characteristics of clinicians - caring; trust; continuity; and feeling identified, respected, and connected - more than precise communication techniques. (Salander P, 2005) The impressions of their physicians' overall interpersonal style can be very nuanced, but the questionnaire ratings of patients regarding their health care expert are unambiguous.

Clinicians can promote patient participation by participating in the following:  
(Williams GC D. E., 2001)

- Create and foster relationship
- Set joint agenda
- Successful listening
- Steps to ensure patient awareness
- Nonverbal habits of empathy and comfort

Some researchers have explored congruence between what cancer patients feel for their participation in medical decisions and what physicians consider the desires of patients to be. However, few studies have been performed to evaluate clinicians' expectations and their own patients' positions in the decision-making process in the cancer environment. Further work needs to be done on these topics, because it can lead to disappointment and confusion between a clinician's desires and patient for their relationship. Clarification, open dialogue, and compromise can remedy misunderstanding, but misunderstandings are still unaddressed.

Communication involves the on-going capacity of clinicians for attentiveness and self-monitoring to recognise the experiences of patients and separate them from their own. Some clinician training programs have introduced self-awareness, communication of emotions and obligations, self-care, creating a personal philosophy, and limit-setting. (Bruce A, 2005)

### **3.8 Information Exchange**

Cancer Patients and their family members seek information about the disease, its cause, treatment availability. Additionally, patients provide consultation with disease-related information, mostly through conversations with other health practitioners, laid informants, family members, media outlets, and particularly the Internet. Thus, work on patient-clinician exchange of information, which has largely taken the deficit model, needs to be rethought. In addition, information content must include:

- Prevention: address the dangers and benefits of asymptomatic screening
- Diagnosis or recurrence: sharing bad news and test findings

- Treatment: Clinical trial findings for decision-making

Such tasks of data sharing are challenging. Similar concerns that are important to effective knowledge management include uncovering the knowledge needs of the patient and knowing what the patient understands and feels about health.

### **3.8.1 Patients' needs**

Patient-centred communication patterns promote successful knowledge management, offer concise explanations, avoid medical jargon, and check for understanding. Hopefully, when patients feel that they do not get adequate or sufficient details, they will ask questions or share their views. Correspondingly, physicians should understand that patients want information and find ways to evoke their data needs. This is especially important for patients with cognitive disabilities or poor health awareness to inquire about information needs. These patients may want information, but they may be less assertive and take more time to get it from their doctors. Health care providers may also help resolve the patient's information needs by including the following:

- Audio recordings of clinical consultations for the recall and assimilation of cancer patients
- Multimedia tools to illustrate complex disease and treatment options
- Educational resources providing the most useful information for cancer patients and their family.

### **3.8.2 Patient's knowledge and believe about health**

Since communication-related health care inequalities that arise from culturally mediated misunderstandings, clinicians should make careful efforts to understand the representations of patients' disease during cross-cultural health care experiences. Representations of disease are learned from a number of outlets, including mass media, Internet, relatives, friends, and colleagues.

One of the factors that lead to differences in health knowledge between patients and physicians is that psychological dimensions of disease affect how patients perceive and use the knowledge they have. Uncovering the patient's sense of the disease is an

vital aspect of the knowledge-exchange process as cancer patients also find that awareness not only allows them to understand the disease, but also allows them to find hope to feel accepted and understood by their caregivers, and to assign spiritual and other meanings to the disease. (AW, *The Wounded Storyteller*, 1995) This interpretation will, in effect, improve the understanding. While patients most often tend to get information from their health care providers and trust this information, clinicians cannot believe that patients are likely to have greater health knowledge, particularly though they are well educated, and are familiar with medical terminology. Therefore, a significant communicative role for the clinician is to get information from their health care providers. Thus, the patient feels understood and the clinician acquires useful knowledge about the patient's experience, which can be used by the clinician to reconcile the respective disease interpretations to provide more customized cancer treatment.

### **3.8.3 Communicating clinical information**

Communicating clinical data is difficult and requires physicians to be able to provide the patient with descriptions, frame information, and use visual aids. It is especially challenging to communicate quantitative information. Patient statistical information can be minimal, and misunderstandings of absolute and relative risk or means and standard deviations can lead to excessively simplistic interpretations. Graphical presentations, especially 100-person diagrams, are increasingly being used to improve patient understanding of statistical data, but the results of at least one study showed that patients preferred words to pictures. (Hagerty RG, 2004) Not only does the quality of clinical evidence differ across the spectrum of cancer care, but the expected information sharing goals often vary. For instance, clinicians can provide statistics on mammography accuracy in detecting cancer to convince a patient to have a mammogram. To help patients articulate their risks and benefits of different prostate cancer treatments, a clinician can present information preferences, principles.

For example, although most people would rather know that even though treatment is unsuccessful, they might prefer not to know. Since patients prefer to support estimates framed in optimistic outcomes (a 60% probability of living for five years) rather than estimates framed in negative outcomes (a 40% risk of dying within

five years), physicians can frame the data in both ways to avoid being viewed as excessively hopeful or cynical.

Patients make subjective sense of the knowledge through their own interpretive prism, and these perceptions are informed by previous experiences, their own views and beliefs of illness, the experiences of others, their emotional states, and their goals. Patient-centred communication skills that can help physicians handle clinical data include:

- Use daily vocabulary to the fullest
- Save, summarize
- Ask patients to restate data to ensure that they understand
- Encourage patients to inquire
- Engage in listening
- Allow adequate time for patient discussion
- Integrity

#### **3.8.4 Sharing bad news and prognostic information**

While patients and clinicians strongly support truthful disclosure of a cancer diagnosis in the United States and other English-speaking countries, the transmission of bad news tends to be stressful for clinicians and ineffective and/or traumatic for patients and their families. (Fallowfield L, 2004) patients report feeling distressed or depressed after hearing the shocking news of a cancer diagnosis; While no communication intervention can eliminate the life-changing effect of a cancer diagnosis, bad news delivery can at least help patients become the following:

- Facilitated
- More inspired by further evaluation and care
- Less emotionally sad
- Better able to ask and participate in a clinical encounter
- Best able to assess diagnosis
- Easier to manage the health system
- Clear the extent of diagnostic uncertainty

The difficulty in handling negative news can be further exacerbated by psychological and emotional causes, cognitive disability, and poor literacy in health.

Cultural factors also play a role, particularly the connection between mainstream American culture and cultures where families play a key role in managing health-related information.

Clinicians, too, have great trouble compassionately and simply transmitting bad news. Given a vast body of literature with relatively reasonable guidelines for presenting bad news, and an increasing number of courses for students and residents, clinicians still provide diagnostic information without adequate training or support. Many physicians claim that their early attempts at presenting bad news have confused and traumatized them. They should know how bad news should be. This is not shocking that the mainstream press and medical literature often contain patient accounts of cold, impersonal, blunt, evasive, tactless, indirect, jargon-laden, and badly timed transmission of bad news. At times, the behaviours of physicians serve their desires to alleviate their own anxiety and confusion and bring the visit to closure, rather than discussing such patient desires as the need to understand and be understood, to receive emotional support and hope, and to be assured that they get the best care available. (Schofield PE B. L., 2001)

Discussions of prognosis suggest confusion. Patients usually say that they want an objective prognosis but still want to be offered hope. In general, the more serious is the prognosis, the fewer amounts of patients who want an honest life expectancy assessment. Most patients want to be told what details they want to know before it is revealed, as well as when the disclosure will take place. Nevertheless, doctors' pro A recent study of programs designed to help clinicians better inform patients of their prognoses and end-of-life care plan suggested that most clinicians did not succeed with this mission, possibly due to insufficient attention to communication factors.

### **3.9 Responding to Emotions**

The danger, diagnosis, and treatment of cancer evoke a variety of emotions that include terror, sorrow, frustration, anxiety, and depression. Reactions also occur in friends and

family members. Patients and families convey these feelings in a number of ways in clinical encounters: fear, (Beach WA, 2005) humour, nervousness, anxiety, sorrow, or fatalistic thinking. These feelings are often not static; instead, they ebb and flow during the cancer experience.

Recognizing and reacting to emotional symptoms of patients is especially relevant, because depression, anxiety and adjustment disorders have significant effects on the quality of life of cancer patients. (Ryan H, 2005) These feelings can also influence the response to chemotherapy and the perception of pain. Physicians can discuss the emotional discomfort of patients effectively and explicitly by verbal use. Attention to feelings of family members may avoid caregiver burnout.

Given the magnitude of emotions caused by cancer diagnosis in patients and family members, clinicians should be able to identify the emotional state of a patient, ask appropriate questions to understand it, express that understanding to the patient, and respond with empathy or tangible support. Unfortunately, neither are the clinicians sufficiently informed of the emotional signals of patients, nor are they successful in uncovering the worries and concerns of patients. (Osse BH, 2002) Less than one-third of emotionally disturbed patients are identified by their physicians as such. In general, clinicians seldom initiate emotional interactions, and certain patients tend not to carry any major sign of being emotionally disturbed. Part of the question is that while some patients clearly convey feelings ("I'm scared that ..."), some are more likely to report physical symptoms than psychological problems, and even others implicitly share their worries and concerns or not, unless the clinician asks.

These direct and indirect cues to emotional distress are often ignored, displaced, or rejected rather than being met with empathic responses that recognize the patient's cognitive and affective dimensions. Paradoxically, reassurance can be counterproductive. While reassurance typically initially reduces anxiety, after clinicians' attempts to reassure, anxiety may rebound to even higher levels, especially if the patient feels as though his or her concerns were superficially addressed and though the clinician did not provide an appropriate justification for reassurance. (McDonald IG, 1996) Successful emotional expression responses include the following:

- Legitimation: "It's just normal ..."
- Validation: "Yes, this is a very time of anxiety."
- Empathy: "It's making you nervous and sad, right?" • Tangible support: "I hope I can contribute."

In comparison, less successful responses ask leading questions; concentrate on the physical dimensions of safety, and offer guidance and reassurance prematurely. Potential obstacles to the recognition and sensitivity of clinicians to the feelings of patients can be the absence of communication skills, as well as lack of resources, ambient noise, and lack of privacy. Professional strategies can help clinicians meet the emotional needs of patients (GH., 2003) and the results of strategies can be long-lasting. It is important to remember that clinicians, too, experience a range of emotions as they treat their patients before leaving the discussion of reacting to patients' emotions, particularly when confronting patients with life-threatening diseases and patients for whom care is not always available. Clinicians should have self-awareness of their emotions and properly understand and control their emotions; a significant part of handling emotions is finding the right balance between commitment and distance to provide appropriate treatment.

Clinicians often do not explore their own emotions about patients or their own emotional needs, leading to confusion between the emotional needs of the patient and those of the clinician. In particular, unexamined negative emotions can create distances between clinicians and patients that patients may interpret as lack of care.

### **3.10 Managing Uncertainty**

We distinguish uncertainty management from information sharing and decision-making because data, emotional support, and shared understanding between clinicians and patients do not automatically mean uncertainty reduction. Uncertainty is especially important in cancer care because cancer outcomes usually occur closer to the time of diagnosis (e.g. within five years) and cancer is often curable; other major causes of death, such as diabetes, emphysema, and coronary artery disease, have more prolonged courses and are usually not eradicated. According to Mishel, (MH., 1999) disease uncertainty arises when an individual perceives illness, diagnosis, and recovery aspects

as contradictory, unexpected, complex, and unpredictable. Uncertainty can have negative effects, such as emotional distress, a loss of sense of control, and lower quality of life. However, by creating room for optimism, retaining uncertainty may have self-protective value for certain patients and families. While uncertainty may emerge from a lack of knowledge (Does the patient have cancer?), it can also be generated when there is too much of information coming in from different unauthorised sources.

Uncertainty is particularly common in prognosis discussions, usually involving statistical presentation. Most people have trouble recognizing and also interpreting data as reliable predictions. It is sometimes hard to say that statistical estimates are no more than a probabilistic uncertainty structuring. In addition, doctors have long been considered to have an overwhelming need for certainty and to preserve an illusion of certainty. (Quill TE, 1993) Few research studies centred on the impact of communicating ambiguity with patients and families, and no study was unique to cancer settings. Some vignette research in primary care settings indicate that clinical ambiguity expressions in the form of "I don't know" or "Let's see what happens" or the use of ambiguous language could have negative effects on patient confidence. Furthermore, expressions of ambiguity associated with increased patient satisfaction in the sense of an otherwise patient-centred design.

Patient-centred communication can not only minimize ambiguity, but also help cancer patients handle uncertainty. Patients appreciate when the clinician can consider ambiguity as unavoidable and can interpret knowledge in terms of what is understood and what is unknown. Cognitive-behavioural techniques can improve understanding and probabilistic thinking for patients facing uncertainty, help maintain a positive outlook on future treatments and developments, and engage patients in vigilant self-monitoring for emerging symptoms. This behaviour will enhance quality of life and communication. For example, one cognitive-behavioural intervention for breast cancer patients enhanced cognitive reframing, understanding of cancer, communication skills, and coping. Similar interventions for men with prostate cancer led to improved psychological, emotional, and urinary functioning after prostatectomy. A similar intervention led to better quality of life for men who preferred "watchful waiting" humour.

While uncertainty management theories have been suggested and therapeutic approaches based on those theories have been successful, little is understood about what can be done as part of routine clinical treatment to alleviate the uncertainty-related anxiety burden faced by patients and families. To manage emotions effectively, patients need information, cognitive strategies, and skills to manage uncertainty, yet it is not clear if these resources can be provided during routine clinical care or if specialized psychological interventions are needed. The efforts of physicians to alleviate confusion or provide reassurance have the potential to backfire, further raising patient anxiety and distrust. Such issues are critical in the survivorship process and may affect an increasing number of patients, including patients who do not have an immediate cure guarantee or who have oncogenetic mutations. These issues also impact patients who can face new challenges in treating long-term sequelae to treatment.

### **3.11 Making Decisions**

Decision-making is a central communicative activity in all phases of the continuum of cancer treatment. A high-quality judgment is one based on the principles and appreciation of the patient's facts and reasoning for judgment. To make a high-quality decision, it should express and consider the wishes, beliefs and desires of the patient. The best possible decision, however, is often difficult for several reasons:

- Clinicians often ignore patient needs, values and preferences
- Patients did not generally find all choices prior to medical visit
- Patients and physicians have different health values
- Patients often do not know the desired method of clinical reasoning

Clinicians are sometimes unaware of the expectations of patients for involvement (Jahng KH, 2005) and the desired degree of involvement and decision of the patient that change over the course of the consultation or from one visit to the next. The model describes three forms of spectrum decision-making:

- Paternalistic: clinician chooses treatment
- Shared: joint clinician and patient decide treatment
- Informed: patient chooses treatment based on clinician and other data

Although the degree of patient or clinician influence over the decision varies in each type of decision-making process, each type continues through the same three stages — information sharing, deliberation, and final decision-making. The mechanism is ideally characterized by shared involvement and participation at both information-exchange and deliberation levels, irrespective of who is responsible for the final decision. Knowledge sharing includes the clinician and the patient finding and offering their respective opinions on the health of the patient. The clinician addresses clinical results, treatment methods, procedures, and his or her familiarity with these conditions. Patient discloses their wishes, inquiries, desires, fears, and health and care information.

When the patient is difficult to understand or appears contradictory to what the patient understands, an informed, enabled and motivated patient will usually ask questions and give his or her own perspective. However, patients are also passive and overwhelmed by the clinical environment.

For such situations, the clinician will need to use partnership-building and other facilitative communication to gain the viewpoint of the patient. The use of partnering strategies by physicians may often help to discover the motives behind the patient's care preferences, which are sometimes not readily apparent. For instance, physicians frequently have little understanding of the reasons for the patient to forego traditional therapy, and these reasons can be very varied, including having a close friend / relative who died of cancer while undergoing conventional treatments, a desire for control, fear of conventional treatment side effects, inadequate communication with physicians, and anticipated treatment benefits. Throughout the deliberation stage, clinician, patient, and family find parallels in their views and address any disagreements as they work for common or shared understanding of the situation. In short, even though the final decisions were taken arbitrarily, all participants in the information-exchange and deliberation processes would still have fully engaged the decision-making process itself.

The quality of the decision reached will mostly depend on how well four tasks were accomplished:

- Clinician and patient viewpoints were shared and understood

- Differences were acceptable
- Collective consensus on the best course of action
- Decision based on current clinical evidence

Each decision-making step — information exchange, deliberation, and final decision — is critical to effective decision-making. For example, some research shows that the greater the match between the preferences of breast cancer patients to be involved and their perception of actual involvement, the less decisional regret and greater care satisfaction. Patients' care evaluations are better predicted by perceptions of having a shared role in decision-making than by their initial preferred role; Physician support for patient involvement can increase cancer patient involvement, foster a sense of treatment choice and lead to greater care satisfaction.

This adaptation of Charles et al's model is valuable in that it provides a significant distinction between patient participation in the decision-making process, which a number of studies show is a beneficial aspect of patient-centred treatment, and who is responsible for making the decision. This model should take into account the findings that most patients want to be involved in decision-making, want to know all of their care options, and want the decision to take their desires and beliefs into account. But many of these patients may prefer not to have sole or even partial responsibility for the final decision, instead deferring it to the clinician. This model also stresses that a “shared decision” is not necessarily a good decision-making outcome. Rather, the level of patient-clinician interaction is arguably the most significant factor influencing the quality of decision-making, and not the role of the patient per se in determining care.

Relevant communication techniques that may promote patient / family clinician treatment coordination include:

- Set a simple agenda
  - Good listening
  - Check comprehension
  - Providing ways to connect
  - Endorsing patient engagement and decision-making
  - The needs of patients
-

- Communicating empathy and warmth both verbally and nonverbally

Health care services also facilitate decision-making by promoting access to information and offering decision aids and other tools. Decision aids, in the form of booklets, prompt sheets, video recordings, and interactive Web-based formats, can help patients understand and take an active role in decision-making. (O'Connor AM, 1999) Decision aids increase patients' knowledge about options, lower decisional conflict, and reduce the proportion of patients remaining undecided about the treatment, but few studies have addressed the impact of decision aids on patient-clinician communication.

### **3.12 Enabling Patient Self-Management**

A sixth contact feature in cancer care deals with the practicalities of diligent follow-up, helping patients improve their ability to address health-related issues, and taking steps to improve their health. This function differs somewhat from information management because it includes recommendations ("should" communication), instruction ("how to" communication), and advocacy ("can" communication). Enablement refers to the presumed capacity of patients to self-manage important aspects of their condition, which includes their ability to locate condition details, cope with consequences of treatment, and seek adequate care when needed. The desire to stick to medication, navigate the health care system, and gather support is implicit in enablement. Enablement encompasses measures clinicians can do for patients to eliminate obstacles to self-management, as well as ways in which clinicians can help patients be more independent and able to provide for themselves. Bodenheimer et al. developed the idea of self-management which has been formalized into a chronic care model to be applied in primary care settings. Enablement encompasses all measures physicians can do for patients to eliminate self-management obstacles, as well as helping patients be more independent which able to care for themselves.

In primary care settings, the concept of self-management has been expanded and applied to chronic disease management. The chronic care model emphasizes collaboration in which the patient and the health care team each identify problems and set goals. Clinicians offer details but often teach patients how to access and use expertise. Education and information can come directly from health professionals and

other patients, peers, or family members (in group settings). Everyone contributes expertise and shares responsibility for problem-solving, health outcomes and caregiving. Without a paternalistic approach, experts help the patient make educated decisions. Clinicians understand that their responsibility is to help patients find internal motivation instead of dictating action. The task of the clinician is to teach problem-solving instead of solving all patient issues with a specific aim of improving self-efficacy.

Self-management leads to improved health outcomes and reduced hospitalizations for chronic disease patients. The idea that patient-clinician communication can improve self-management is relatively new to cancer settings. Patient-clinician self-management contact may concentrate on a variety of topics, but we believe three are especially relevant in cancer care: promoting and communicating, respecting patient autonomy, and offering guidance, expertise, and resource access.

### **3.12.1 Advocating for patients and helping to navigate the health care system**

Patients need support or acts on their behalf. Advocacy often involves interactions between clinicians and others in and outside the health care system. Such forms of advocacy are contacting insurance providers, directly arranging treatment with another expert, and ensuring sufficient home care facilities for a terminally ill patient. Advocacy also involves family experiences to help patient recovery efforts.

Navigation is an advocacy form. More so than with care for other diseases, cancer cares typically requires patients to navigate a complex health care system where they interact at multiple locations with a variety of health professionals. Navigating the health care system is particularly difficult in the journey from cancer diagnosis to treatment initiation but is also critical in obtaining survivorship and end-of-life care services. Specially trained "navigators" assess the needs of patients in some settings and, in collaboration with the patient, develop a plan to address these needs and help patients overcome various barriers to timely, high-quality care. While navigator programs are increasingly used, there are limited data on their effectiveness or costs. Some ways clinicians may contribute to navigation include:

- Help patients get prompt confirmatory testing for suspected cancer
- Instruct patients to get to a specialist's office

- Explain specifically when and how to follow up
- Arrange psychotherapy, counselling and/or social work services
- Coordinate hospital treatment among specialists
- Provide palliative / end-of - life treatment or direct patients to treatment services, as needed

### **3.12.2 Supporting patient autonomy**

Autonomy needs self-efficacy and motive. Motivation was tested in other settings using self-determination theory to predict and influence the motivation for improvement of patients. Self-determination theory indicates that clinician attitudes that promote autonomy appear to encourage patient motivation. In comparison, motivation appears to decline when clinicians are directing and regulating. Autonomy-supportive practices include exploring the ambivalence of patients to take action, offering multiple ways to accomplish the same goal and allowing patients' time to make decisions rather than making a premature decision. This method has been effectively extended to smoking abstinence, weight loss, commitment to care and exercise, topics related to cancer prevention and quality of life. (Williams GC G. V., 1996)

While navigation is a form of patient advocacy, activation is the patient's self-advocacy. However, patient engagement interventions have concentrated more on educating patients about how to answer their questions and how to engage in decision-making. Interventions can aid patients with:

- Find your way through healthcare
- Get access to the right doctors for their condition
- Consider and draw attention to service differences and lapses
- Boost treatment adherence
- Become educated healthcare consumers

### **3.12.3 Providing guidance, skills, and access to resources**

By providing access to resources, clinicians can help patients directly or help themselves. In addition to inspiration and self-efficacy, patients do need the expertise,

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skills and tools to follow through. Clinicians also need guidance, training, advocacy, and encouragement. Even if a patient feels empowered and enabled, the disease of the patient changes over time. Recommendations with non-technical vocabulary and basic sentence structure should be transparent. Recommendations should be accompanied by recall-promoting behaviors like repetition, summary, categorization, and asking the patient to repeat complex recommendations so that they understand clearly. (A., 1992) Instruction helps patients do things for themselves. Instructions would provide specific details of how the patient can treat pain and other symptoms and how to follow up with a mutually agreed plan that may include arranging medications, getting an x-ray, or talking to a social worker. Instruction will also involve advising the patient and the family how and when to contact the clinician, how to make sure that at family meetings the right people are present, and what resources can include useful details.

Patient self-management needs differ greatly. All facets of self-management include other environments, individuals and organisations, putting the patient and clinician beyond the confines of the clinical office or hospital space. In particular, health care facilities have a significant role to play in promoting the self-management of patients by offering convenient access to self-management personnel, consultants, services, and media. Some of the supporting services addressed in the literature include:

- Use of lay health educators and digital media to help patients better manage pain and other symptoms related to cancer
- Teaching patients to properly access health information through the Internet
- Sponsoring of community-based cancer symptom relief programs
- Patient support with complementary and alternative medicine
- Self advocacy learning kits

### **3.13. Behavioural Strategies for Cardiovascular Risk Reduction**

Within the broad spectrum of strategies needed to address disparities in CVD (Cardio Vascular disease), behavioural strategies that can be effectively implemented in clinical settings have a critical role. The literature reviewed in this paper provides a menu of options for facilitating behavioural CVD risk reduction in diverse, underserved racial/ethnic groups. Several themes have emerged. It is clear that interventions need to

be culturally and linguistically tailored and individualized, with an understanding that racial/ethnic groups are not monolithic. Multi-component, multidisciplinary teams, often led by a nurse, appear to be the most effective in addressing multiple risk reduction. Including community health workers on the multidisciplinary team is an important addition to address the needs of individuals living in under-resourced areas. Efforts that target providers and the way they deliver behavioural interventions are important to achieve sustained, system-wide improvement in outcomes. Going forward it will be important for published reports of successful interventions to provide more detailed information about the specifics of the intervention so that the intervention can be disseminated and translated into practice. Often the nuances of these interventions; information important to successful implementation, are lost. It is also important for research studies, including large clinical trials, to include more diverse subjects so that racial/ethnic subgroup comparisons can be made. Oversampling racial/ethnic minorities, including under-studied subgroups in the Asian, Hispanic and American/Indian/ Alaska Native communities is necessary so that inferences can be made to these populations.

Recently the AHA released its strategic impact goal; “To improve the cardiovascular health of all Americans by 20% while reducing deaths from cardiovascular diseases and stroke by 20%”. If, as a country, we are to meet this ambitious goal, clinicians and health care organisations will need to implement strategies to reduce CVD risk in racial/ ethnic and underserved populations that bear a disproportionate burden of disease. To meet this goal, we will be challenged to broaden our prevention perspective beyond primary and secondary prevention to include primordial prevention across the lifespan; a challenge that will necessitate cardiologists collaborating with clinicians from primary care, nursing, nutrition, pharmacy, family medicine, paediatrics and exercise science. Although here we had focused predominantly on behavioural risk reduction strategies in high risk individuals; it is estimated that the majority of CVD and stroke events occur in individuals with average or only mildly elevated levels of risk, which is where the majority of the population lies. (Lloyd-Jones DM, 2010) (Stamler J, 2000), (Application of lower sodium intake recommendations to adults, 2009) To achieve the greatest reduction in risk, population wide approaches to CVD risk in understudied racial/ethnic minority communities will be necessary in addition to the individual-level interventions.

Table 3.4 Established Metrics and Strategies for Prevention of CVD in Adults (Source- Stamler J 2017)

Targeted Risk Factor	Ideal CV Health Definition* Primordial Prevention Goals	Primary Prevention Goals	Secondary Prevention Goals	Strategy
<b>Smoking</b>	Never or quit > 12 months ago	Complete cessation. No exposure to environmental tobacco smoke.	Complete cessation. No exposure to environmental tobacco smoke.	<ul style="list-style-type: none"> <li>• Ask about tobacco use at every visit.</li> <li>• Advise every tobacco user to quit.</li> <li>• Assess the smoker's willingness to quit.</li> <li>• Assist the smoker to make a plan for quitting and provide counselling.</li> <li>• Arrange follow-up, referral and/or pharmacotherapy.</li> <li>• Urge avoidance of environmental exposure.</li> </ul>
<b>Dietary Pattern</b>	4 – 5 components of the primary metrics Fruits and vegetables; $\geq 4.5$ cups per day Fish: $\geq$ two 3.5-oz servings per week (preferably oily fish) Fiber-rich whole grains ( $\geq 1.1$ g of fiber per 10 g of carbohydrate); $\geq$ three 1-oz equivalent servings per day Sodium: < 1500 mg per day Sugar sweetened beverages; $\leq 450$ kcal (36 oz) per week. Secondary metrics Avoidance of trans fat and saturated fat Nuts, legumes, and seeds: $\geq 4$ servings per week Processed meats: none or $\leq 2$ servings per week Saturated fat: < 7% of total energy intake.	An overall healthy eating pattern.	An overall healthy eating pattern.	<ul style="list-style-type: none"> <li>• Balance calorie intake and physical activity to achieve or maintain a healthy body weight.</li> <li>• Consume a diet rich in vegetables and fruits.</li> <li>• Choose wholegrain, high-fibre foods</li> <li>• Consume fish, especially oily fish, at least twice a week</li> <li>• Limit your intake of saturated fat to &lt;7% of energy, trans fat to &lt;1% of energy, and cholesterol to &lt; 300 mg per day</li> <li>• Minimize your intake of beverages and foods with added sugars.</li> <li>• Choose and prepare foods with little or no salt</li> <li>• If you consume alcohol, do so in moderation.</li> <li>• When you eat food that is prepared outside of the home follow the AHA Diet and Lifestyle Recommendations</li> </ul>

Targeted Risk Factor	Ideal CV Health Definition* Primordial Prevention Goals	Primary Prevention Goals	Secondary Prevention Goals	Strategy
<b>Physical activity</b>	$\geq 150$ min/wk moderate intensity or $\geq 75$ min/wk vigorous intensity or combination	At least 30 min of moderate-intensity physical activity on most (and preferably all) days of the week.	30 minutes, 7 days per week (minimum 5 days per week)	<ul style="list-style-type: none"> <li>• For all patients, assess risk with a physical activity history and/or an exercise test, to guide prescription.</li> <li>• For high risk patients, consult physician before initiating vigorous exercise program.</li> <li>• For all patients, encourage 30 to 60 minutes of moderate-intensity aerobic activity, such as brisk walking, on most days of the week, supplemented by flexibility training and an increase in daily lifestyle activities.</li> <li>• Encourage resistance training at least 2 days per week.</li> </ul>
<b>Body Mass Index</b>	$< 25$ kg/m <sup>2</sup>	Achieve and maintain desirable weight (body mass index 18.5–24.9 kg/m <sup>2</sup> ). When body mass index is $\geq 25$ kg/m <sup>2</sup> , waist circumference at iliac crest level $\leq 40$ inches in men, $\leq 35$ inches in women.	Body mass index: 18.5 to 24.9 kg/m <sup>2</sup> Waist circumference: men $< 40$ inches, women $< 35$ inches	<ul style="list-style-type: none"> <li>• Assess body mass index and/or waist circumference on each visit and consistently encourage weight maintenance/ reduction through an appropriate balance of physical activity, caloric intake, and formal behavioral programs when indicated to maintain/achieve a body mass index between 18.5 and 24.9 kg/m<sup>2</sup>.</li> <li>• If waist circumference (measured horizontally at the iliac crest) is <math>\geq 35</math> inches in women and <math>\geq 40</math> inches in men, initiate lifestyle changes and consider treatment strategies for metabolic syndrome as indicated.</li> </ul>

Targeted Risk Factor	Ideal CV Health Definition* Primordial Prevention Goals	Primary Prevention Goals	Secondary Prevention Goals	Strategy
				<ul style="list-style-type: none"> <li>• For overweight/ obese persons, reduce body weight by 10% in first year of therapy.</li> </ul>
<b>Blood Pressure</b>	<120/80	<140/90 mm Hg; <130/85 mm Hg if renal insufficiency or heart failure is present; or <130/80 mm Hg if diabetes is present.	<140/90 mm Hg or <130/80 mm Hg if patient has diabetes or chronic kidney disease	<p><b>For all patients:</b></p> <ul style="list-style-type: none"> <li>• Initiate or maintain lifestyle modification—weight control; increased physical activity; alcohol moderation; sodium reduction; and emphasis on increased consumption of fresh fruits, vegetables, and low fat dairy products.</li> </ul> <p><b>For patients with blood pressure <math>\geq</math>140/90 mm Hg (or <math>\geq</math>130/80 mm Hg for individuals with chronic kidney disease or diabetes):</b></p> <ul style="list-style-type: none"> <li>• As tolerated, add blood pressure medication, treating initially with <math>\beta</math> blockers and/or ACE inhibitors, with addition of other drugs such as thiazides as needed to achieve goal blood pressure.</li> </ul>
<b>Cholesterol</b>	< 200 mg/dL	Primary goal: LDL-C <160 mg/dL if $\leq$ 1 risk factor is present; LDL-C <130 mg/dL if $\geq$ 2 risk factors are present and 10-y CHD risk is <20%; or LDL-C <100 mg/dL if $\geq$ 2 risk factors are present and 10-y CHD risk is	LDL-C <100 mg/dL If triglycerides are $\geq$ 200 mg/dL, non-HDL-C should be <130 mg/dL	<p><b>For all patients:</b></p> <ul style="list-style-type: none"> <li>• Start dietary therapy. Reduce intake of saturated fats (to &lt;7% of total calories), <i>trans</i>-fatty acids, and cholesterol (to &lt;200 mg/d).</li> <li>• Adding plant stanol/ sterols (2 g/d) and viscous fiber (&gt;10 g/ d) will further lower LDL-C.</li> <li>• Promote daily physical activity and weight management.</li> </ul>

Targeted Risk Factor	Ideal CV Health Definition* Primordial Prevention Goals	Primary Prevention Goals	Secondary Prevention Goals	Strategy
		<p>≥20% or if patient has diabetes.</p> <p>Secondary goals: (if LDL-C is at goal range): If triglycerides are &gt;200 mg/ dL, then use non-HDL-C as a secondary goal: non-HDL-C &lt;190 mg/dL for ≤1 risk factor; non-HDL-C &lt;160 mg/dL for ≥2 risk factors and 10-y CHD risk ≤20%; non-HDL-C &lt;130 mg/dL for diabetics or for ≥2 risk factors and 10-y CHD risk &gt;20%.</p> <p>Other targets for therapy: triglycerides &gt;150 mg/dL; HDL-C &lt;40 mg/dL in men and &lt;50 mg/dL in women.</p>		<ul style="list-style-type: none"> <li>• Encourage increased consumption of omega-3 fatty acids in the form of fish or in capsule form (1 g/d) for risk reduction.</li> </ul> <p><b>For lipid management:</b></p> <p>Assess fasting lipid profile in all patients, and within 24 hours of hospitalization for those with an acute cardiovascular or coronary event. For hospitalized patients, initiate lipid-lowering medication as recommended below before discharge according to the following schedule:</p> <ul style="list-style-type: none"> <li>• LDL-C should be &lt;100 mg/dL</li> <li>• If baseline LDL-C is ≥100 mg/dL, initiate LDL lowering drug therapy.</li> <li>• If on-treatment LDL-C is ≥100 mg/ dL, intensify LDLlowering drug therapy (may require LDLlowering drug combination).</li> <li>• If baseline LDL-C is 70 to 100 mg/dL, it is reasonable to treat to LDL-C &lt;70 mg/ dL.</li> <li>• If triglycerides are 200 to 499 mg/dL, non-HDL-C should be &lt;130 mg/dL.</li> <li>• Further reduction of non-HDL-C to &lt;100 mg/dL is reasonable.</li> <li>• Therapeutic options to reduce non-HDLC are: <ul style="list-style-type: none"> <li>◦ More intense LDLC– lowering therapy, or</li> <li>◦ Niacin</li> </ul> </li> </ul>

Targeted Risk Factor	Ideal CV Health Definition* Primordial Prevention Goals	Primary Prevention Goals	Secondary Prevention Goals	Strategy
				(after LDLC– lowering therapy) <ul style="list-style-type: none"> <li>• If triglycerides are <math>\geq 500</math> mg/dL, therapeutic options to prevent pancreatitis are fibrate or niacin before LDL lowering therapy; and treat LDL-C to goal after triglyceride lowering therapy. Achieve non-HDL-C <math>&lt; 130</math> mg/dL if possible.</li> </ul>
<b>Type 2 Diabetes</b>	Fasting plasma glucose $< 100$ mg/dL	Normal fasting plasma glucose ( $< 110$ mg/dL) and near normal HbA1c ( $< 7\%$ ).	HbA1c $< 7\%$	<ul style="list-style-type: none"> <li>• First-step is vigorous modification of other risk factors (eg, physical activity, weight management, blood pressure control, and cholesterol management as recommended above).</li> <li>• Second-step therapy is usually oral hypoglycaemic drugs: sulfonylureas and/or metformin with ancillary use of acarbose and thiazolidinediones.</li> <li>• Third-step therapy is insulin. Treat other risk factors more aggressively (eg, change BP goal to <math>&lt; 130/80</math> mm Hg and LDL-C goal to <math>&lt; 100</math> mg/dL).</li> <li>• Coordinate diabetic care with patient's primary care physician or endocrinologist.</li> </ul>

**Table 3.5** Applying cross cultural principles in individual or group behavioural/lifestyle counselling for prevention (Source- Stamler J 2017)

Issues	Applications
Core issues relate to both provider and patient knowledge, attitudes, and behaviour and include communication styles, trust, prejudice, patient, autonomy and family dynamics, the role of the practitioner (expert vs partner), traditions, customs and spirituality	In general, respect the uniqueness of each individual. Establish a relationship based on respect, empathy and curiosity. Assess decision-making preferences and the role of family. Employ strategies for identifying and bridging different styles of communication. Offer prevention services in a manner compatible with the person's cultural health beliefs and practices and preferred language. Be aware of issues of mistrust and prejudice and the impact of race/ethnicity on clinical decision-making.
The meaning of illness and wellness varies among cultures. Cultural influences contribute to the person's understanding of prevention as well as views on weight, physical activity, or a heart healthy diet	Ask questions to elicit the patient's understanding of CVD, his or her own risk factors, and clinical recommendations, and outlook on self-care. For example, What do you think caused the problem? How? What worries you the most? What kind of treatment do you think you should receive? What can you do to improve your health? Establish their views on treatment and goals with an emphasis on behaviour change
Patient motivation for and adherence to behavioural change recommendations is strongly influenced by the social contexts of their day-today life, social support, previous experience with the health care system, and resources for change	Assess supports for change (family, friends, environment); resources including access to healthy affordable places to exercise and purchase healthy food; literacy/language. Determine previous experiences with changing lifestyle behaviours. Utilise translators as needed and provide verbal and written information that is appropriate for cultural, linguistic and literacy needs. Identify community-based behaviour change programs and other resources that may assist the patient in meeting his or her goals.
Bringing the patient perspective and clinician perspective together requires negotiation	Strive for collaboration. Consider both your perspective and the patient's perspective and come to a mutual understanding about what will work for this person in relation to the lifestyle recommendations detailed in Table 1. Negotiation can be facilitated by empathy, reflective listening, the ability to roll with resistance and focusing on self-efficacy.

### 3.14. Conclusion

Here researcher has discussed an overview of patient-centred communication with a particular emphasis on how successful communication depends not just on the individual capacity of professional communication of clinicians and patients, but also on their ability to adapt actions and coordinate their experiences to achieve mutual goals. Long after the consultation is finished, we established many types of results that can be related to good communication, from quality of treatment within the experience itself to health improvement. It is also necessary, however, to understand that patient-clinician contact is embedded within multiple layers of context that can influence and mediate the relationships between processes and outcomes. Future work will contribute to an understanding of cancer communication ecology to provide insight into how best to implement cancer care strategies.

In this, we outlined communication functions in cancer settings that likely impact important intermediate and health outcomes. Fostering healing relationships stresses the importance of mutual trust, partnership, understanding, and engagement, as well as consensus as all needs and effects of successful communication on the roles and aspirations of each other.

Exchanging information emphasises the importance of recognising the information needs of patients, integrating clinical information with the representations of the patient's disease (explanatory models), recognising both the content and the information exchange process, recognising that disease-related information is now more readily available over the Internet, accurately communicating prognostic information while responding to emotions requires clinicians to evoke emotional distress from patients; express to him or her an awareness of the emotions of the patient; and respond with legitimisation, affirmation, empathy, and support.

Managing uncertainty emphasises that uncertainty can often not be removed but can be managed to help by providing knowledge, support and cognitive strategies.

Patients and families cope more easily with unpredictable fear. Decision-making includes understanding both the patient and family's active participation in the decision-

making process' information sharing and deliberation stages and determining the individual responsible for the final decision.

Finally, Cancer and strategic communication mass media for attitudinal and behavioural change includes change in health seeking behaviour, proper strategic disease-based communication programme, including working through the health care system; encouraging patient autonomy; and providing guidance, expertise, and access to resources.



# **Chapter 4**

## *Data Tabulation, Diagrammatic Representation and Analysis*



# *Chapter 4*

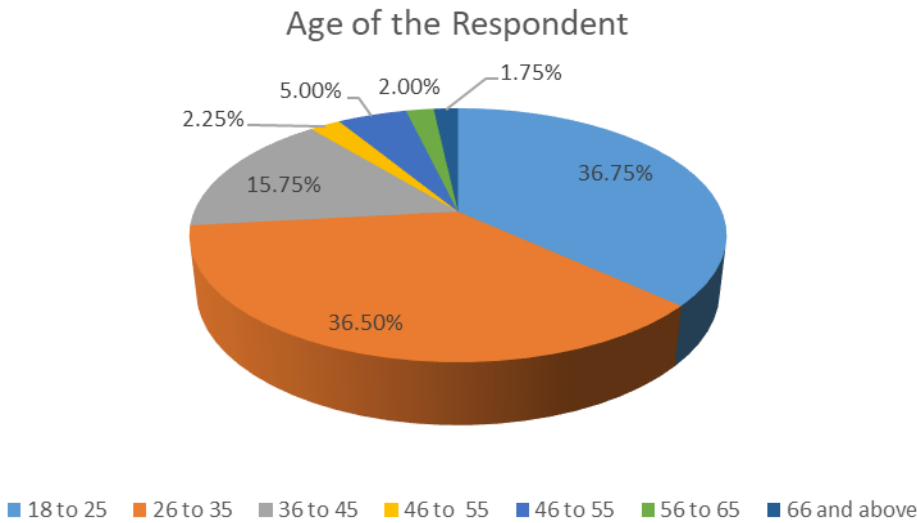
## *Data Tabulation, Diagrammatic Representation and Analysis*

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**SECTION-1:**

**Demographic Profile of the Respondent**

**Age:**



**Fig: 4.1 Demographic profile of the respondents**

Above graph shows the distribution of Age of the respondents. The graph indicates that majority of the respondents belonged to the age group from 26 to 35 years.

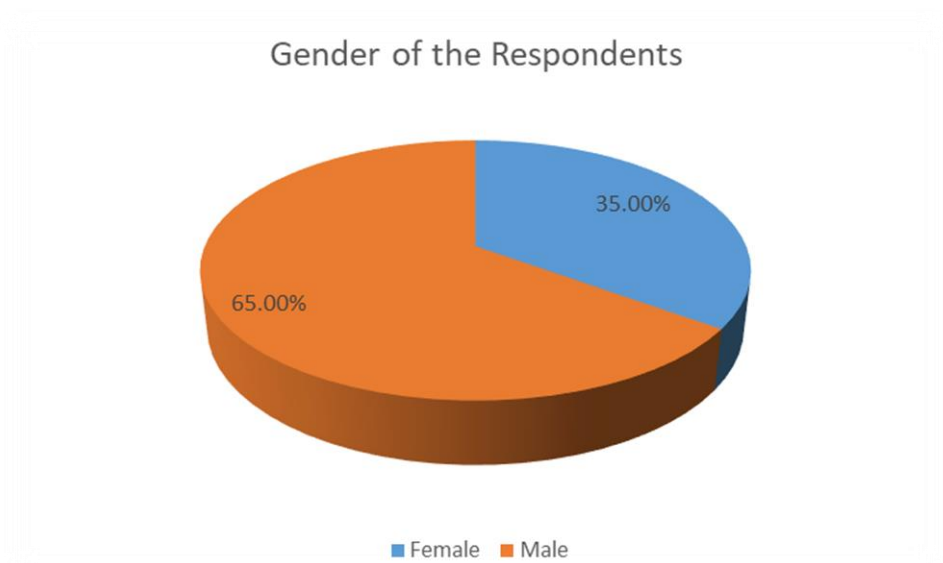
**Gender:****Fig: 4.2 Gender of the respondents**

Figure 4.2 shows the distribution of the Gender of the respondents. The graph indicates that the proportion of male respondents is higher than the female participants.

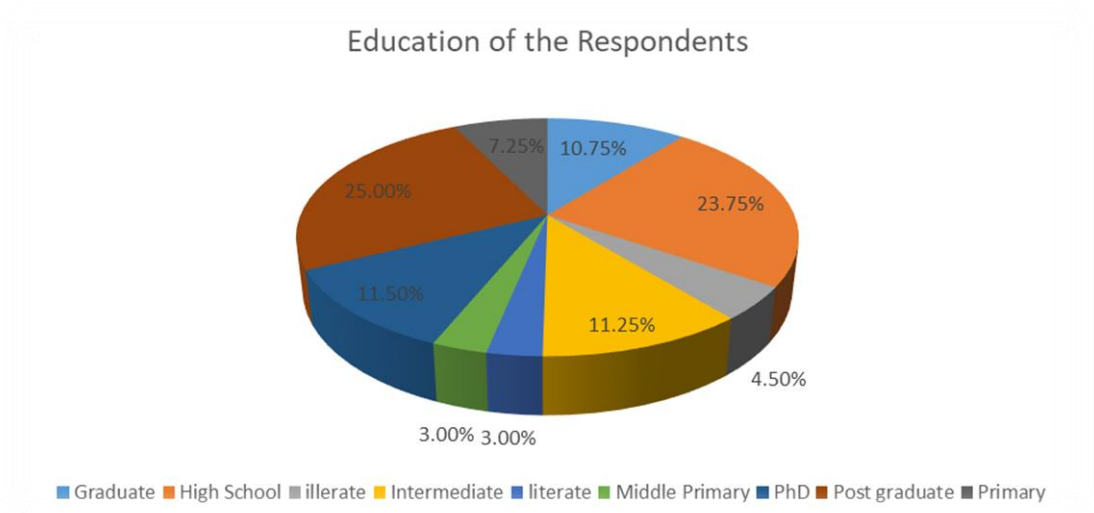
**Education:****Fig: 4.3 Educational qualification of respondents**

Figure 4.3 shows the distribution of respondents education level which clearly indicates that most of the study participants are educated.

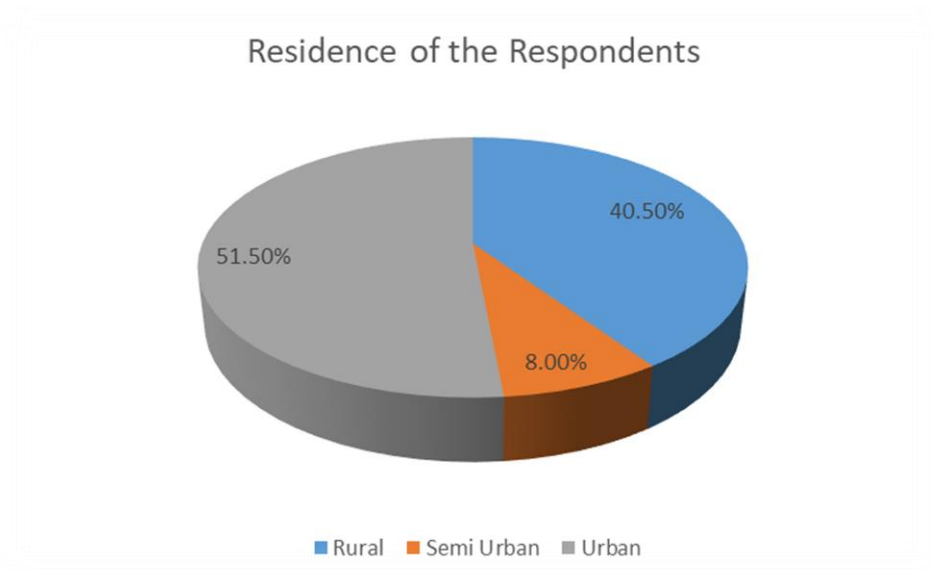
**Residence:**

Fig: 4.4 Residence categorisation of the respondents

Figure 4.4 shows the distribution of residence of the respondents, which indicates that half of the respondents belong to urban areas.

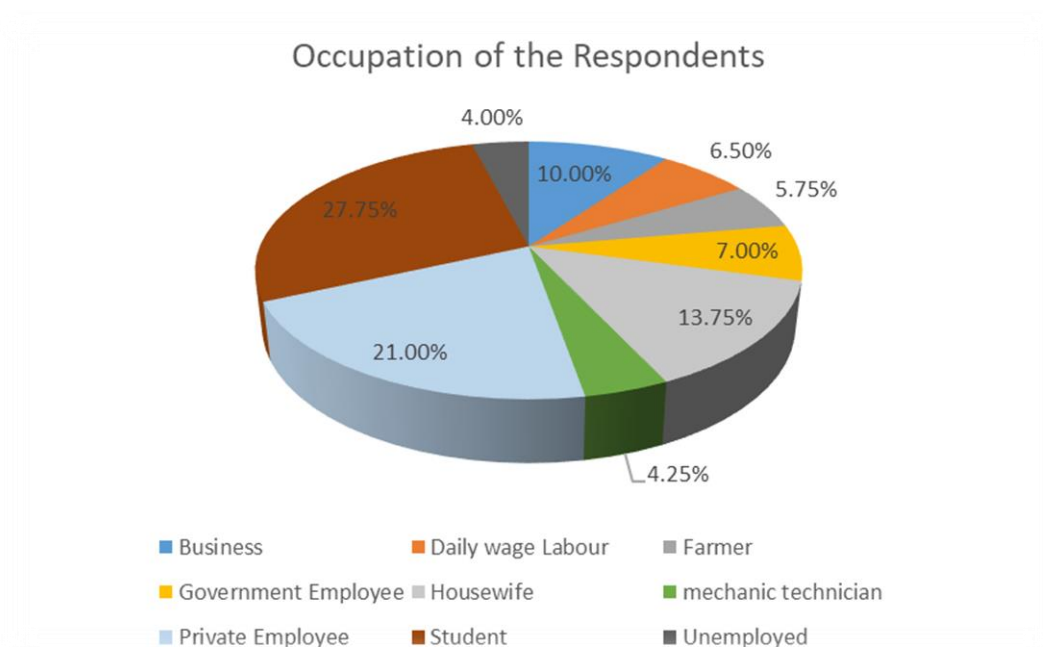
**Occupation:**

Fig: 4.5 Occupation of the respondents

Figure 4.5 shows the distribution of occupation of the respondents, which indicates that most of the respondents are students or private employee.

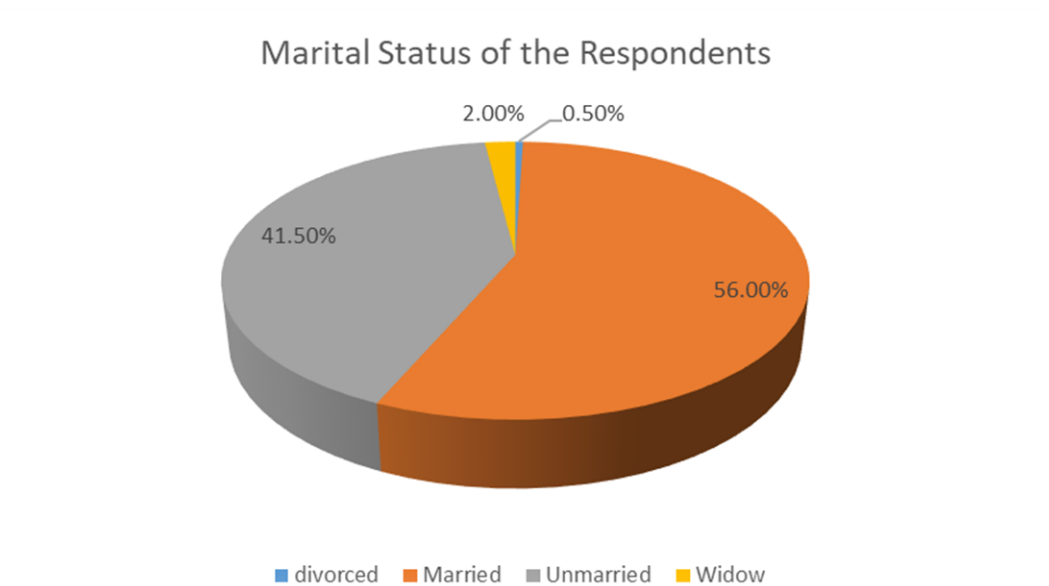
**Marital Status:****Fig: 4.6 Marital Status of the respondents**

Figure 4.6 shows the marital status of the respondents, which indicates the 56% of the respondents are married.

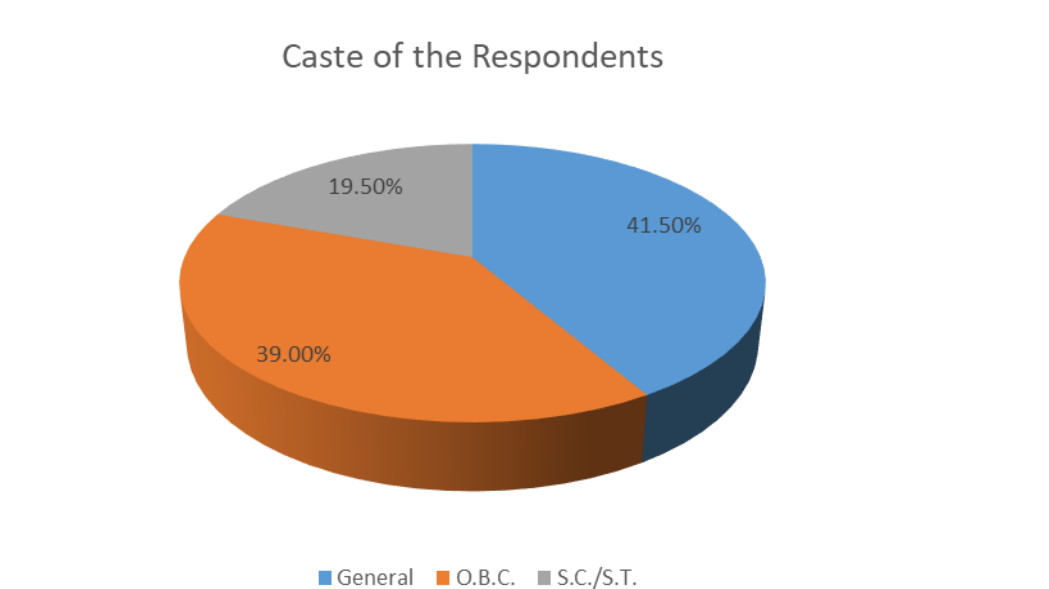
**Caste:****Fig: 4.7 Category of the respondents**

Figure 4.7 shows the distribution of the category-caste of the respondents, data indicates that most of the respondents belong to General and OBC categories.

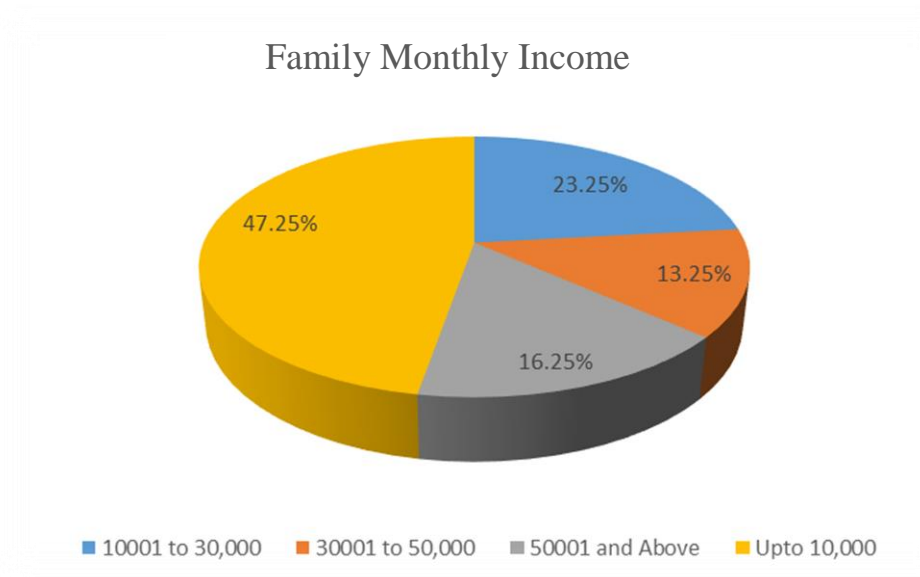
**Family Monthly Income:**

Fig: 4.8 Family income of the respondents

Figure 4.8 shows monthly income of the respondents family, which indicates that most of the respondents belong to lower income group (up to 10,000/month).

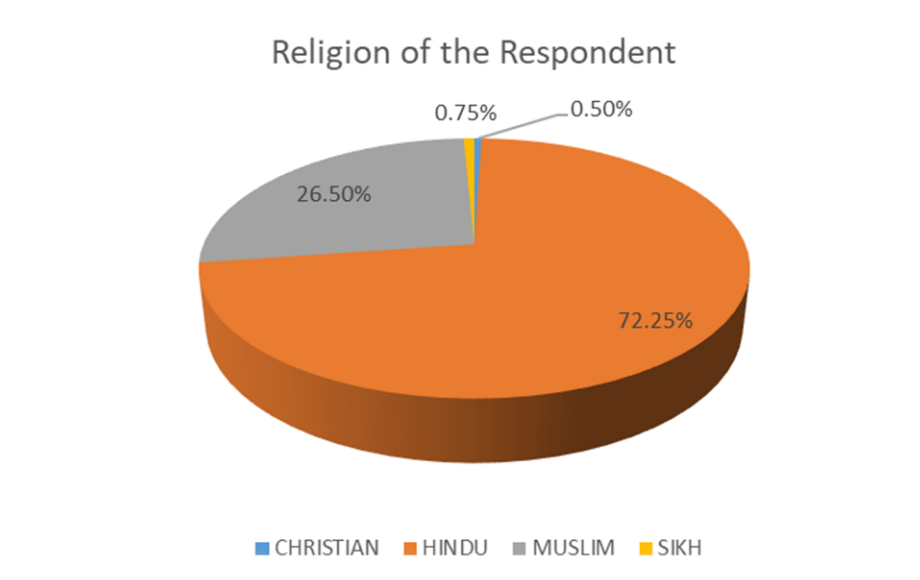
**Religion:**

Fig: 4.9 Religion of the respondents

Figure 4.9 shows the distribution of religion of the respondents, data indicates that most of the respondents belong to Hindu religion.

## Pre Strategic Media Intervention Results

## SECTION2: Questions Based on Strategic Media Intervention

## 1. DO YOU KNOW ANYTHING ABOUT CANCER?

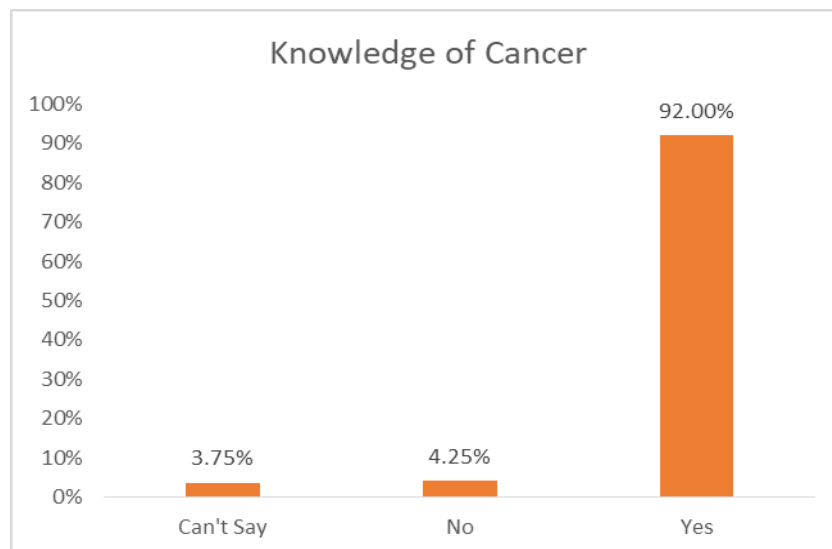
**Fig: 4.10 Knowledge of cancer**

Figure 4.10 shows the level of knowledge of cancer amongst the respondents, which indicates that most of the participants have some idea and knowledge related to Cancer. However, 4.25% respondents don't have the any knowledge about Cancer.

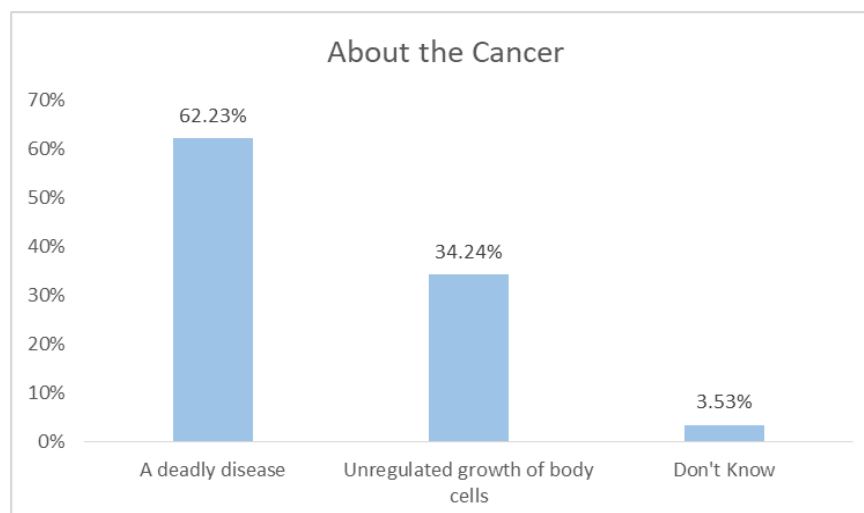
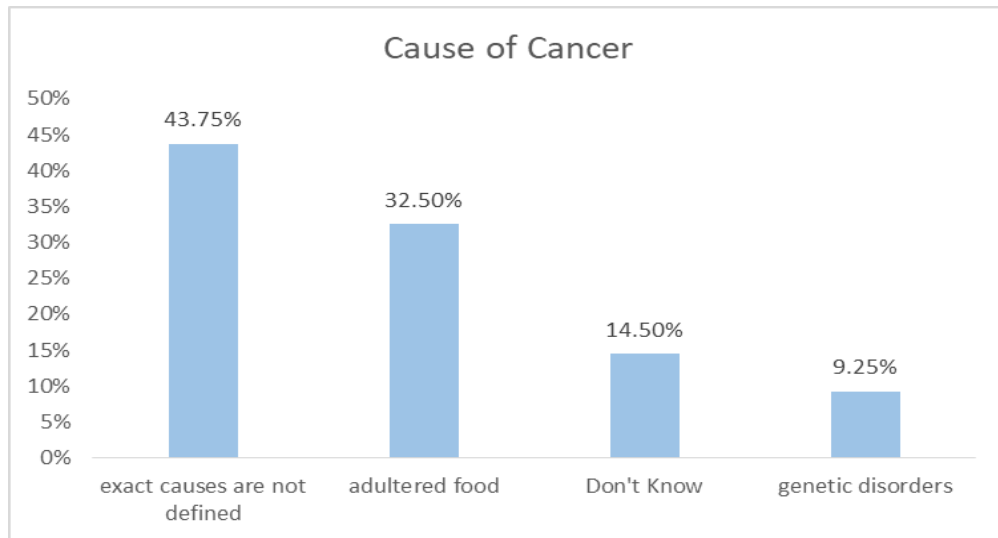
**1a- If Yes, kindly tell what is cancer?****Fig: 4.11 What is cancer**

Figure 4.11 shows that amongst the respondents who have the knowledge about Cancer, 62.23% consider it as a deadly disease. While 3.53% respondents were not able to tell Cancer exactly is.

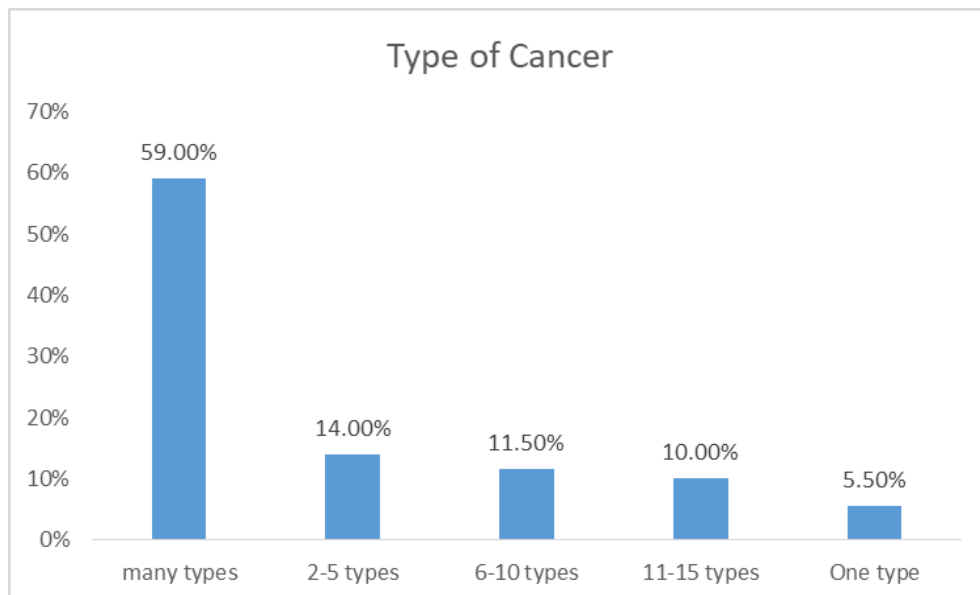
2. What are the causes of cancer?



**Fig: 4.12 Causes of cancer**

Figure 4.12 shows that 43.75% respondents responded that exact cause of Cancer is not defined, whereas 14.50% of the respondents said that they don't have any idea about the causes of cancer.

3. How many types of cancer are there?



**Fig: 4.13 Types of cancer**

Figure 4.13 shows 59% of the respondents are of this opinion that Cancer is of many types.

#### 4- Do you agree that people who consume tobacco, alcohol and drugs only have cancer?

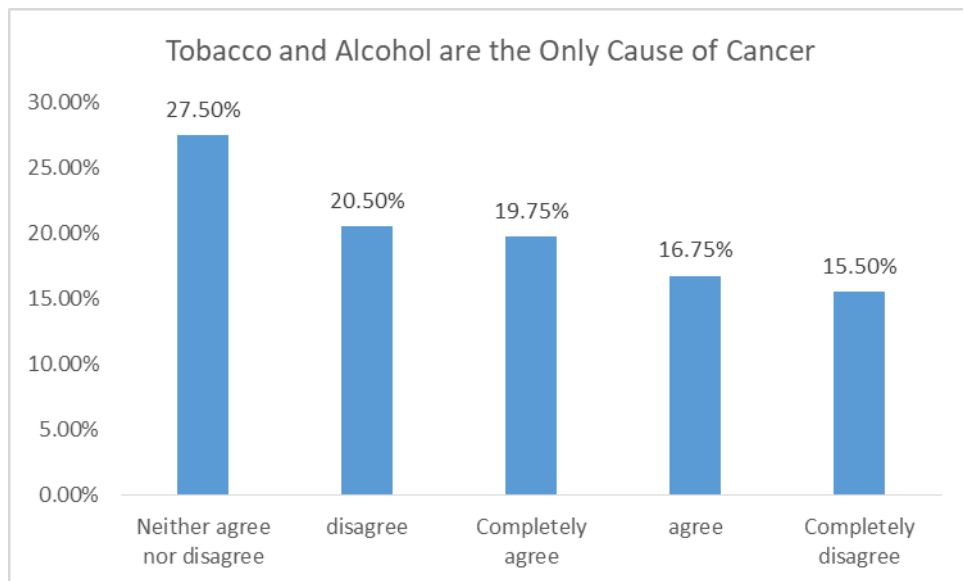


Fig: 4.14 Tobacco and alcohol are the only cause of cancer

Figure 4.14 shows that 27.50% respondents neither agree nor disagree with the fact that tobacco and alcohol are the only cause of cancer.

#### 5- Chemicals used in cleaning house and utensils can also cause cancer?

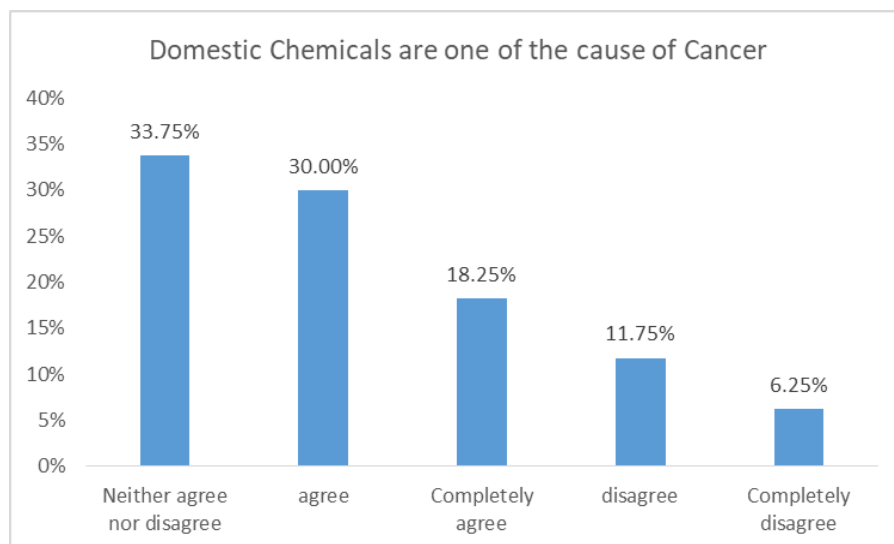


Fig: 4.15 Domestic chemicals are one of the causes of cancer

Figure 4.15 shows that 33.75% respondents neither agree nor disagree with the fact that chemicals used in cleaning house and utensils can cause cancer.

6- Do you agree that consumption of food made in an oil which is heated and reheated again and again can cause cancer?

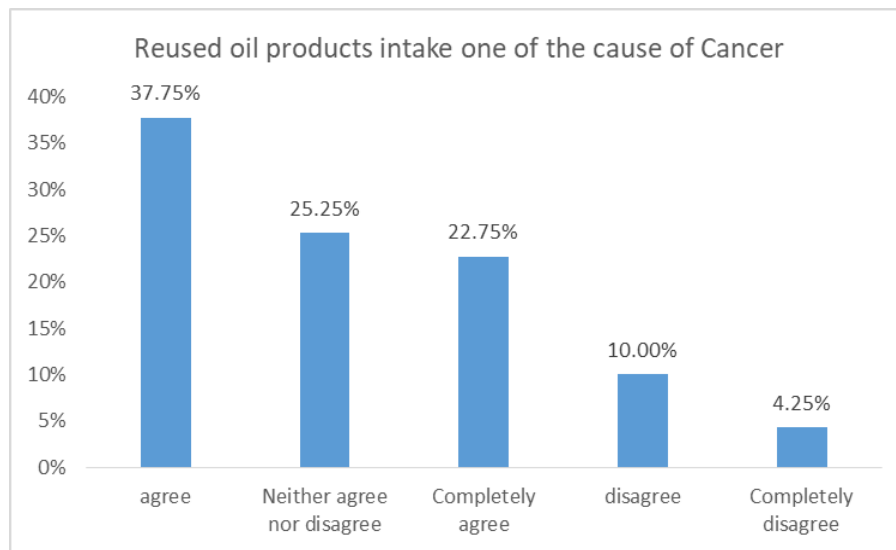


Fig: 4.16 Reused oil product intake causes cancer

Figure 4.16 shows that 37.75% respondents agree with the fact that consumption of food made in oil which is heated and reheated again and again can cause cancer.

7-Do you know about carcinogenic agents?

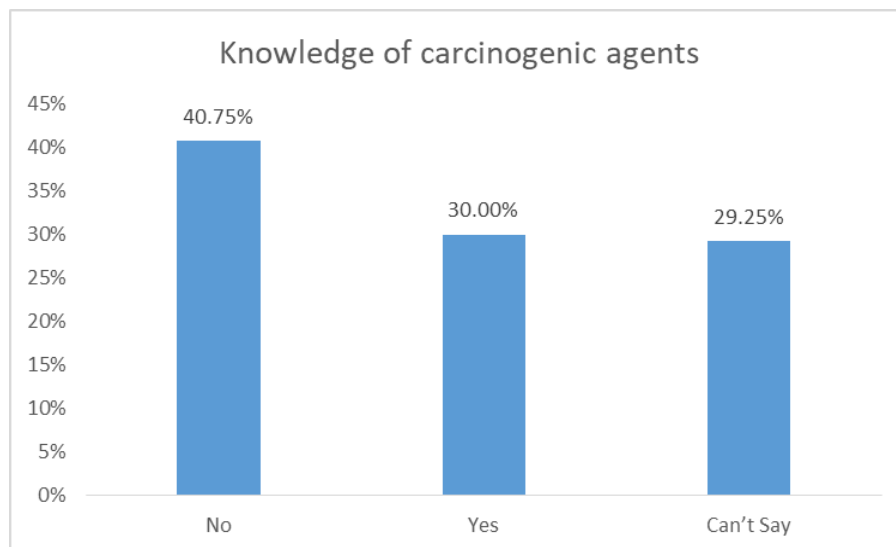
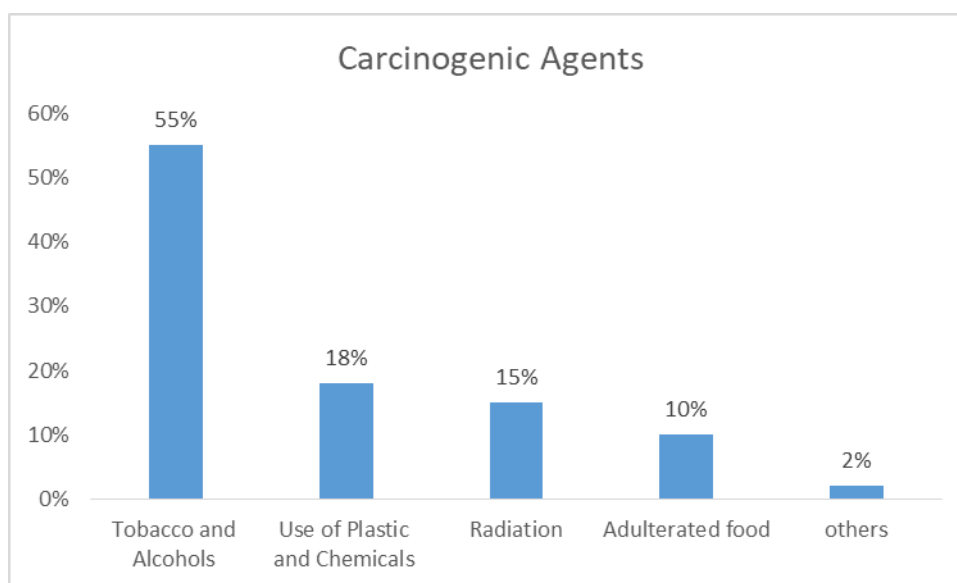


Fig: 4.17 Knowledge of carcinogenic agents

Figure 4.17 shows that 40.75% of respondents don't have any knowledge about carcinogenic agents.

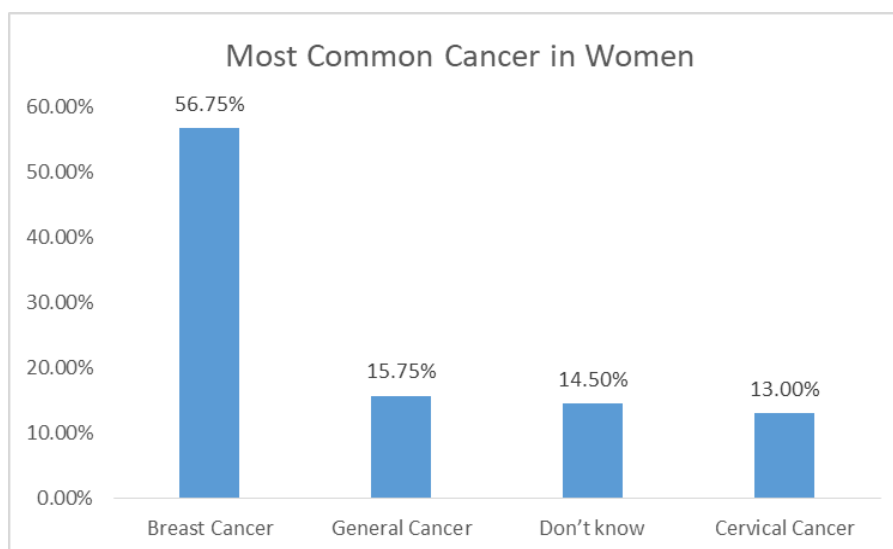
7A- If yes, kindly define?



**Fig: 4.18 Carcinogenic agents**

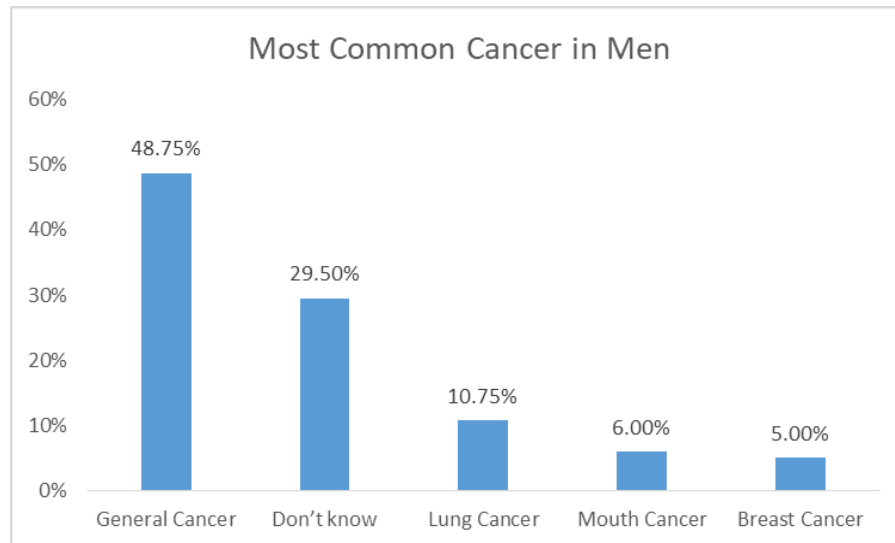
Figure 4.18 shows that 55% of respondents who have knowledge about carcinogenic agents consider tobacco and alcohol as carcinogenic agents.

8- Which is the most common cancer in women?



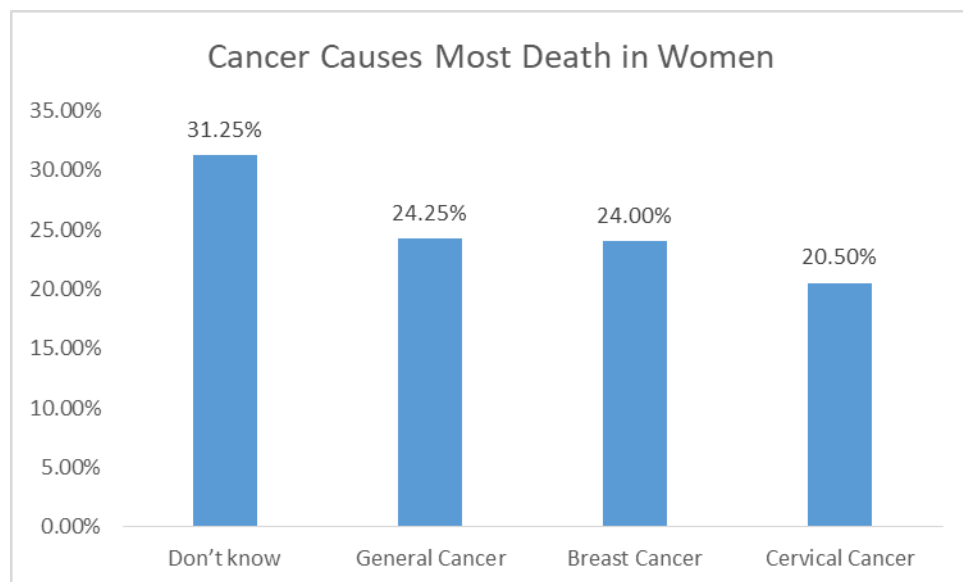
**Fig: 4.19 Most common cancer in women**

Figure 4.19 shows that 56.75% of the respondents responded that Breast Cancer is the most common cancer in women.

**9- Which is the most common cancer in men?**

**Fig: 4.20** Most common cancer in men

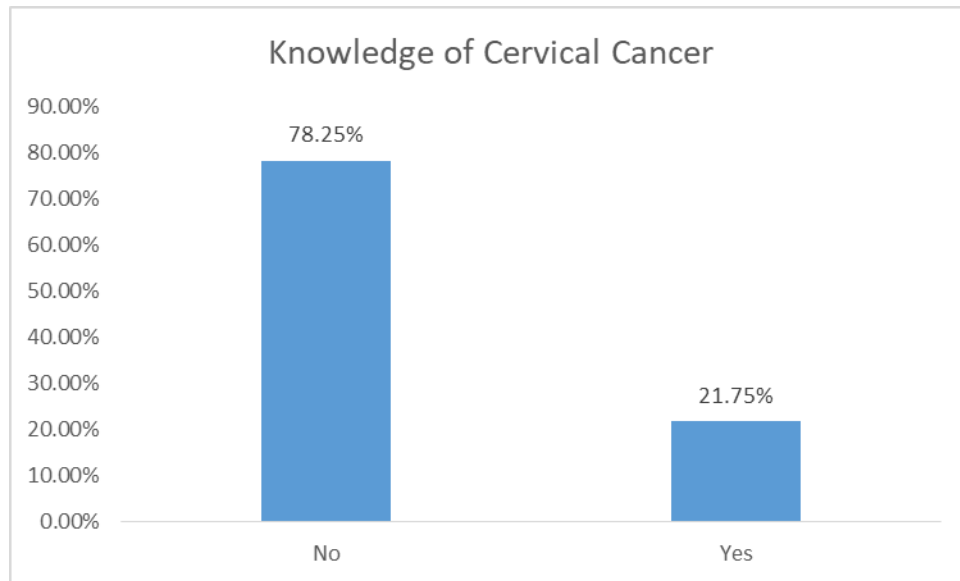
Figure 4.20 shows that 48.75% of the respondents responded that Cancer is the most common cancer in men, they were unable to specify the name of cancer.

**10- Which cancer causes most deaths in women?**

**Fig: 4.21** Cancer Causes most death among women

Figure 4.21 shows that 31.25% of the respondents don't know about the type of cancer which leads to most deaths among women.

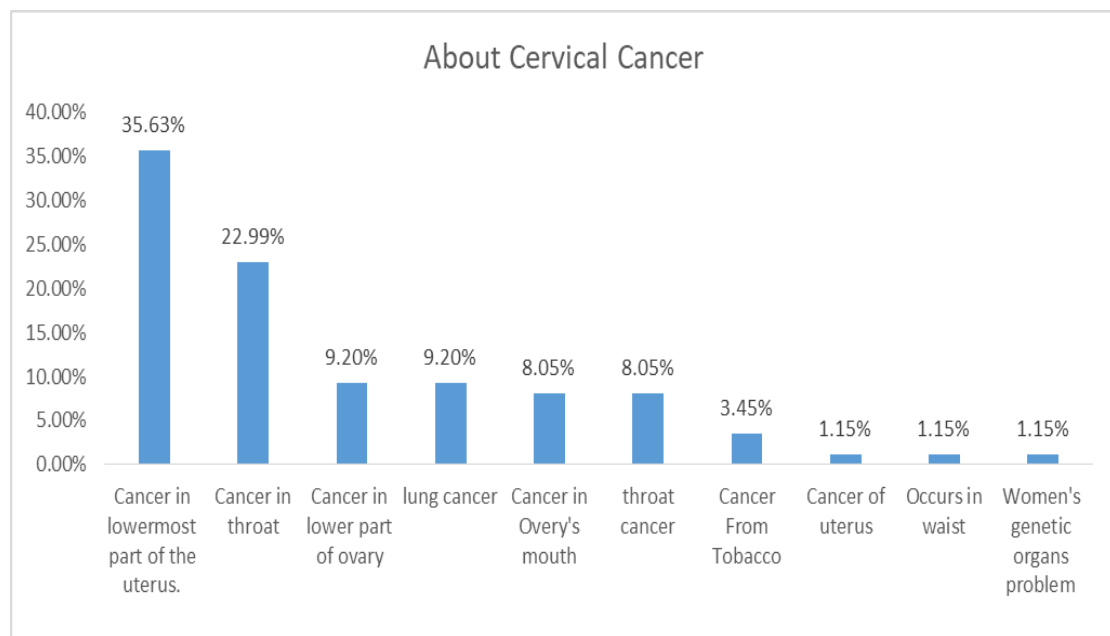
## 11-Do you know what is cervical cancer?



**Fig: 4.22 Knowledge of cervical cancer**

Figure 4.22 shows that 78.25% of the respondents don't have any knowledge about cervical cancer.

## 11-a- If yes, please define....



**Fig: 4.23 Define cervical cancer**

Figure 4.23 shows the knowledge regarding defining cervical cancer by the respondents.

### 12-Do you know that there is any vaccine which can prevent cervical cancer?

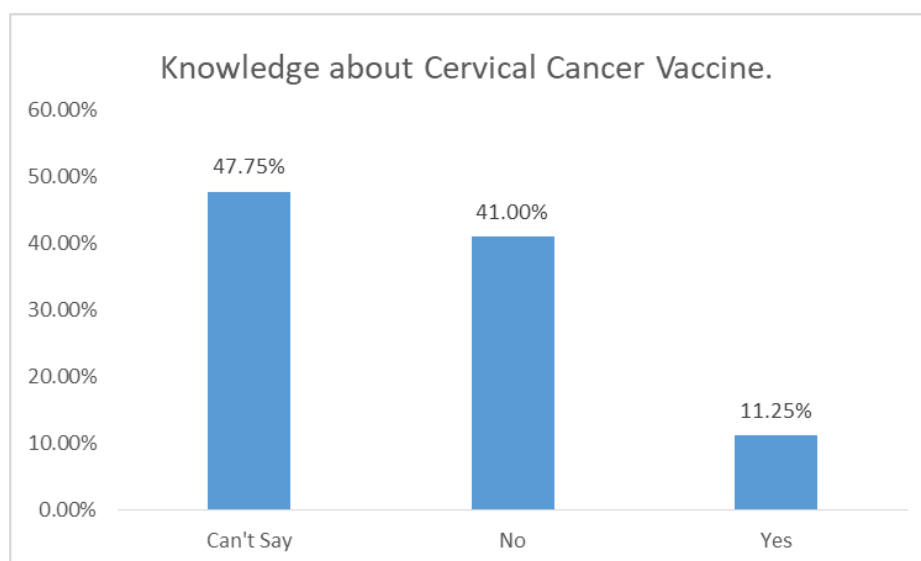


Fig: 4.24 Cervical cancer vaccine knowledge

Figure 4.24 shows that 47.75% of the respondents can't say anything about the Cervical Cancer Vaccine and 41% of the respondents have no knowledge regarding Cervical Cancer Vaccine.

#### 12 a- If yes, please name it.

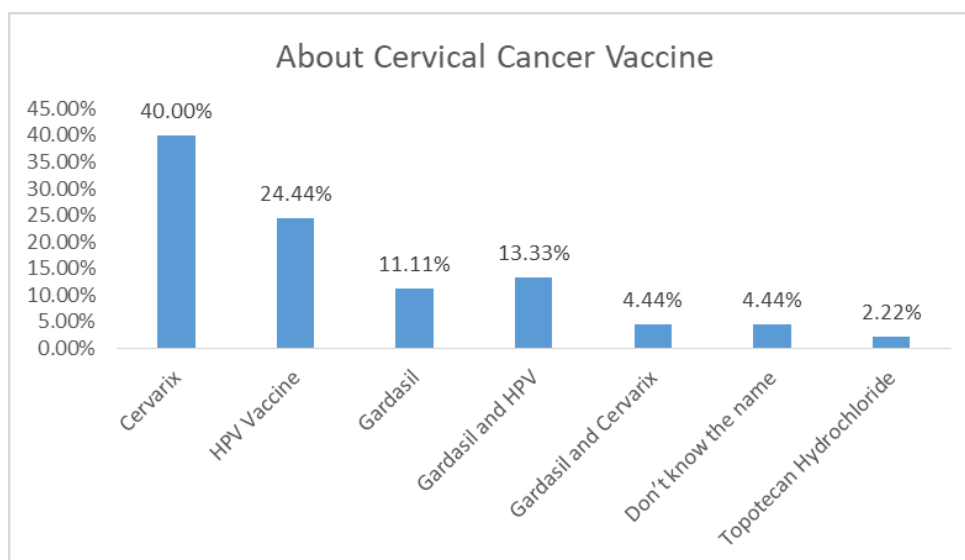


Fig: 4.25 Name of the cervical cancer vaccine

Figure 4.25 shows the responses of the respondents regarding name of the vaccine for protection against cervical cancer, these responses are of those participants who said that know about cervical cancer vaccine.

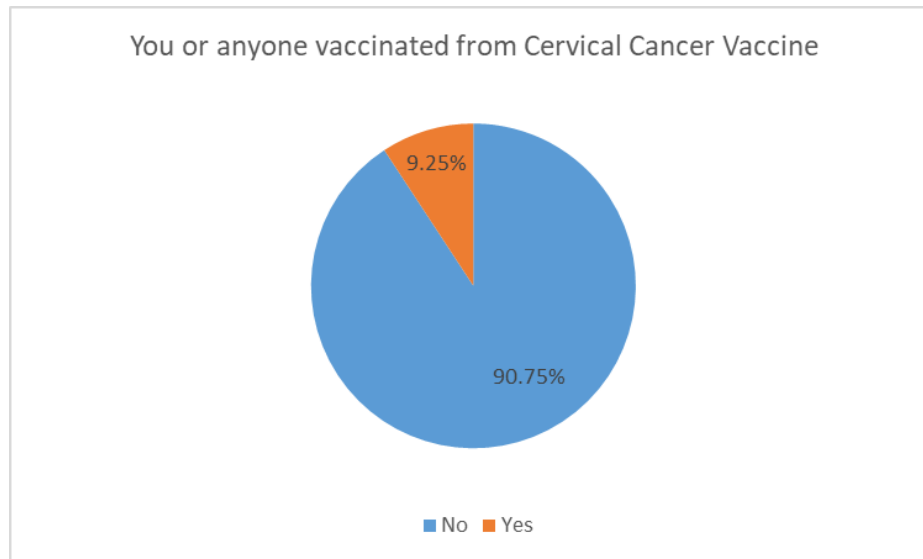
**13- Did you or someone you know have themselves vaccinated?****Fig: 4.26 You or anyone you know got themselves vaccinated**

Figure 4.26 shows that only 9.25 % of the respondents of anyone they know have vaccinated themselves with Cervical Cancer vaccine.

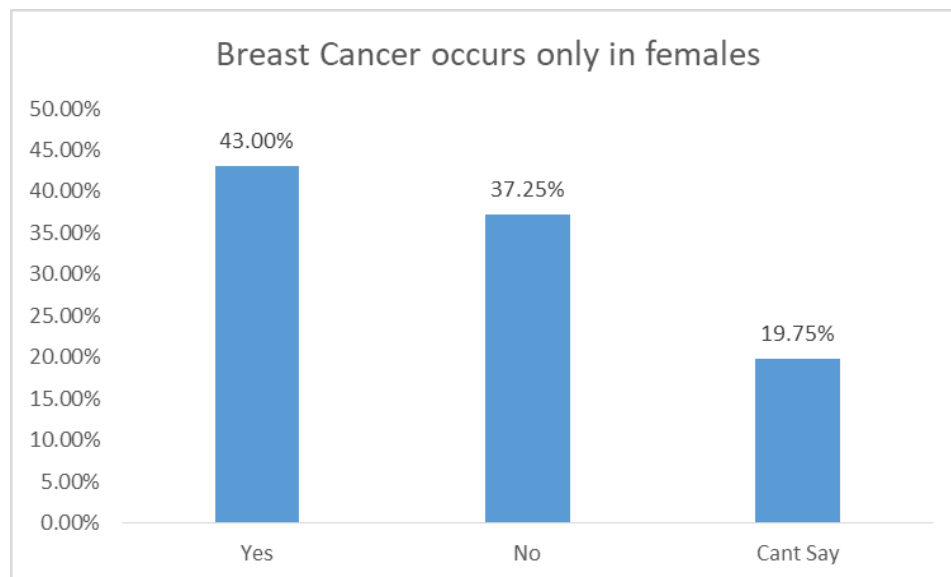
**14- Does breast cancer only happen to women?****Fig: 4.27 Breast cancer occurs only to women**

Figure 4.27 shows that 43% of the respondents think that Breast Cancer occurs only in females, which clearly showcases low awareness regarding breast cancer among respondents.

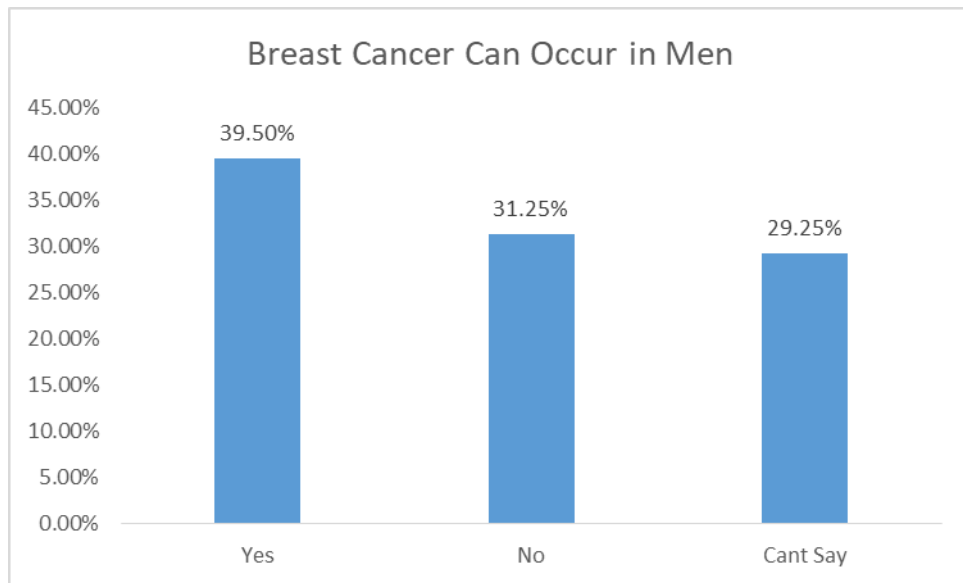
**15- Do you know that breast cancer can occur in men?****Fig: 4.28 Breast cancer can occur to men**

Figure 4.28 shows that 39.50% of the respondents think that Breast Cancer can occur in males.

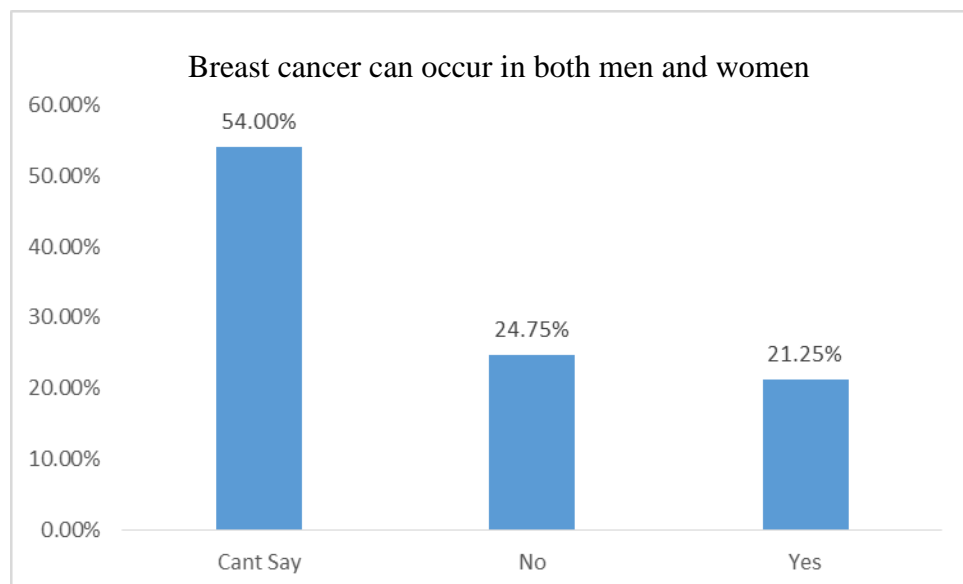
**16- Breast cancer can happen to both men and women?****Fig: 4.29 Breast cancer can occur in both men and women**

Figure 4.29 shows that 54% of the respondents can't say whether Breast Cancer can occur in both male and female, which again showcases extremely low knowledge level regarding breast cancer among respondents.

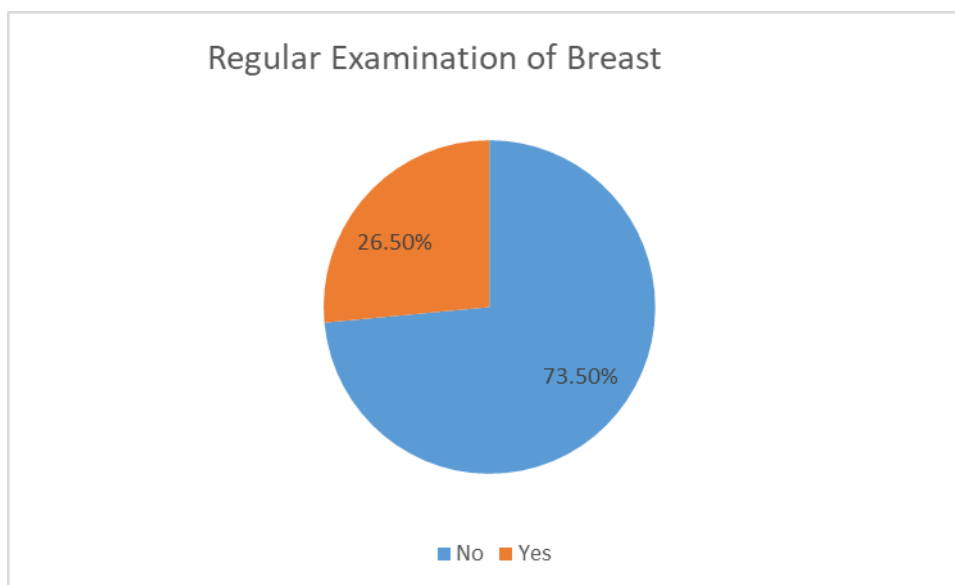
**17- Do you regularly do Self Examination of your breast?****Fig: 4.30 Regular self examination of breast**

Figure 4.30 shows that 73.50% of the respondents responded that they do do regular self examination of Breast.

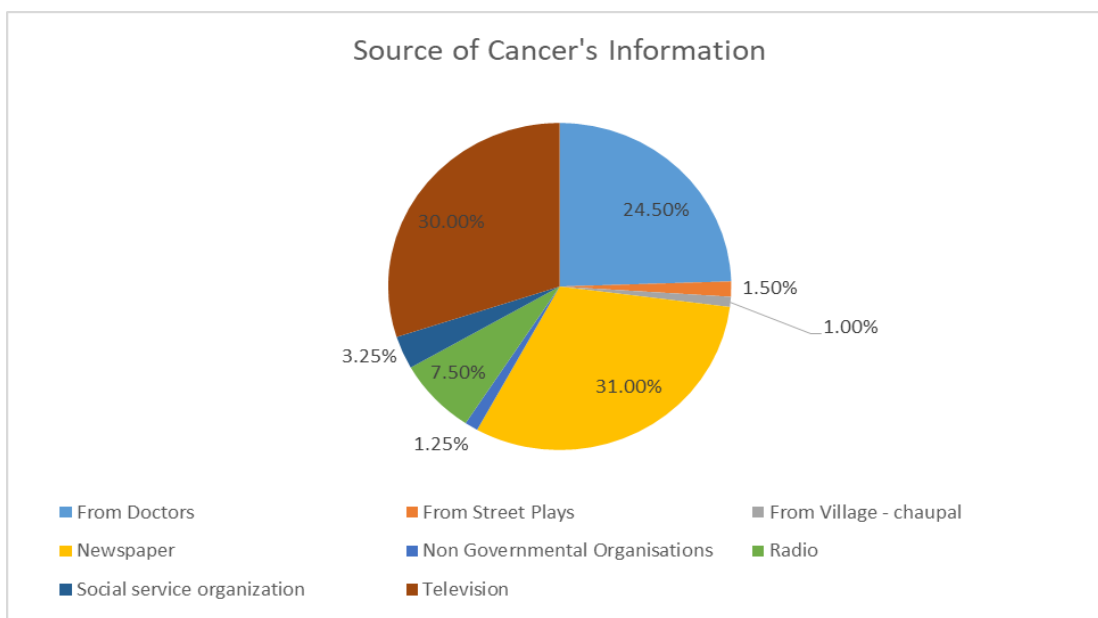
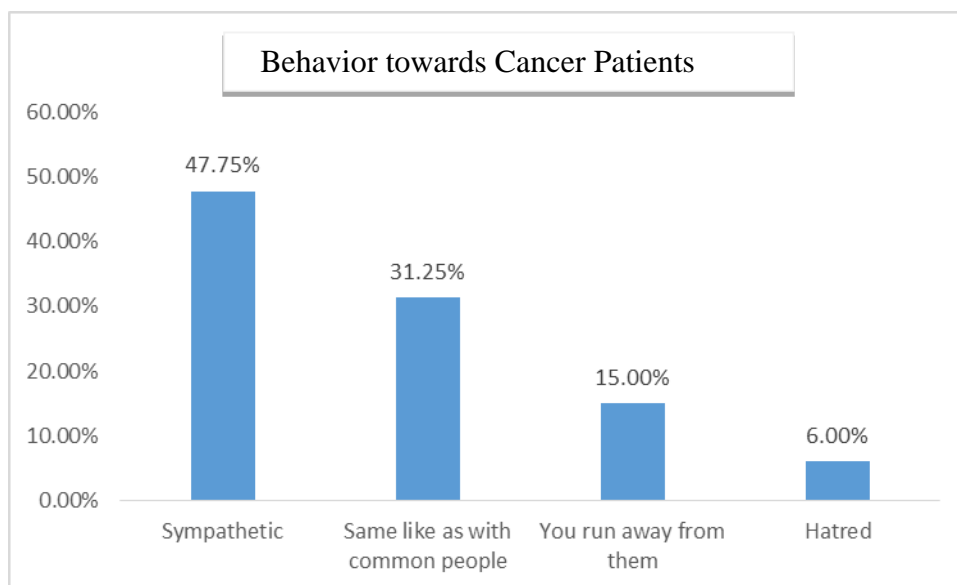
**18- Where do you get cancer and health related information from?****Fig: 4.31 Source of Cancer and health related information**

Figure 4.31 shows that television (30%) and Newspaper (31%) are most preferred sources for Cancer and other health related information for the respondents.

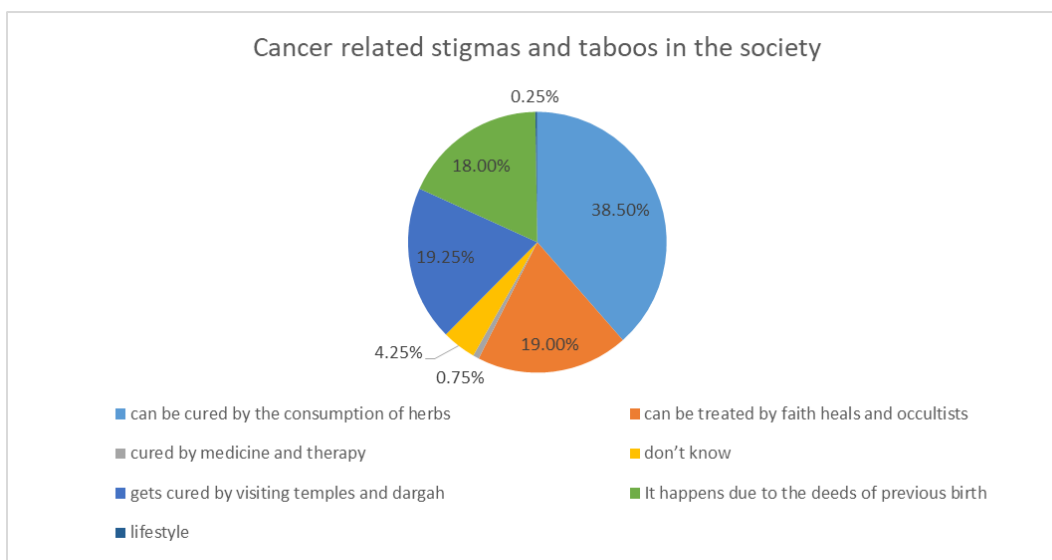
### 19- What is your attitude / behavior towards cancer patients?



**Fig: 4.32 Attitude/behavior towards cancer patients**

Figure 4.32 shows 47.75% of the respondents responded that their attitude/behavior towards the cancer patients is sympathetic.

### 20-What kind of stigmas and taboos exist in society regarding cancer?



**Fig: 4.33 Cancer related stigmas and taboos in the society**

Figure 4.33 shows two most deeply rooted stigmas and taboos in the society related to cancer are that Cancer can be cured by the consumption of herbs (38.50%) and that it can be cured by visiting temples and dargah (19.25%), which showcases low knowledge about cancer treatment.

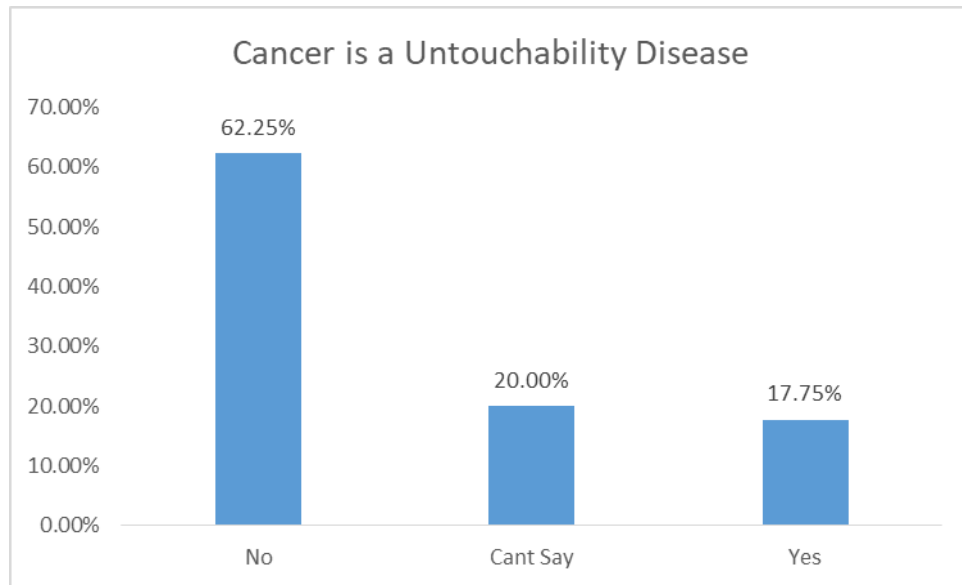
**21-Do you think that cancer is a disease of untouchability?**

Fig: 4.34 Cancer is a disease of untouchability

Figure 4.34 shows that 62.25% of the respondents responded that Cancer is not a disease of untouchability.

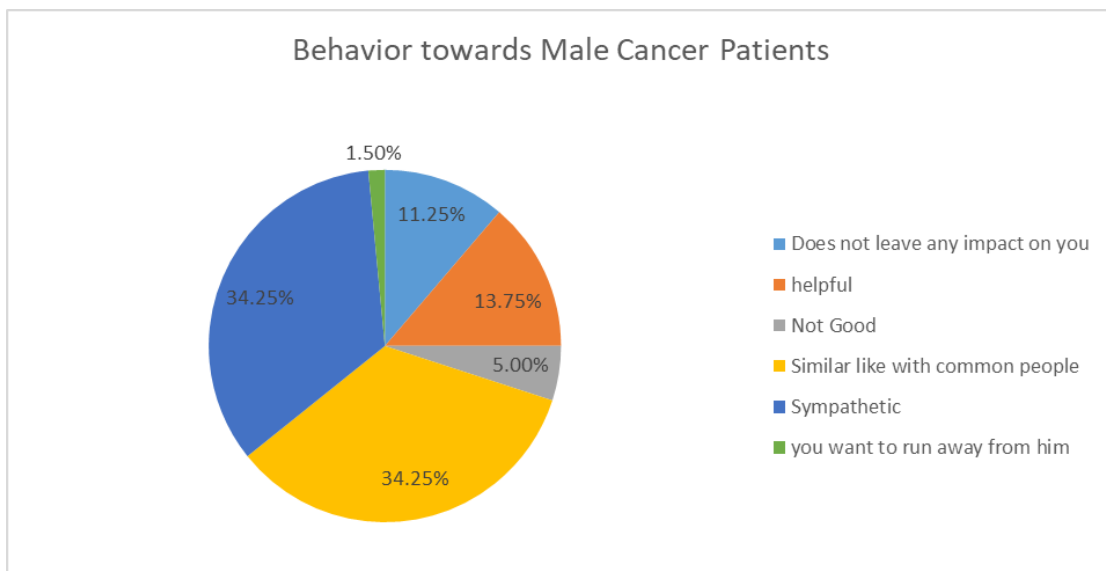
**22- How is your behavior towards men who are cancer patients?**

Fig: 4.35 Behavior towards male cancer patients

Figure 4.35 shows 34.25% of the respondents responded that their behavior towards male cancer patients is sympathetic and that they treat them similar to common people.

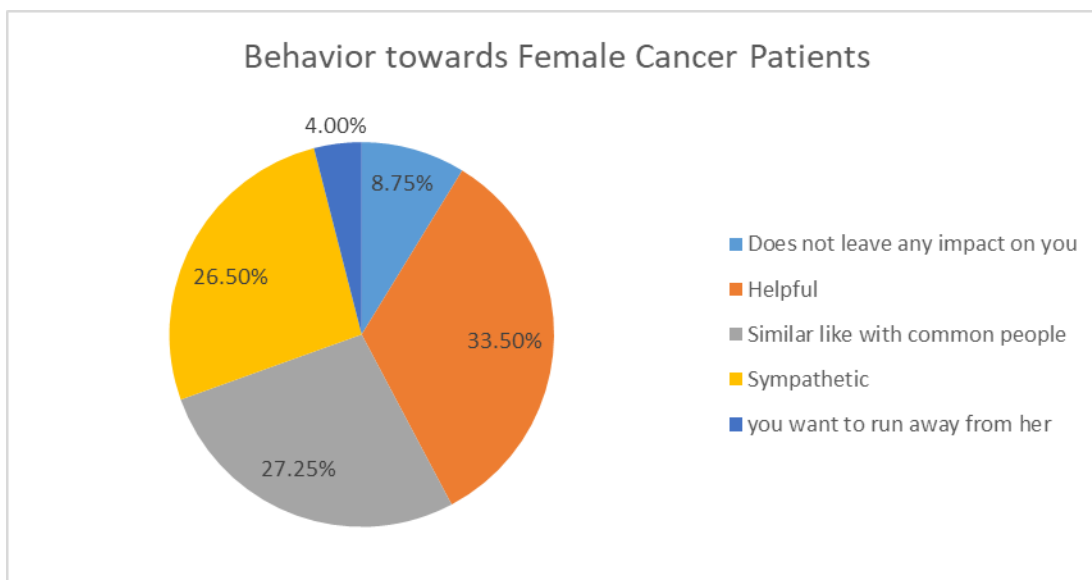
**23- How is your behavior towards women who are cancer patients?****Fig: 4.36 Behavior towards female cancer patients**

Figure 4.36 shows that 33.50% of the respondents responded that their behavior towards female cancer patients was helpful and 27.25% responded that they treated them similar to common people.

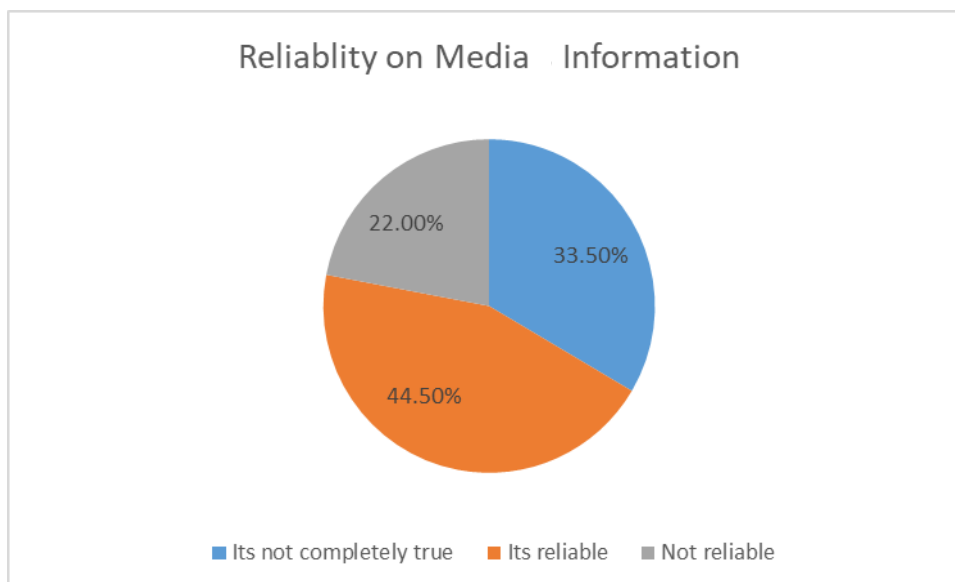
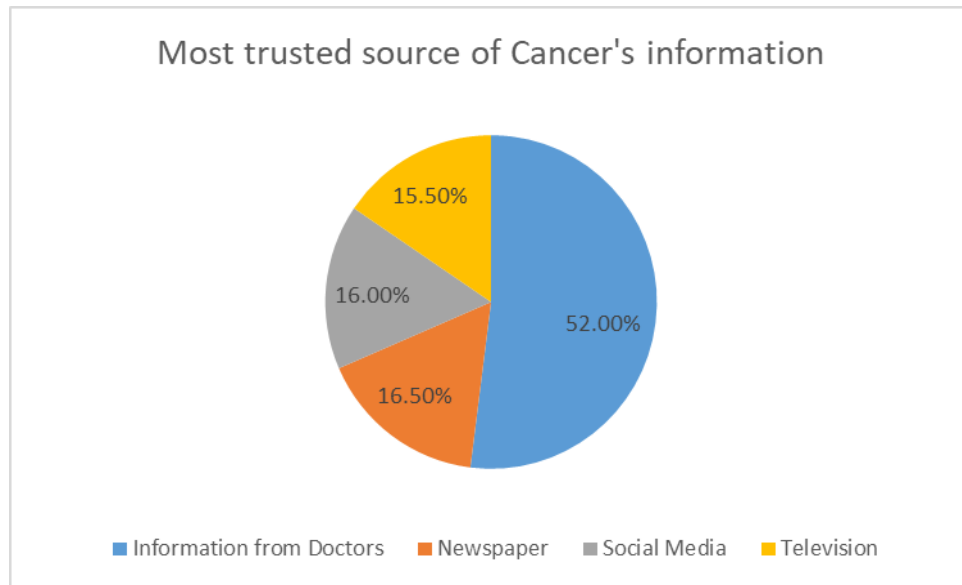
**24- How reliable the information about cancer from the media seems to be?****Fig: 4.37 Reliability on media information about cancer**

Figure 4.37 shows that 44.50% of the respondents responded that they found information from media reliable.

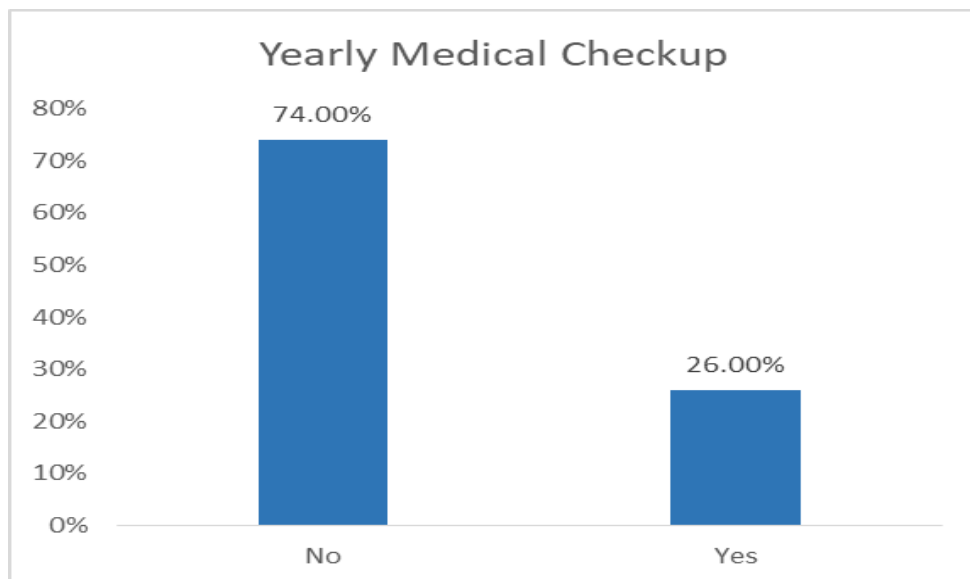
25- Which medium do you trust the most for cancer news/ information?



**Fig: 4.38 Most trusted source for cancer related information**

Figure 4.38 shows that 52% of the respondents trust most on the information related to cancer provided by the doctors.

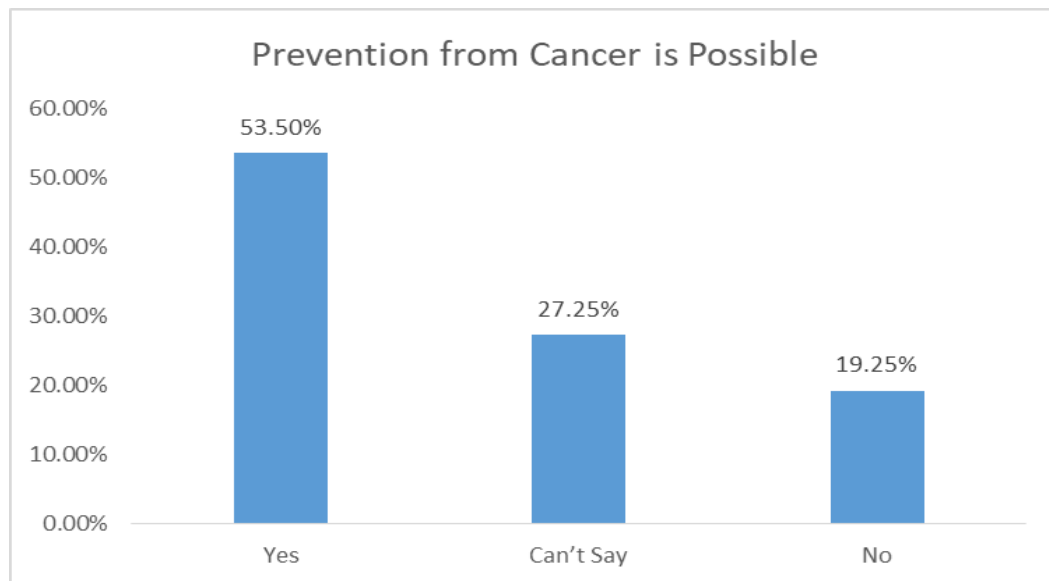
26- Do you get your medical examination done every year?



**Fig: 4.39 Yearly medical check-up**

Figure 4.39 shows that 74% of the respondents do not get their yearly medical examination done, which showcases their neglect for their own health.

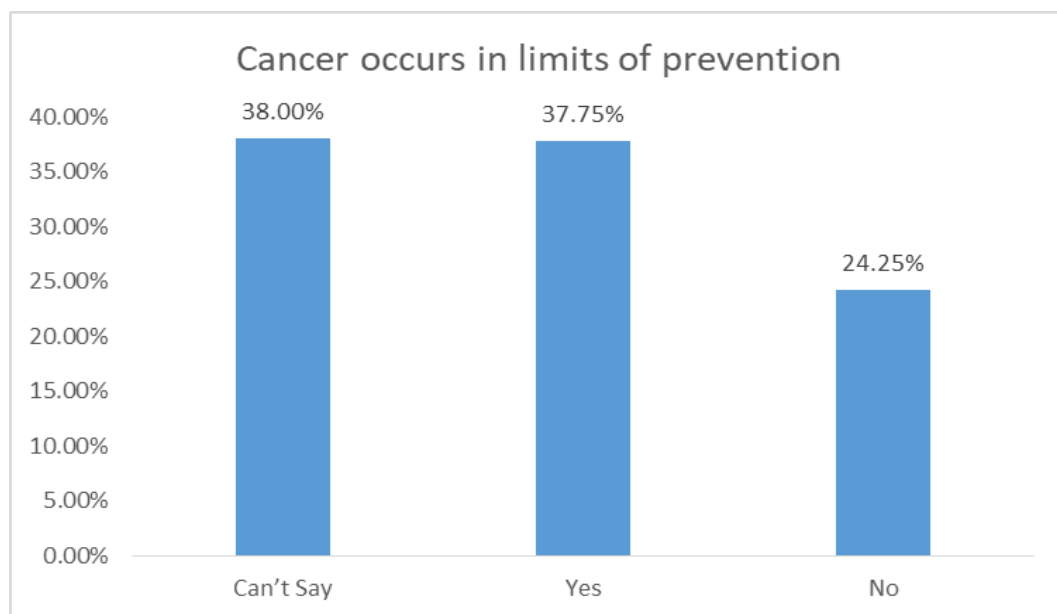
27- Do you think that prevention from Cancer is possible?



**Fig: 4.40 Prevention from cancer is possible**

Figure 4.40 shows 53.50% of the respondents think that prevention from Cancer is possible.

28-Do you think that cancer is within the limits of prevention?

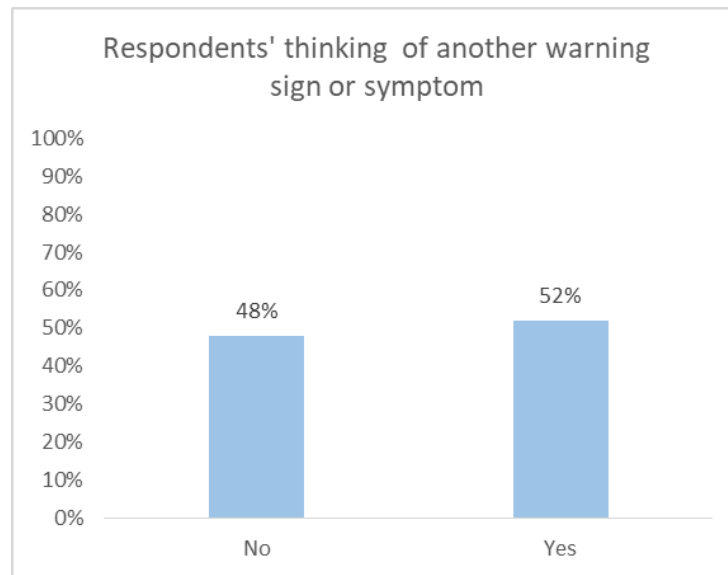


**Fig: 4.41 Cancer is within the limits of prevention**

Figure 4.40 shows that 38% of the respondent can't say anything about the statement that cancer is within the limits of prevention.

## SECTION-3 The Cancer Awareness Measures (CAM)

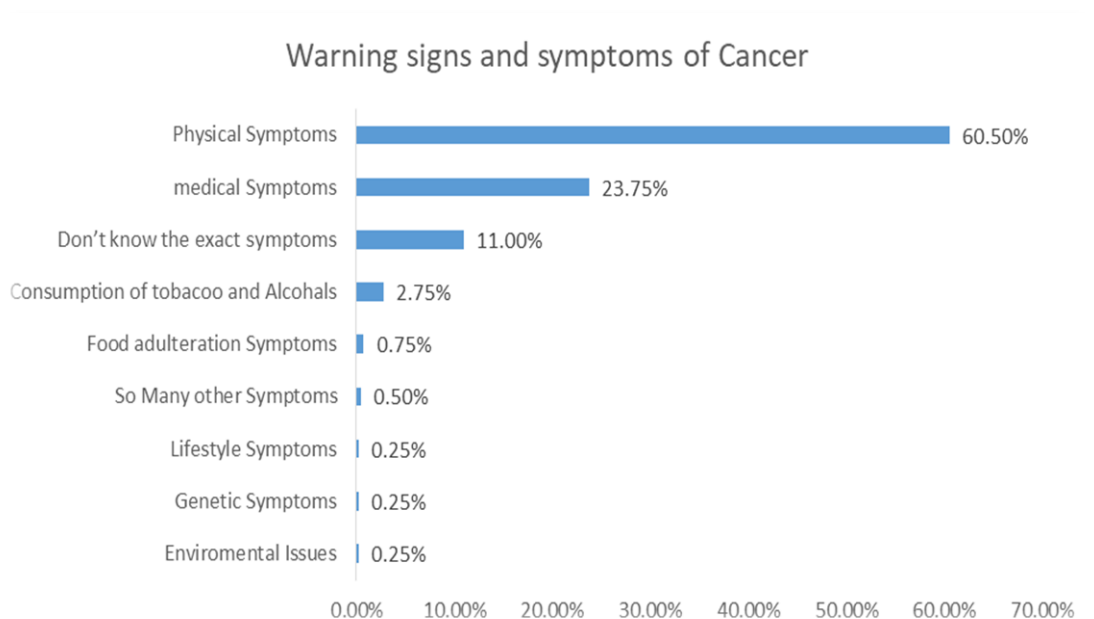
1- Can you think of another warning sign or symptom?



**Fig: 4.42 Another Warning sign or symptom**

Figure 4.42 shows, 52% of the respondents can think of another warning signs and symptoms of cancer.

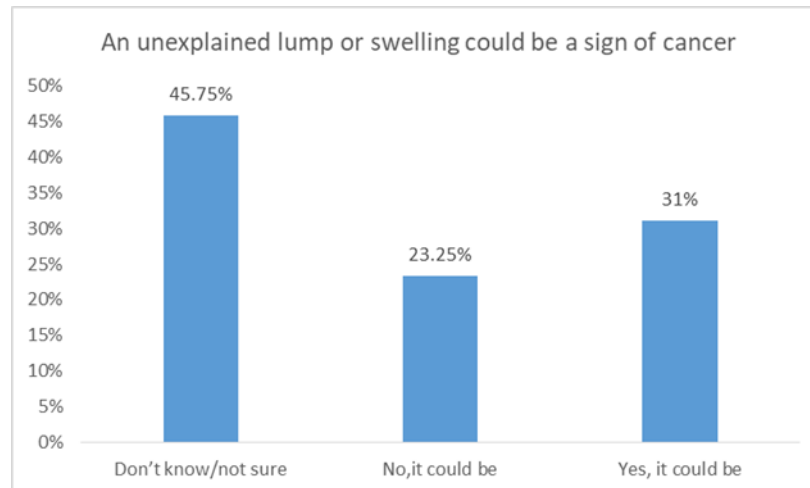
2- Cancer has many warning signs and symptoms. Write the name of the one you believe to be a symptom?



**Fig: 4.43 Warning signs and symptoms of cancer**

60.50% of the respondents consider that physical symptoms such as vomiting, body pain, weakness, lumps etc. are the most common symptoms of cancer.

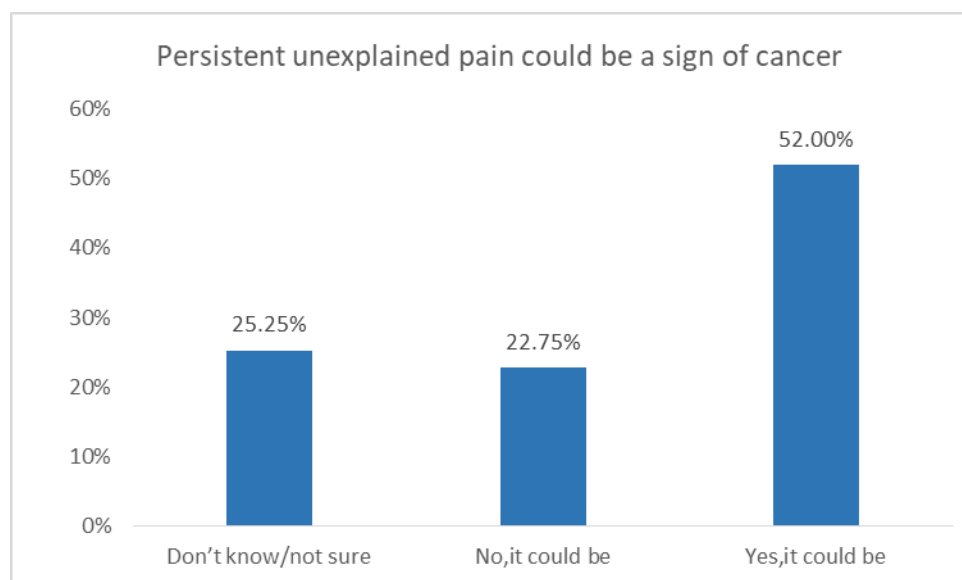
### 3- Do you think an unexplained lump or swelling could be a sign of cancer?



**Fig: 4.44 An unexplained lump or swelling would be a sign of cancer**

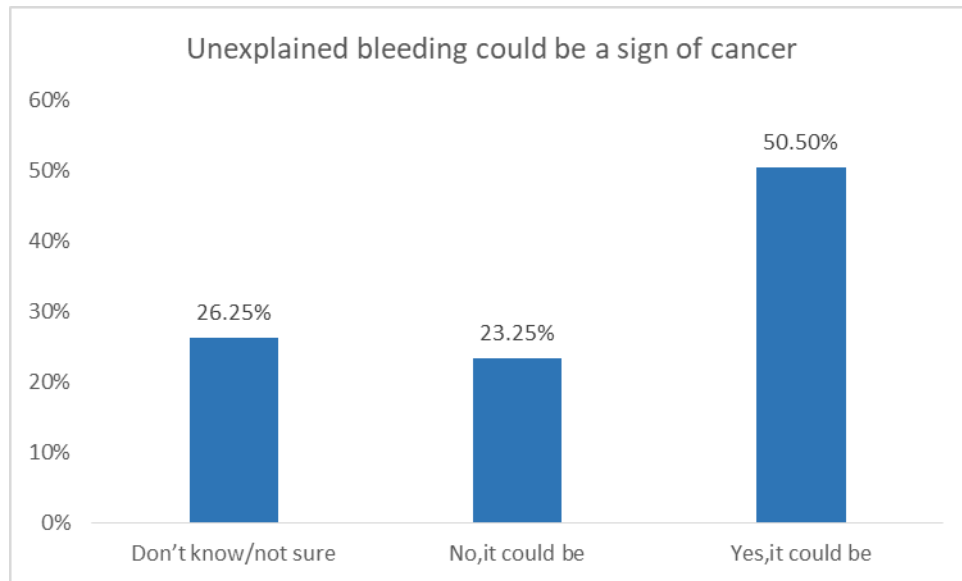
45.75% of the respondents don't know that an unexplained lump or swelling could be a sign of cancer.

### 4- Do you think persistent unexplained pain could be a sign of cancer?

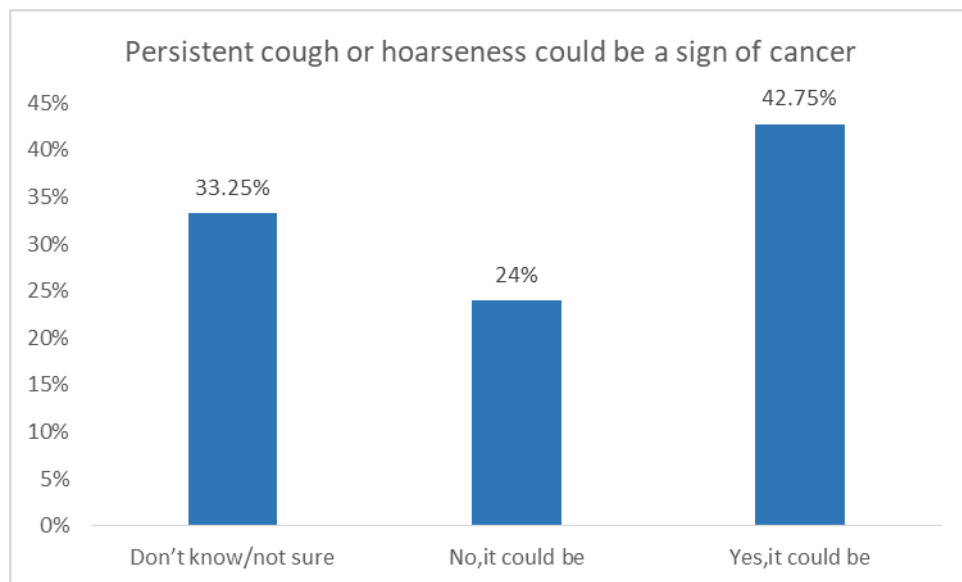


**Fig: 4.45 Persistent, unexplained pain could be a sign of cancer**

52% of the respondents think that persistent unexplained pain could be a sign of cancer.

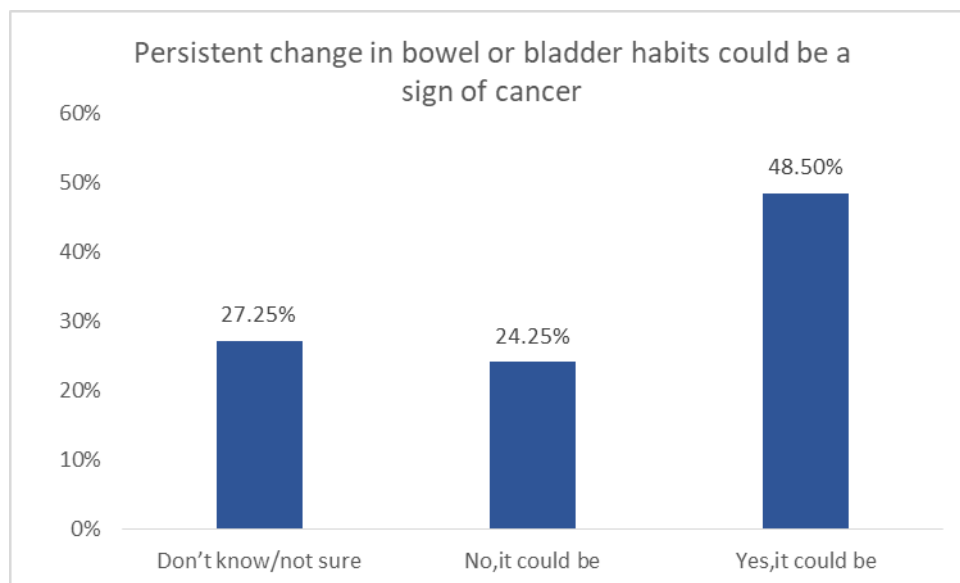
**5-Do you think unexplained bleeding could be a sign of cancer?****Fig: 4.46 Unexplained bleeding could be a sign of cancer**

50.50% of the respondents think that unexplained bleeding could be a sign of cancer.

**6-Do you think a persistent cough or hoarseness could be a sign of cancer?****Fig: 4.47 Persistent cough or hoarseness could be a sign of cancer**

42.75% of the respondents think that persistent cough or hoarseness could be a sign of cancer.

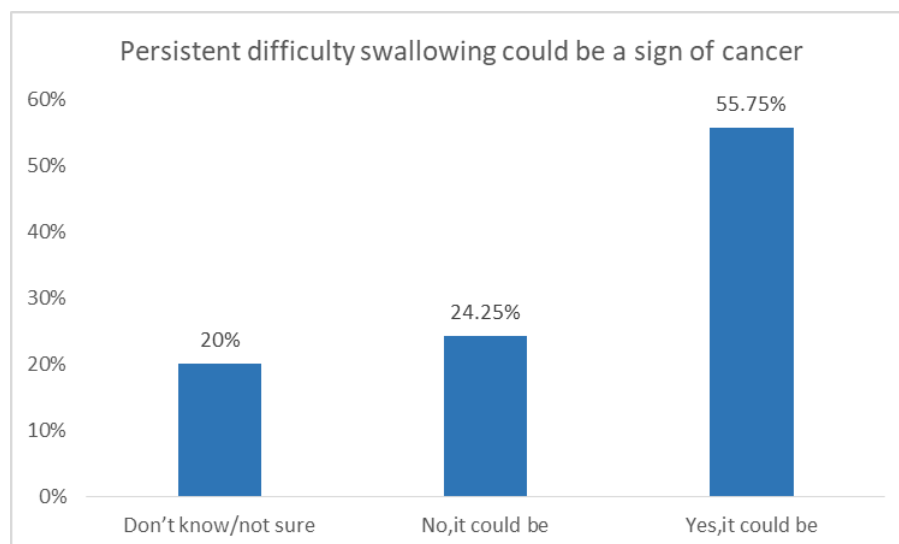
**7- Do you think persistent change in bowel or bladder habits could be a sign of cancer?**



**Fig: 4.48 Persistent change in bowel or bladder habits could be a sign of cancer**

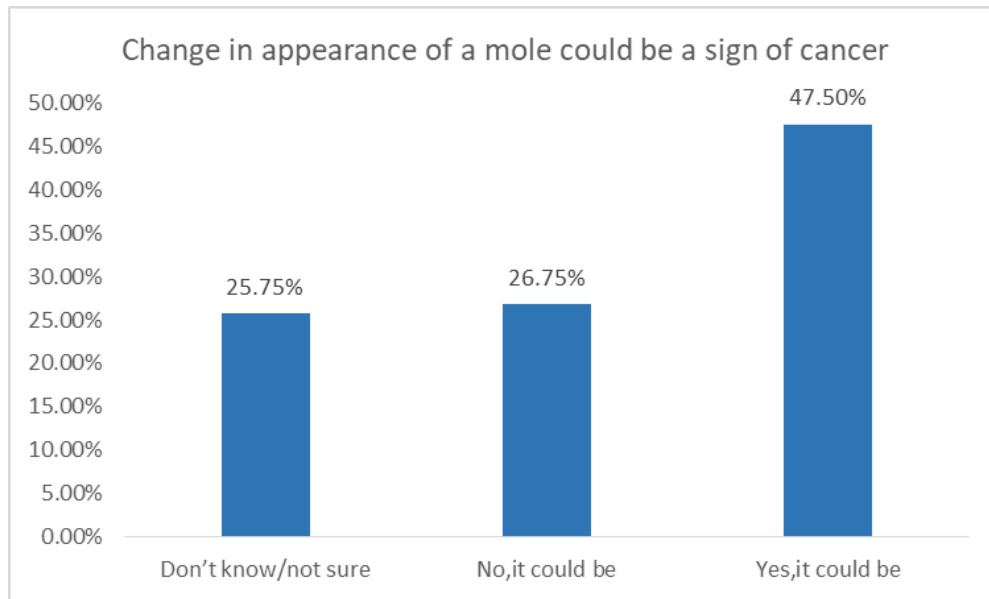
48.50% of the respondents think that persistent change in bowel or bladder habits could be a sign of cancer.

**8-Do you think persistent difficulty in swallowing could be a sign of cancer?**

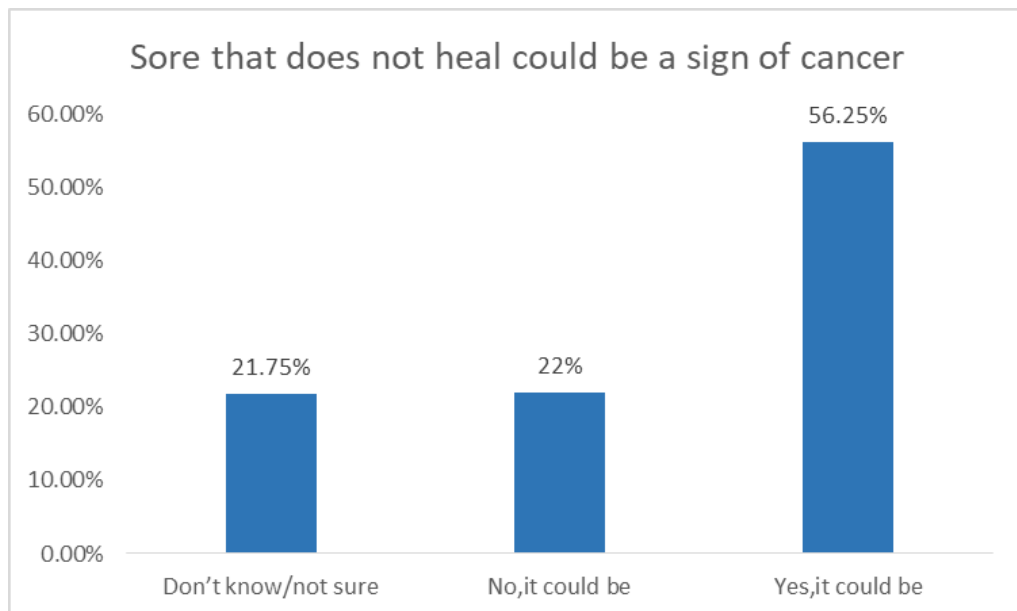


**Fig: 4.49 Persistent difficulty in swallowing could be a sign of cancer**

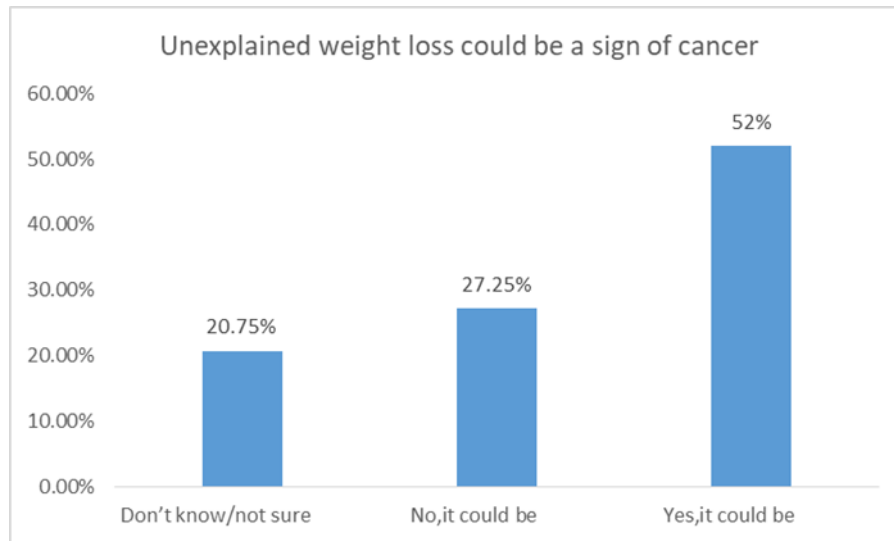
55.75% of the respondents think persistent difficulty in swallowing could be a sign of cancer.

**9- Do you think a change in appearance of a mole could be a sign of cancer?****Fig: 4.50 Changing appearance of a mole could be a sign of cancer**

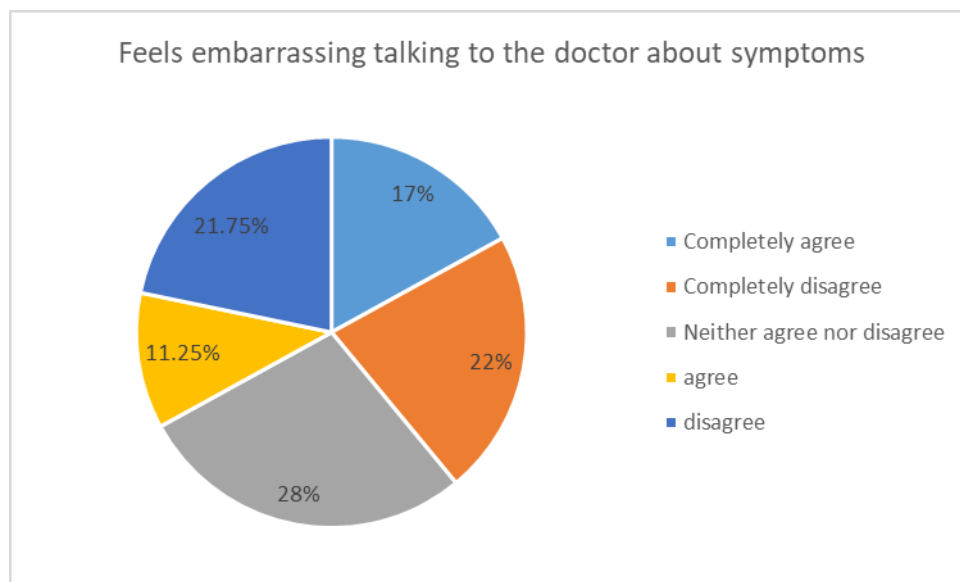
47.50% of the respondents think a change in appearance of a mole could be a sign of cancer.

**10- Do you think a sore that does not heal could be a sign of cancer?****Fig: 4.51 Sore that does not heal could be a sign of cancer**

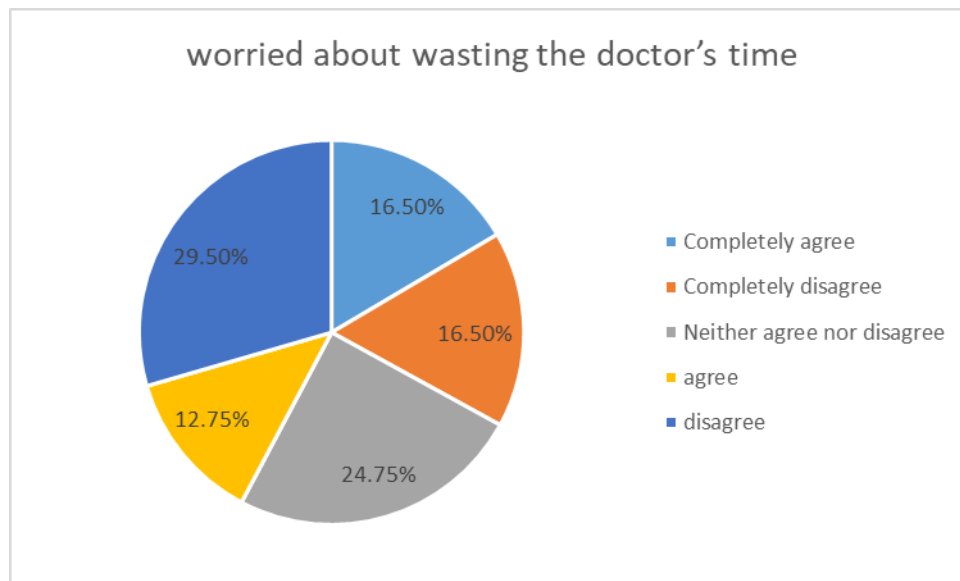
56.25% of the respondents think a sore that does not heal could be a sign of cancer.

**11- Do you think unexplained weight loss could be a sign of cancer?****Fig: 4.52**

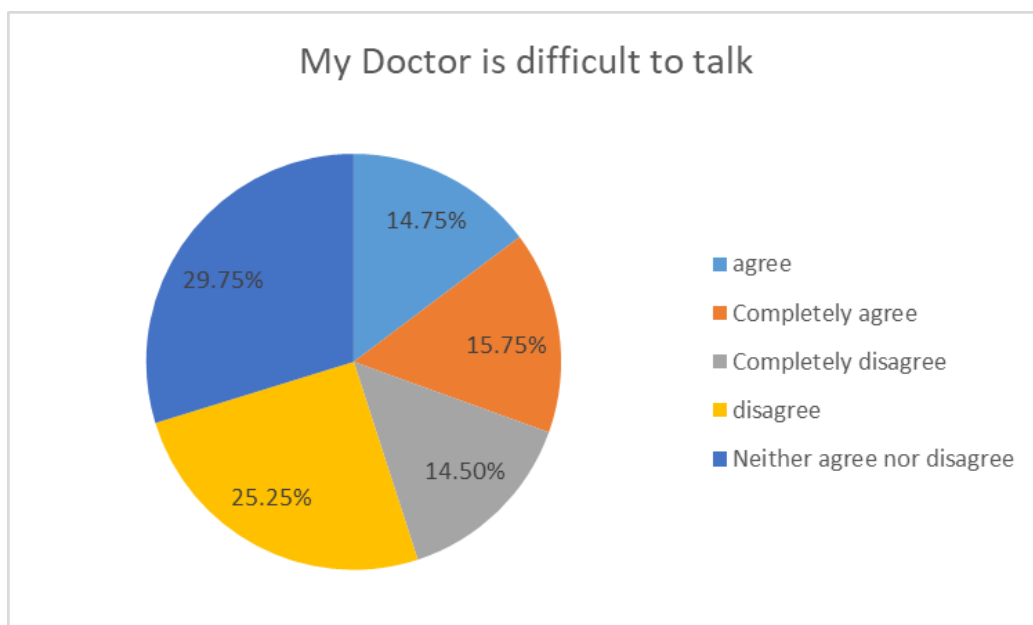
52% of the respondents think unexplained weight loss could be a sign of cancer.

**12- I find it embarrassing talking to the doctor about my symptoms.****Fig: 4.53 Feel embarrassing talking to the doctor about symptoms**

17% of the respondents completely agree that they feel embarrassed to talk about their symptoms with the doctor.

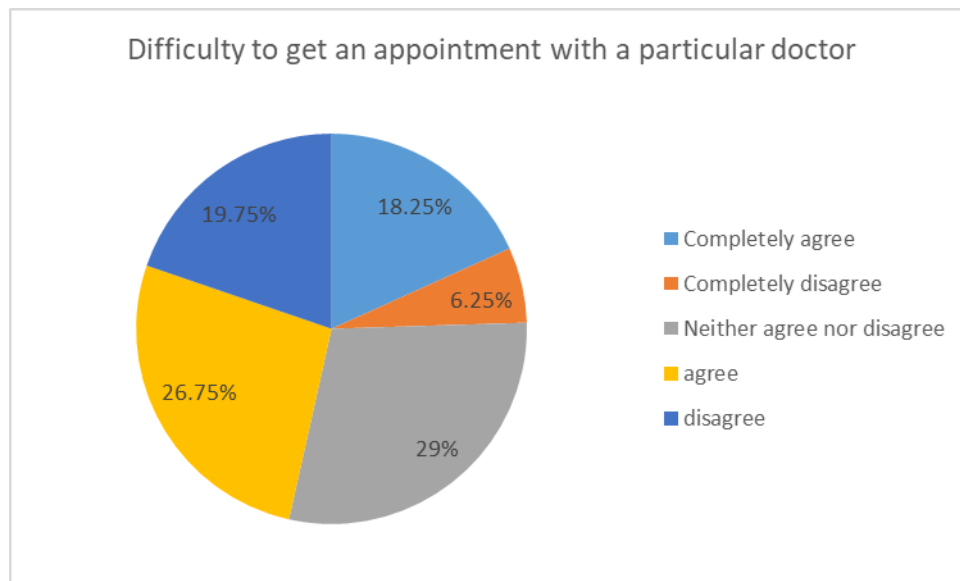
**13- I would be worried about wasting the doctor's time.****Fig: 4.54 Worried about wasting doctors time**

29.50% of the respondents disagreed with the statement that they would be worried about wasting the doctor's time.

**14-My doctor is difficult to talk with.****Fig: 4.55 My doctor is difficult to talk with**

25.25% of the respondents disagree that they have difficulty in talking with their Doctor.

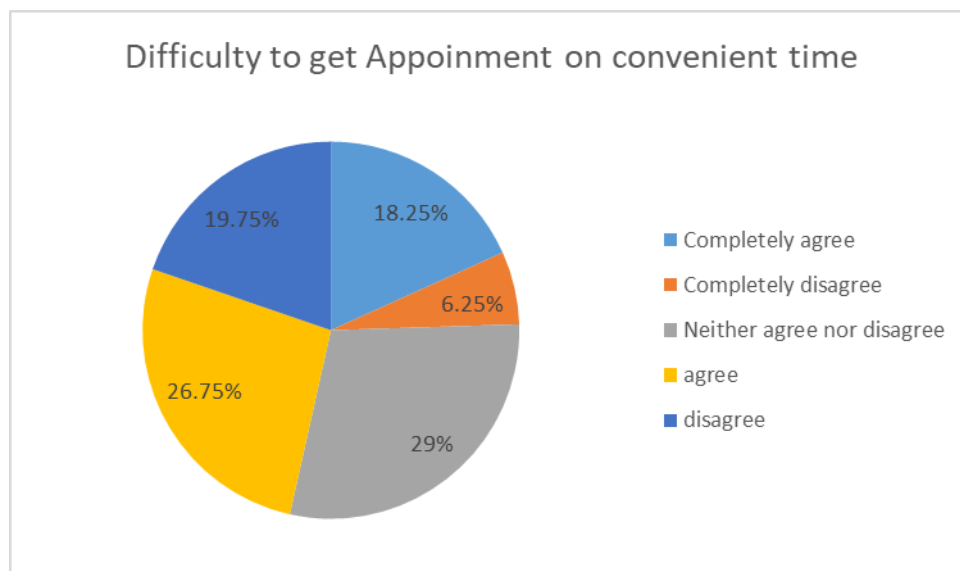
15-I find it difficult to get an appointment with a particular doctor.



**Fig: 4.56 Difficulty to get an appointment with a particular doctor**

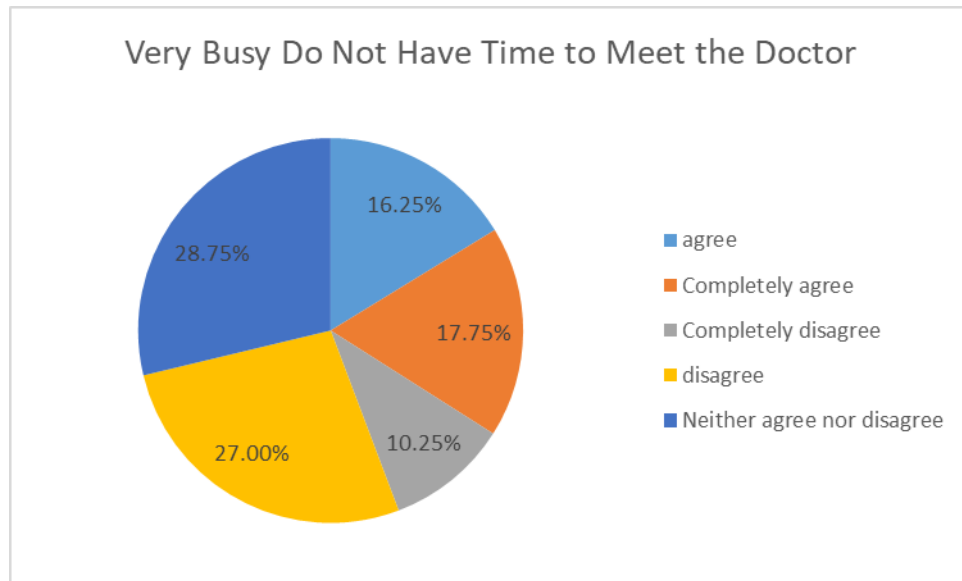
26.75% of the respondents agreed that they find it difficult to get an appointment with a particular doctor.

16- I find it difficult to get an appointment with a doctor at a convenient time.

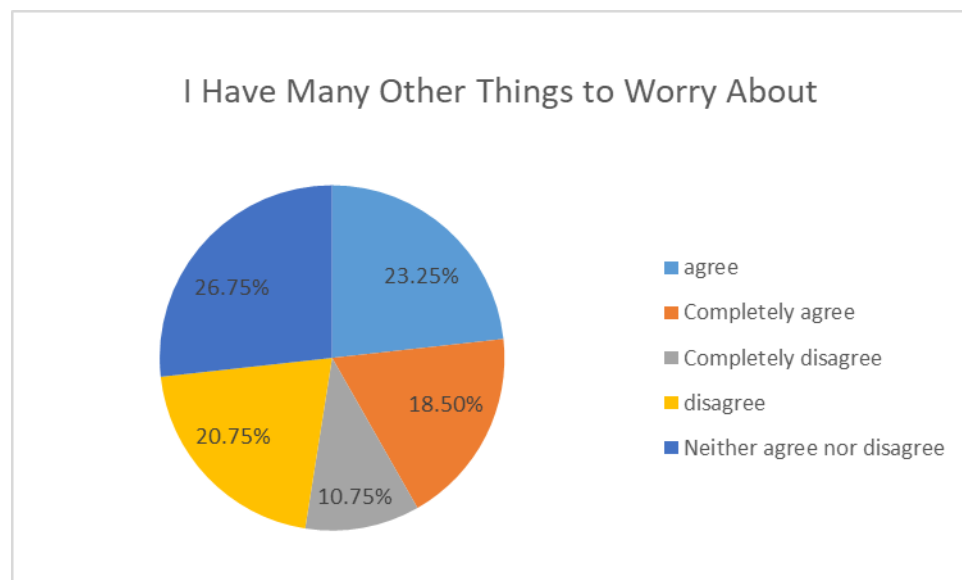


**Fig: 4.57 Difficulty to get an appointment on a convenient time**

26.75% of the respondents agreed that they find it difficult to get an appointment with a doctor at a convenient time.

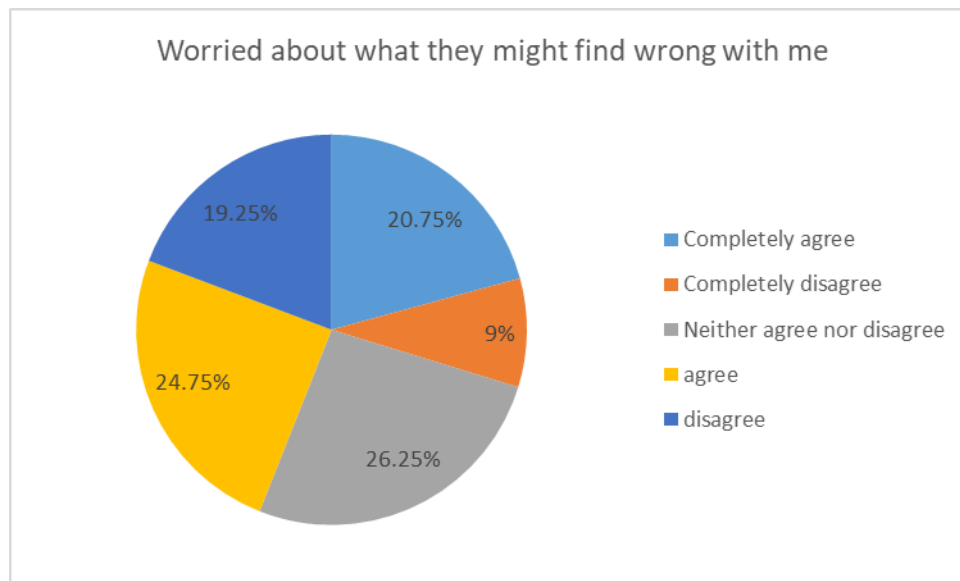
**17- I would be too busy to make time to go to the doctor.****Fig: 4.58 Very bust do not have time to meet the doctor**

17.75 % of the respondents completely agree with the fact that they would be too busy to find time to go to the doctor.

**18- I have many other things to worry about.****Fig: 4.59 I have many other things to worry about**

23.25% of the respondents agreed that they have many others things to be worried about.

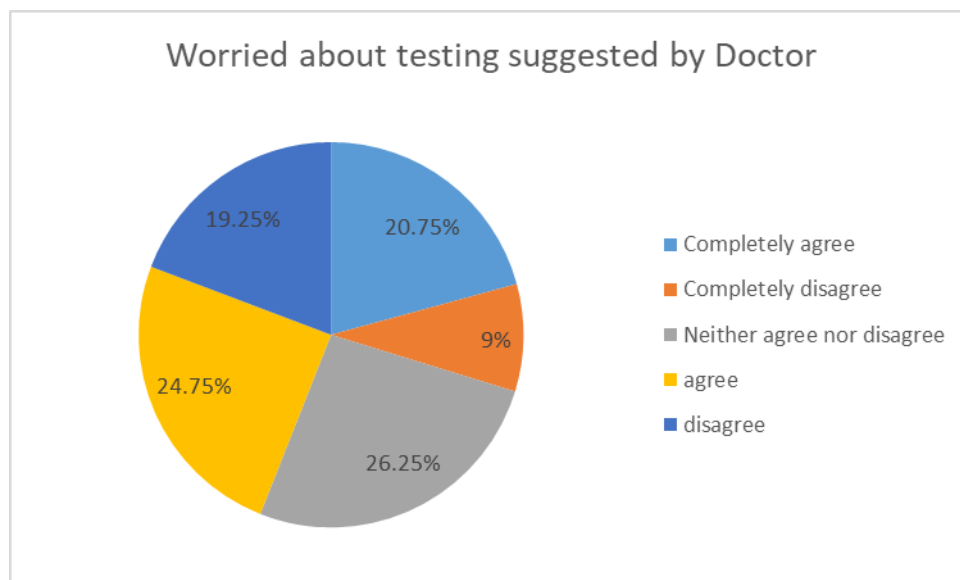
**19-I would be worried about what they might find wrong with me.**



**Fig: 4.60 Worried about that what they might find wrong with me**

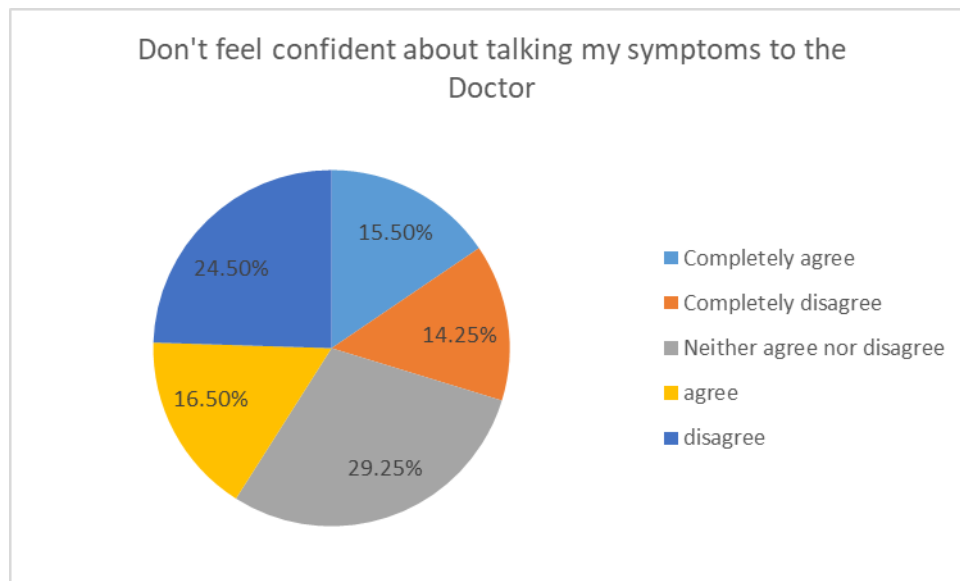
24.75% of the respondents agreed that they are worried about what doctors might find wrong with them.

**20- I would be worried about what tests they might want to do.**

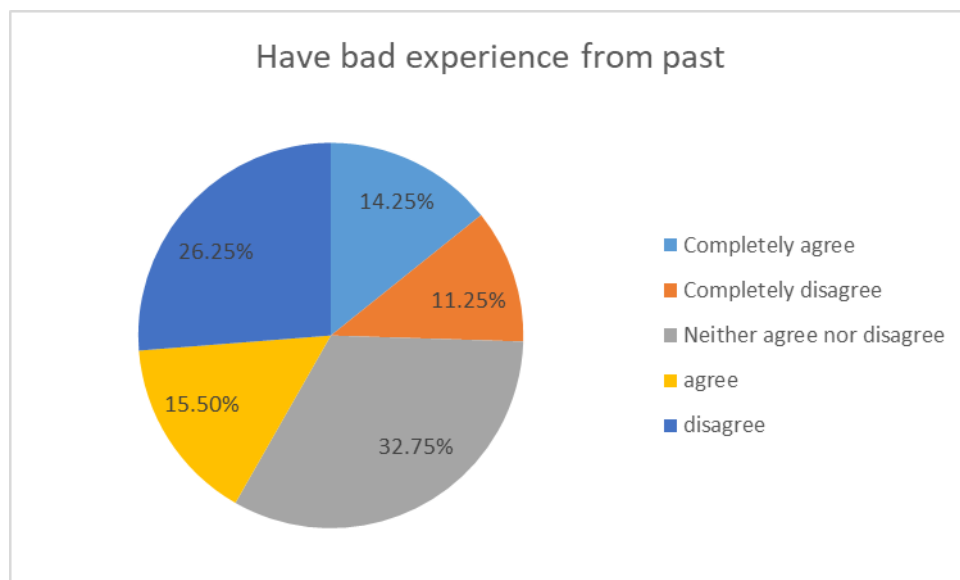


**Fig: 4.61 Worried about tests suggested by doctor**

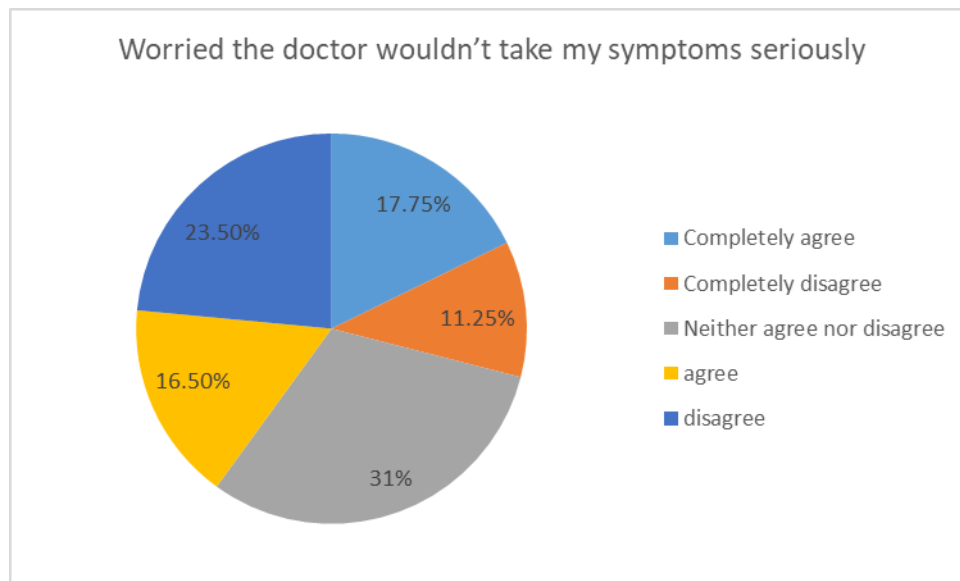
24.75% of the respondents are worried about what tests doctors might want them to do.

**21- I wouldn't feel confident talking about my symptom(s) with the doctor.****Fig: 4.62 Wouldn't feel confident talking about my symptoms with the doctor**

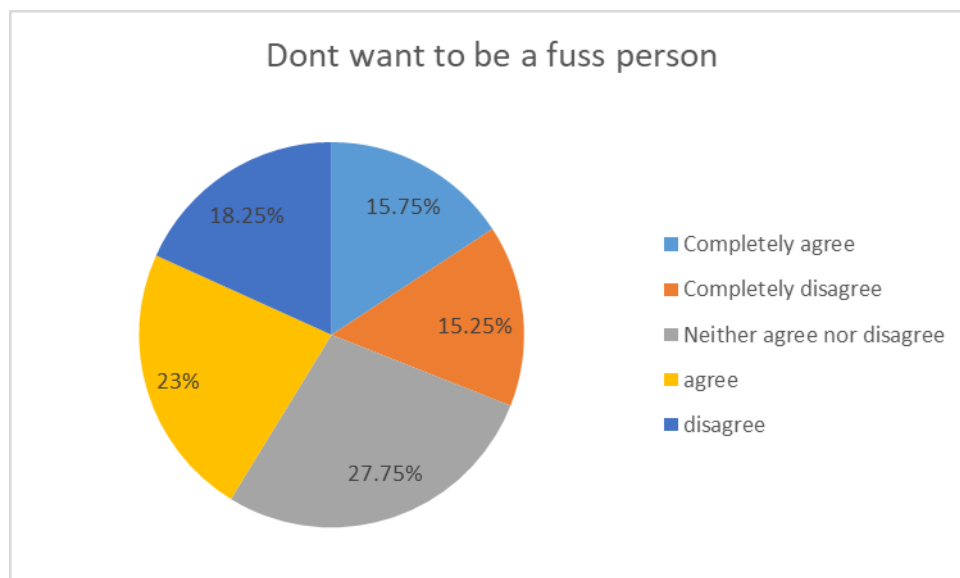
24.50% of the respondents completely agree with the fact they would not feel confident talking about their symptom(s) with the Doctor.

**22- I've had a bad experience at the doctor's in the past.****Fig: 4.63 Have had bad experience at the doctor in the past**

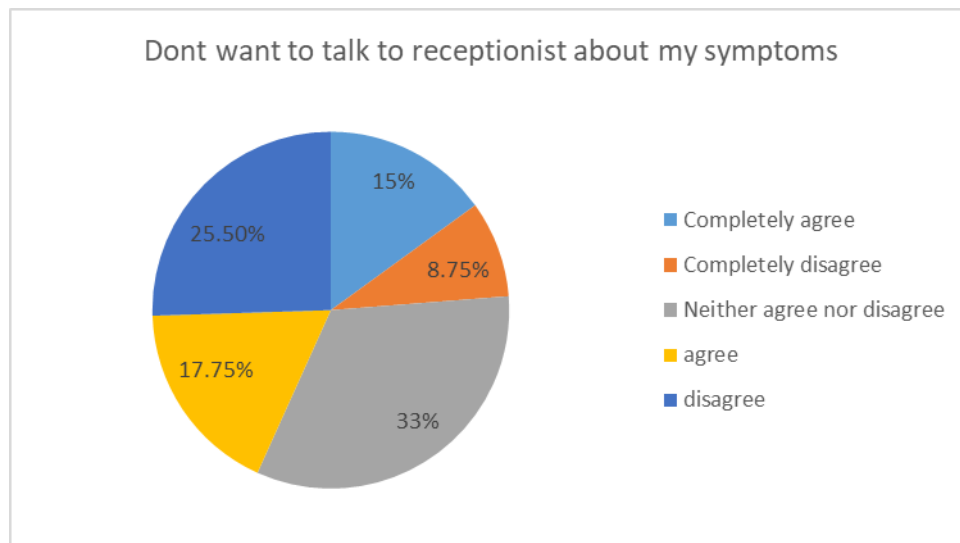
26.25% of the respondents completely agree that they had bad experience with the Doctor in the past.

**23- I would be worried the doctor wouldn't take my symptom(s) seriously.****Fig: 4.64 Worried that the doctor wouldn't take my symptoms seriously**

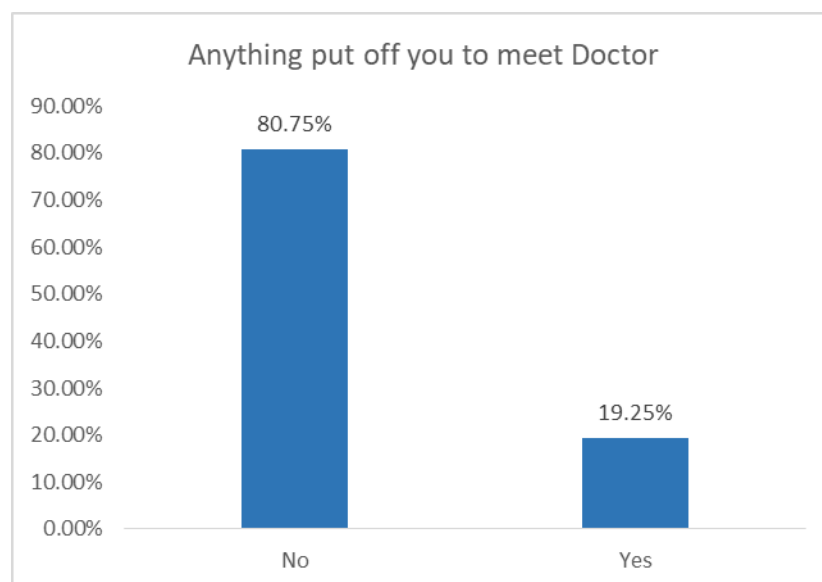
23.50% of the respondents completely agree that they are worried that the Doctor would not take their symptoms seriously.

**24- I don't want to be seen as somebody who makes a fuss****Fig: 4.65 I don't want to be seen as somebody who creates fuss**

23% of the respondents agree that they don't want to look like somebody who makes a fuss.

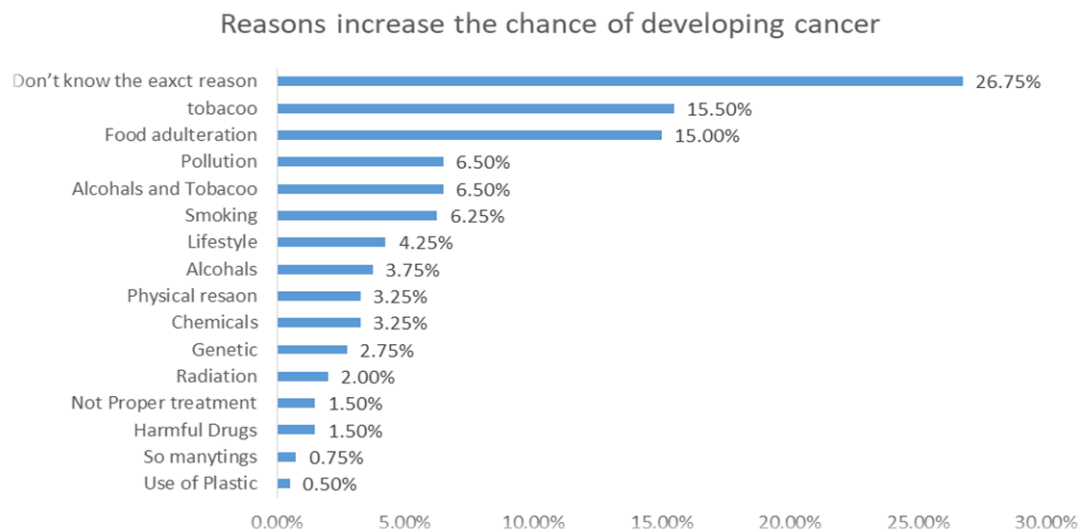
**25-I don't like having to talk to the G.P. receptionist about my symptom(s)****Fig: 4.66 don't want to talk to G.P. receptionist about my symptom(s)**

17.5% of the respondents agree that they don't want to talk about their symptoms with G.P.'s receptionist.

**26- Is there anything else that would put you off going to the doctor?****Fig: 4.67 Anything else put you off going to the doctor**

80.75% of the respondents respond that there is nothing else that would put them off going to the Doctor.

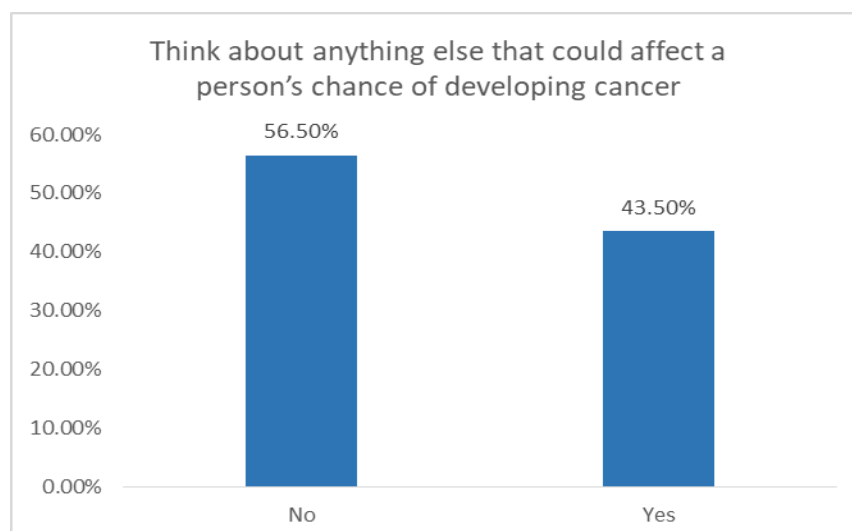
**27-What things do you think affect a person's chance of developing cancer? Please name as many as you can think of.**



**Fig: 4.68 Reasons which increase the chances of developing cancer**

26.75% of the respondents don't know the exact reason that affect a person's chance of developing cancer.

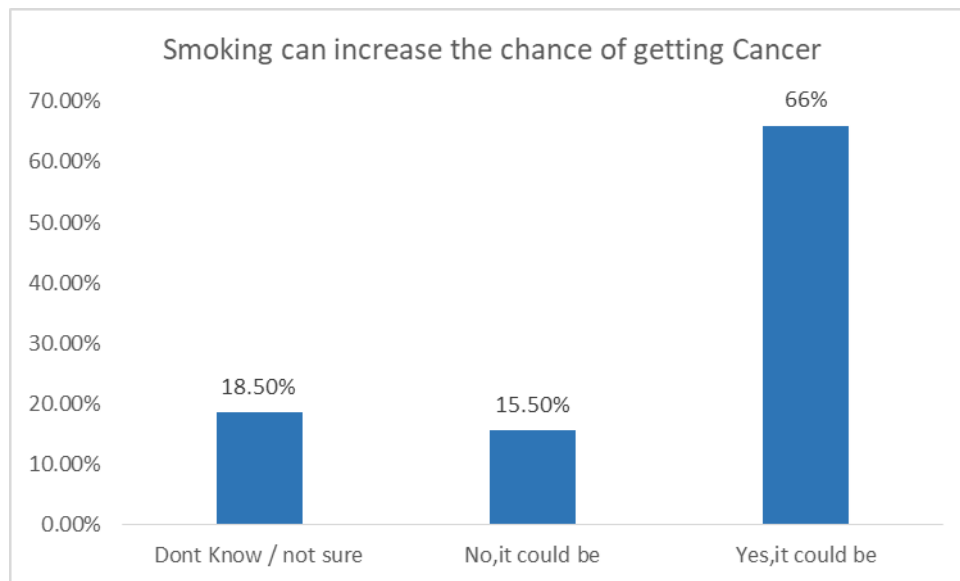
**28- Can you think of anything else that could affect a person's chance of developing cancer?**



**Fig: 4.69 Anything else that could affect a person's chance of developing cancer**

56.50% of the respondents cannot think anything else that could affect a person's chance of developing cancer.

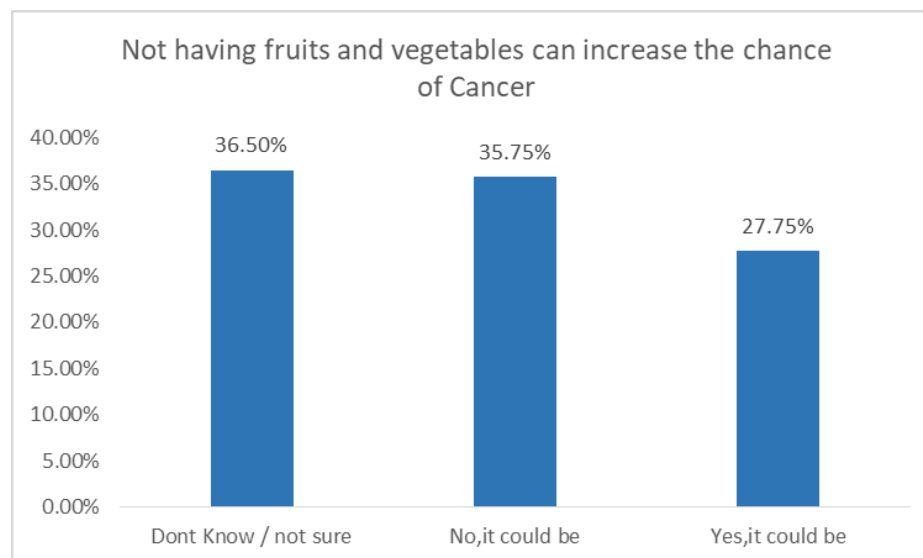
**29-Do you think that smoking can increase a person's chance of developing cancer?**



**Fig: 4.70 Smoking can increase the chance of getting cancer**

66% of the respondents think that smoking can increase a person's chance of developing cancer.

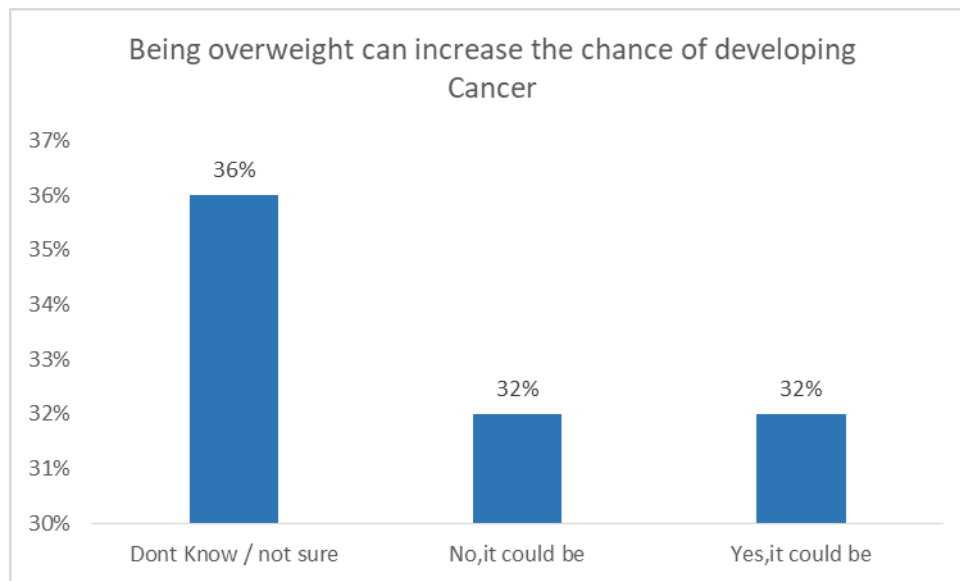
**30- Do you think that not eating many fruits or vegetables can increase a person's chance of developing cancer?**



**Fig: 4.71 Not having many fruits or vegetables can increase the chance of developing cancer**

35.75% of the respondents think that not eating many fruits or vegetables cannot increase a person's chance of developing cancer.

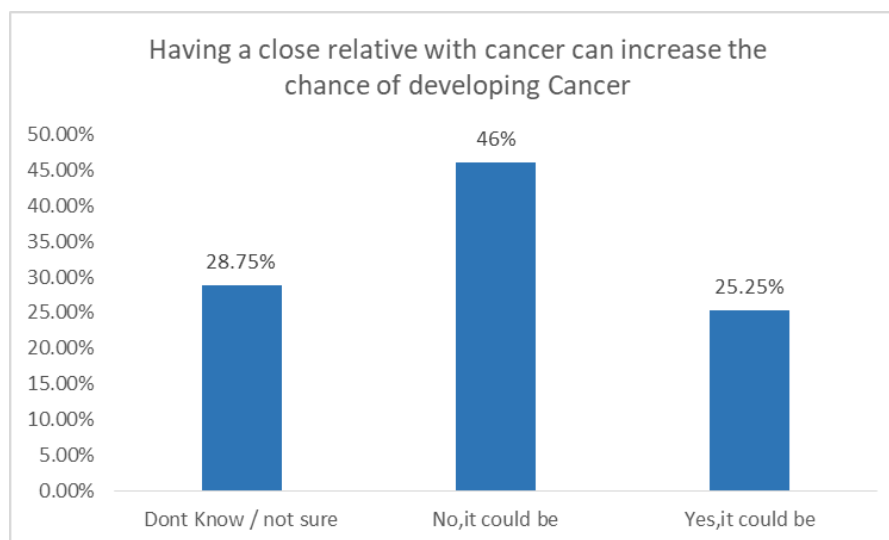
**31- Do you think that being overweight can increase a person's chance of developing cancer?**



**Fig: 4.72 Being overweight can increase the chance of developing cancer**

36% of the respondents don't know or not sure that being overweight can increase a person's chance of developing cancer.

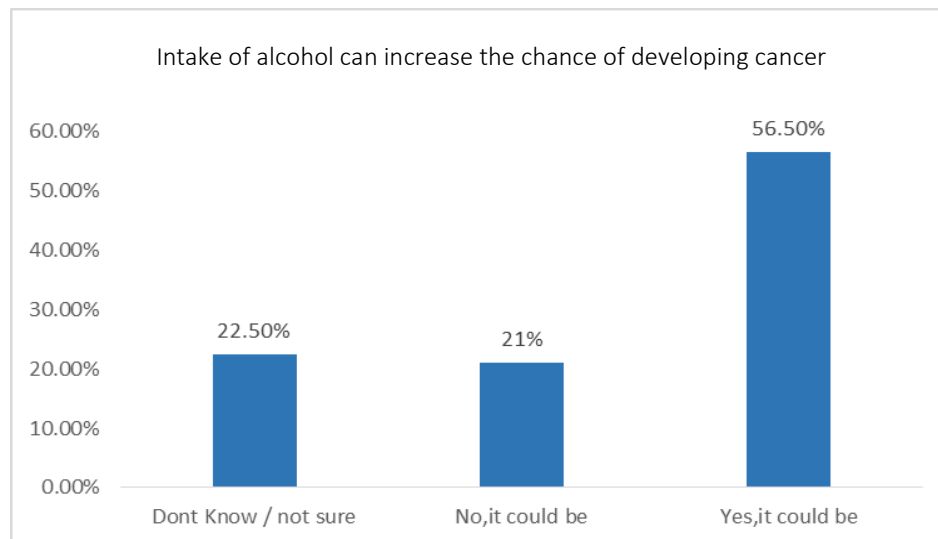
**32- Do you think that having a close relative with cancer can increase a person's chance of developing cancer?**



**Fig: 4.73 Having a close relative with cancer can increase a person chance of developing cancer**

46% of the respondents think that having a close relative with cancer cannot increase a person's chance of developing cancer.

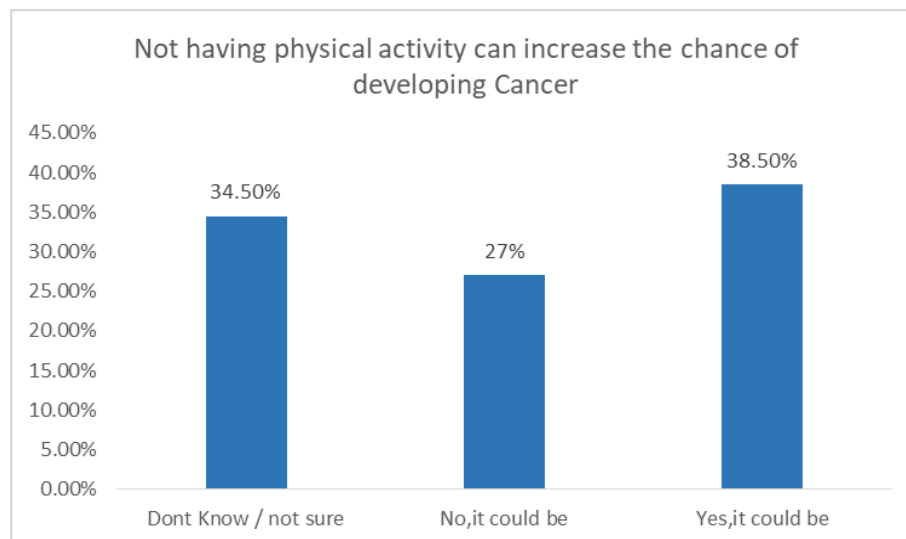
**33- Do you think that drinking alcohol can increase a person's chance of developing cancer?**



**Fig: 4.74 Intake of alcohol can increase the chance of developing cancer**

56.50% of the respondents think that drinking alcohol can increase a person's chance of developing cancer.

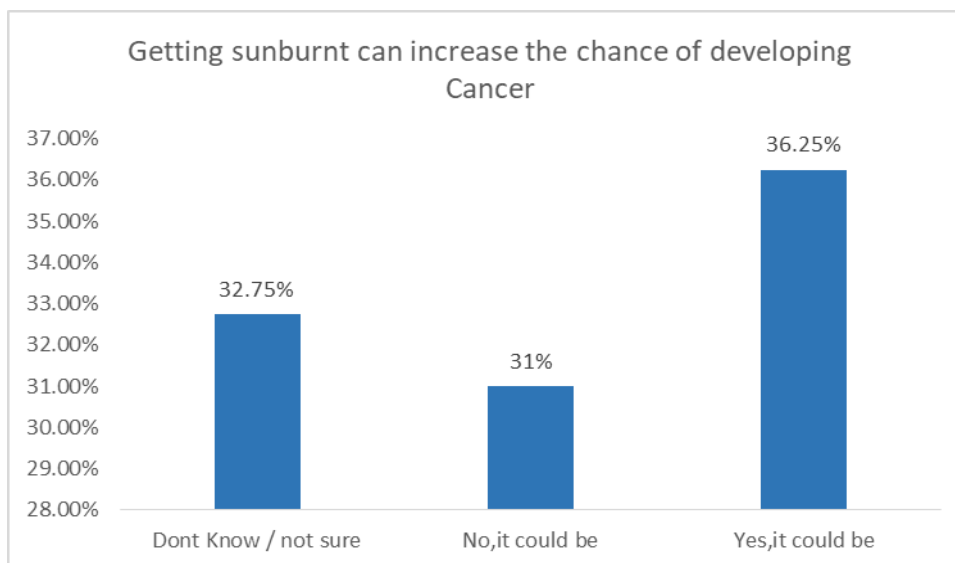
**34- Do you think that not doing much physical activity can increase a person's chance of developing cancer?**



**Fig: 4.75 Not having much physical activity can increase the chance of developing cancer**

38.50% of the respondents think that not doing much physical activity can increase a person's chance of developing cancer.

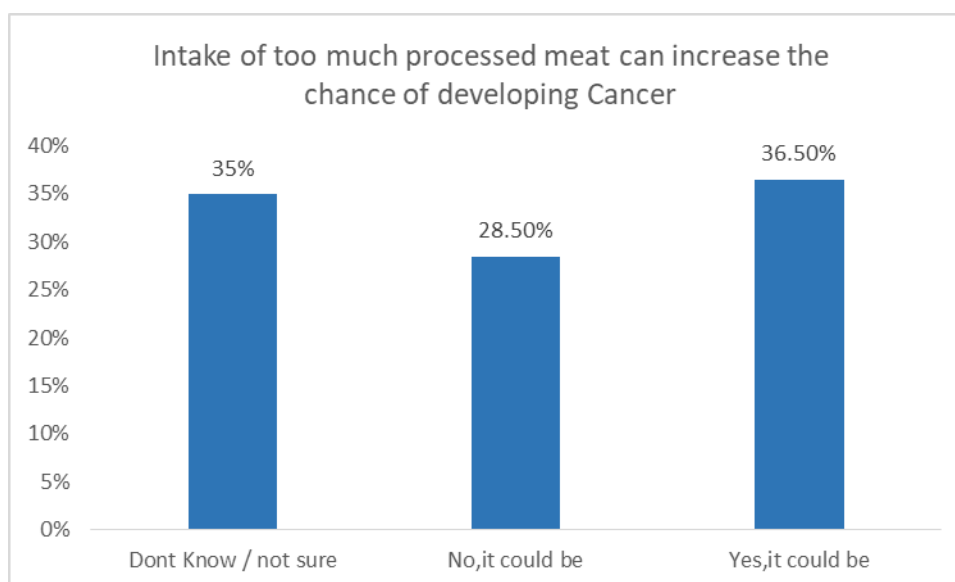
**35- Do you think that getting sunburnt can increase a person's chance of developing cancer?**



**Fig: 4.76 Getting sunburnt can increase the chance of developing cancer**

36.25% of the respondents think that getting sunburnt can increase a person's chance of developing cancer.

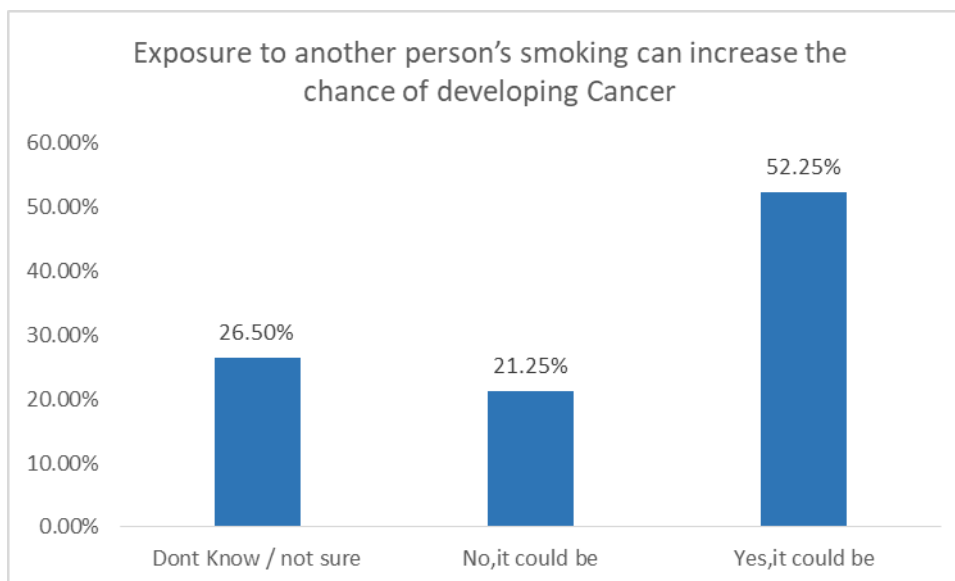
**36- Do you think that eating too much red or processed meat can increase a person's chance of developing cancer?**



**Fig: 4.77 Intake of too much processed meat can increase the chance of developing cancer**

36.50% of the respondents think that eating too much red or processed meat can increase a person's chance of developing cancer.

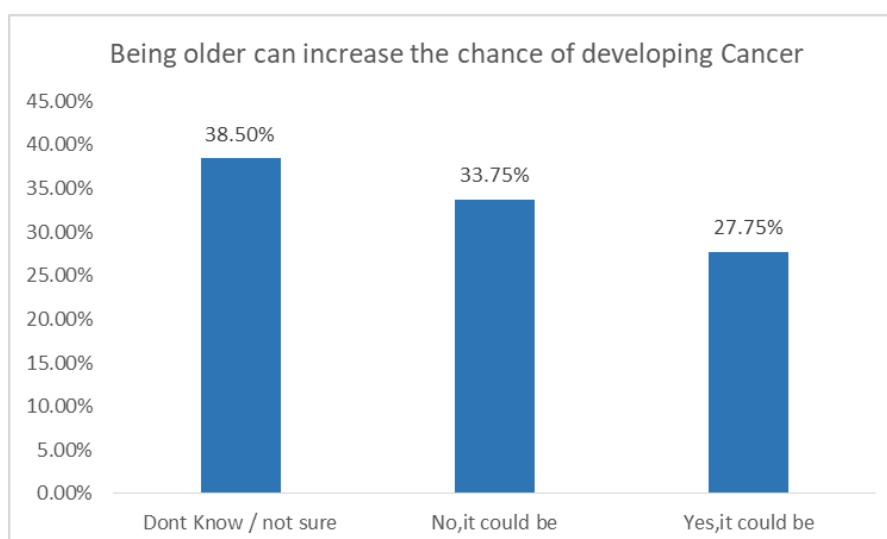
**37- Do you think that exposure to another person's smoking can increase a person's chance of developing cancer?**



**Fig: 4.78 Exposure to another person's smoking can increase the chance of developing cancer**

52.25% of the respondents think that exposure to another person's smoking can increase a person's chance of developing cancer.

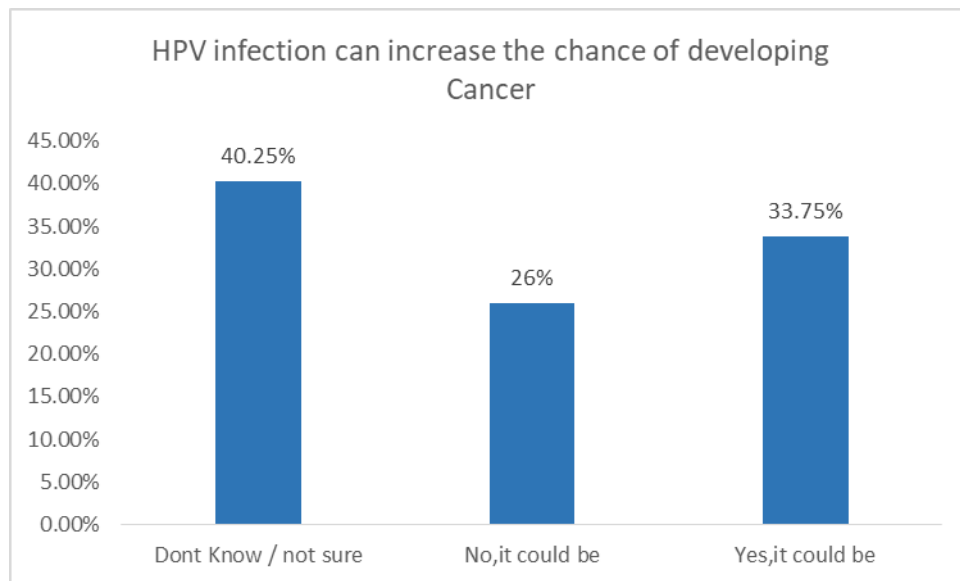
**38- Do you think that being older can increase a person's chance of developing cancer?**



**Fig: 4.79 Being older can increase a person's chance of developing cancer**

33.75% of the respondents think that being older cannot increase a person's chance of developing cancer.

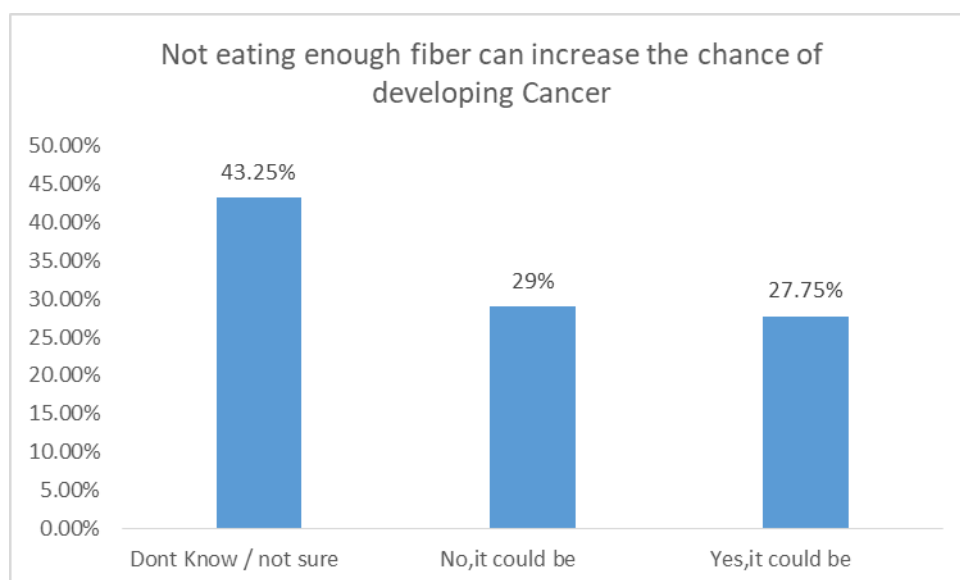
**39- Do you think that infection with HPV (human papillomavirus) can increase a person's chance of developing cancer?**



**Fig: 4.80 HPV infection can increase a person's chance of developing cancer**

40.25% of the respondents don't know or not sure that infection with HPV (human papillomavirus) can increase a person's chance of developing cancer.

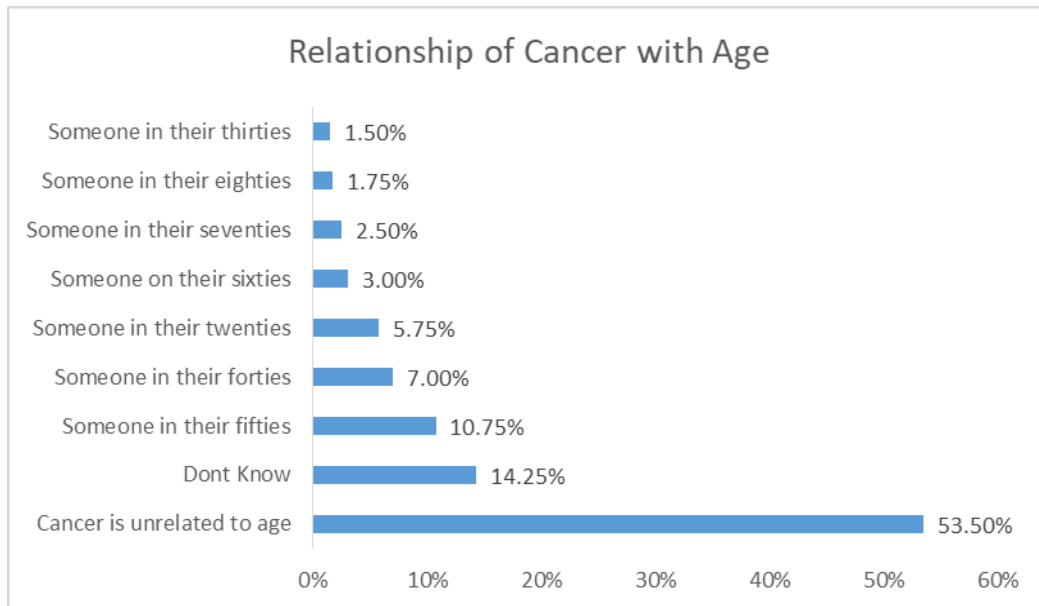
**40- Do you think that not eating enough fiber can increase a person's chance of developing cancer?**



**Fig: 4.81 Not eating enough fiber can increase the chance of developing cancer**

43.25% of the respondents don't know or not sure about that not eating enough fiber can increase a person's chance of developing cancer.

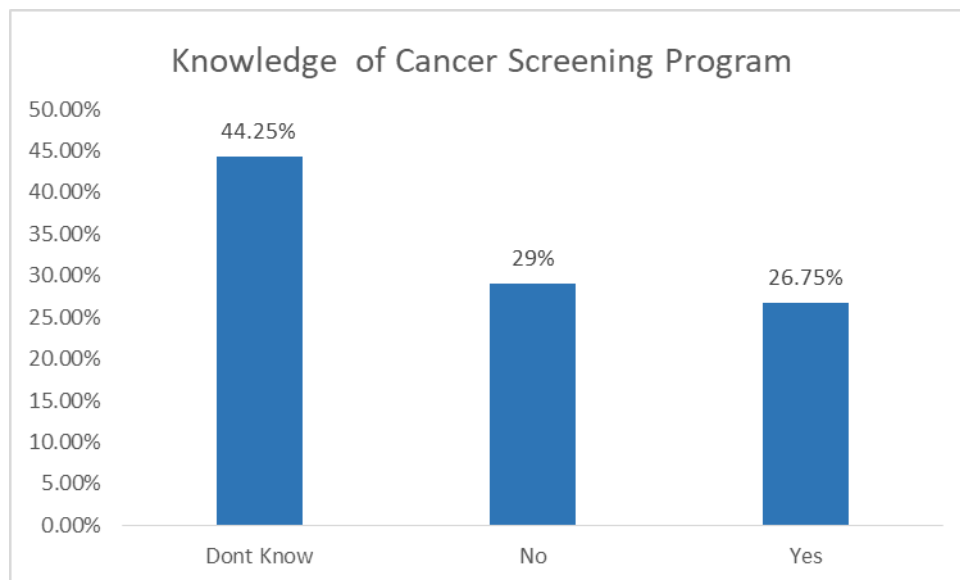
**41- Looking at the options on the card, who do you think is most likely to develop cancer?**



**Fig: 4.82 Relationship of cancer with age**

53.50% of the respondents says that Cancer is not related with the age.

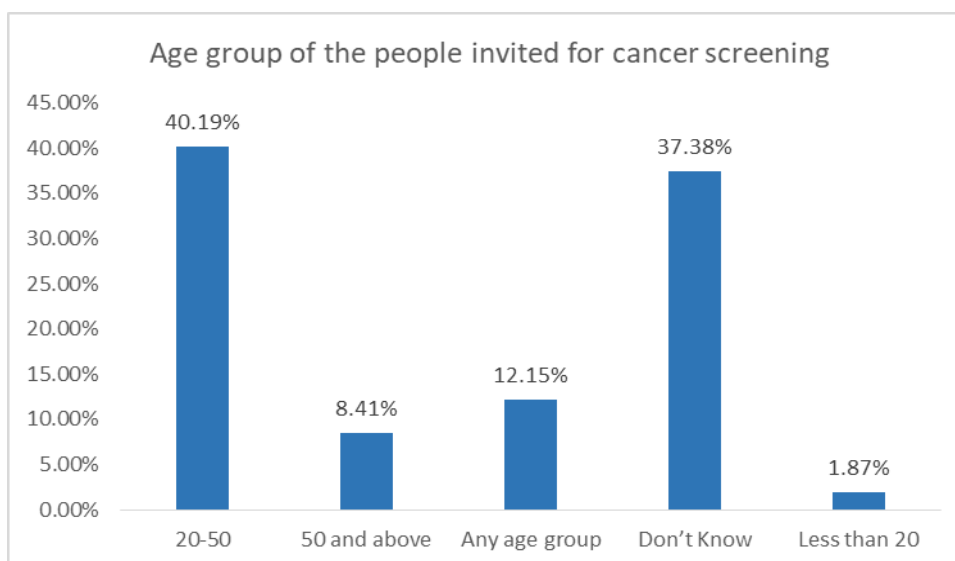
**42- As far as you're aware, is there any cancer screening program?**



**Fig: 4.83 Knowledge of cancer screening program**

44.25% of the respondents don't have any knowledge about Cancer screening Program.

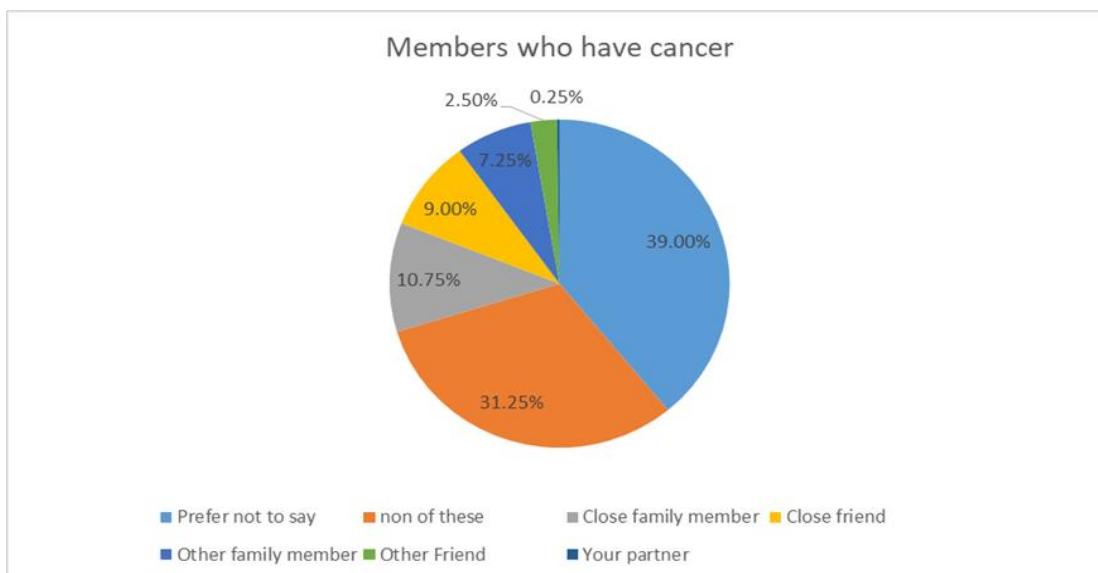
## 42 a- If yes at what age are people invited for cancer screening?



**Fig: 4.84 Age group of people who are invited for cancer screening**

40.19% of the respondents who have the knowledge of cancer screening program told that people belonging to 20-50 age group are invited for Cancer screening.

## 43- Have you, or any of your friends or family, had cancer?



**Fig: 4.85 You or any of your friends or family had cancer**

39% of the respondents prefer not to say anything about themselves or any of their friends or family member ever had Cancer.

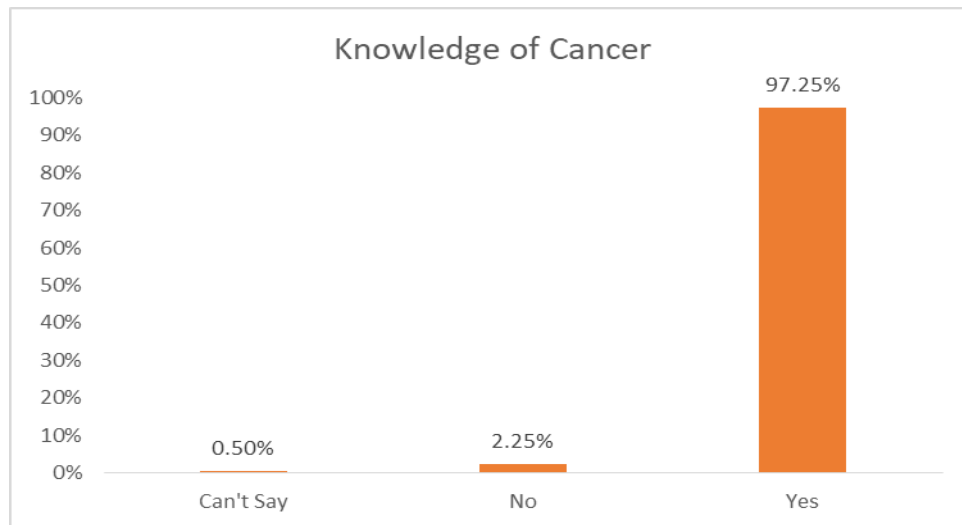
**Post Strategic Media Interventions Results****SECTION 2: Questions Based on Strategic Media Intervention****1-Do you know anything about cancer?****Fig: 4.86 Knowledge of Cancer**

Figure 4.83 shows the most of the respondents have knowledge about cancer post strategic media intervention.

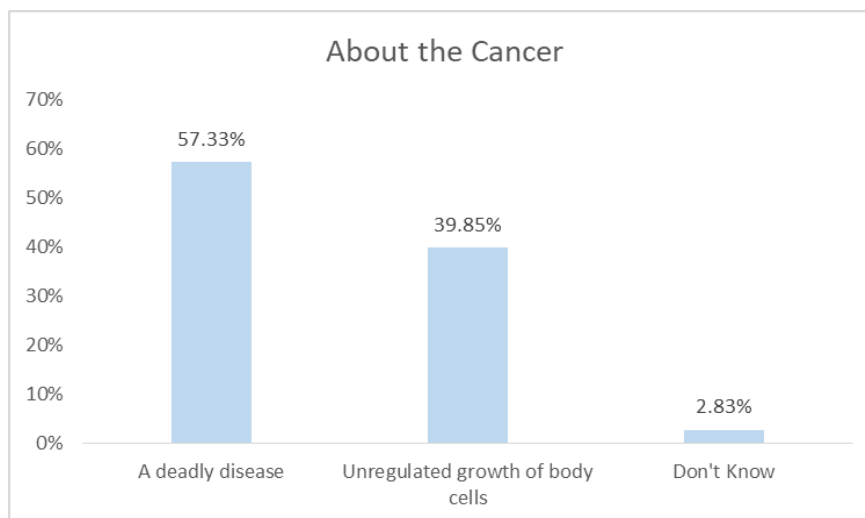
**1a- If yes, kindly tell what is Cancer?****Fig: 4.87- What is Cancer**

Figure 4.87 shows that 53% of the respondents who have knowledge about cancer consider it as a deadly disease while 2.83% participants don't have any idea about what exactly cancer is.

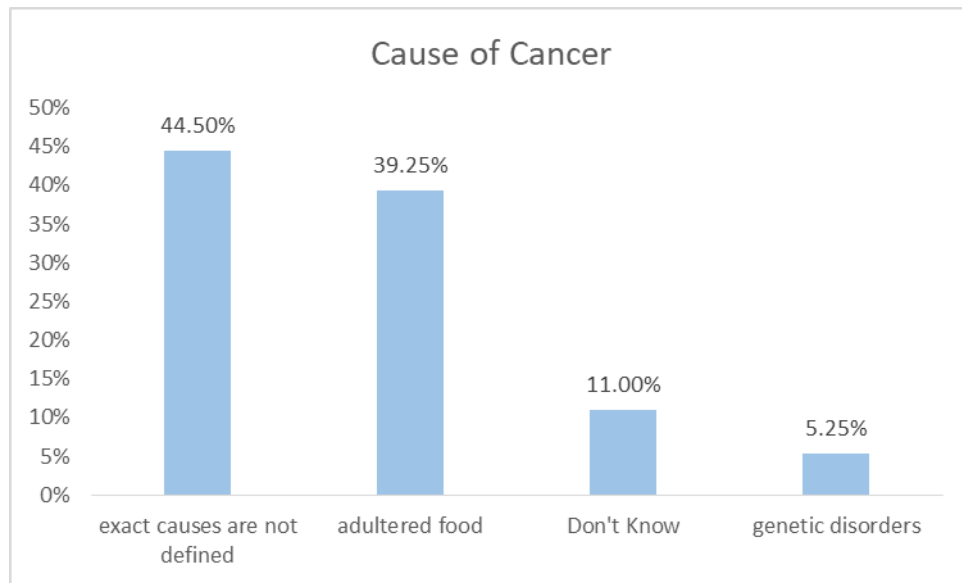
**2- What are the causes of cancer?****Fig: 4.88 Causes of cancer**

Figure 4.88 showcases that 44.75% of the respondents stated that the exact cause of Cancer is not defined, while 11.50% don't have any idea about the exact cause of cancer.

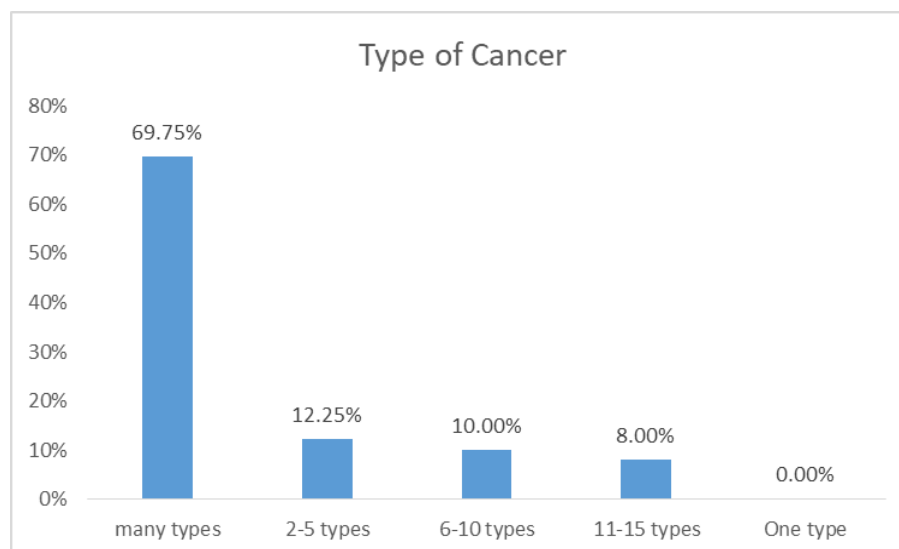
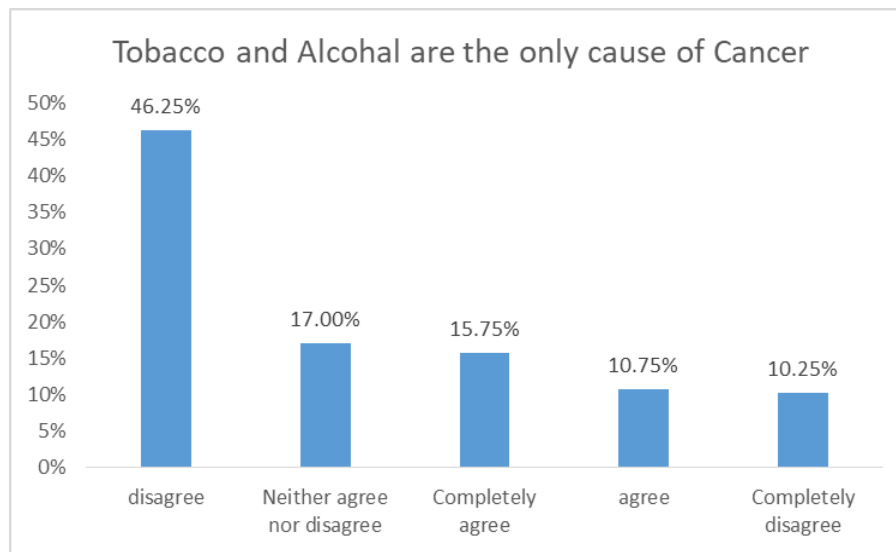
**3- How many types of cancer are there?****Fig: 4.89 Types of cancer**

Figure 4.89 describes that 69.75% of the respondents believed that there are many types of cancer post strategic intervention.

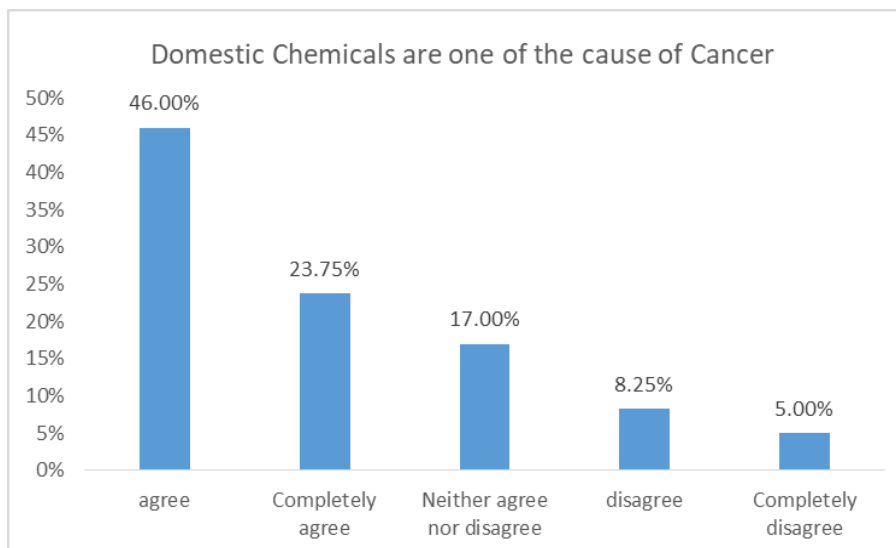
4- Do you agree that only those people who consume tobacco, alcohol and drugs have cancer?



**Fig: 4.90 Tobacco and alcohol are the only cause of cancer**

Figure 4.90 showcases that 46.25% of the respondents disagreed with the fact that tobacco and alcohol are the only causes of cancer.

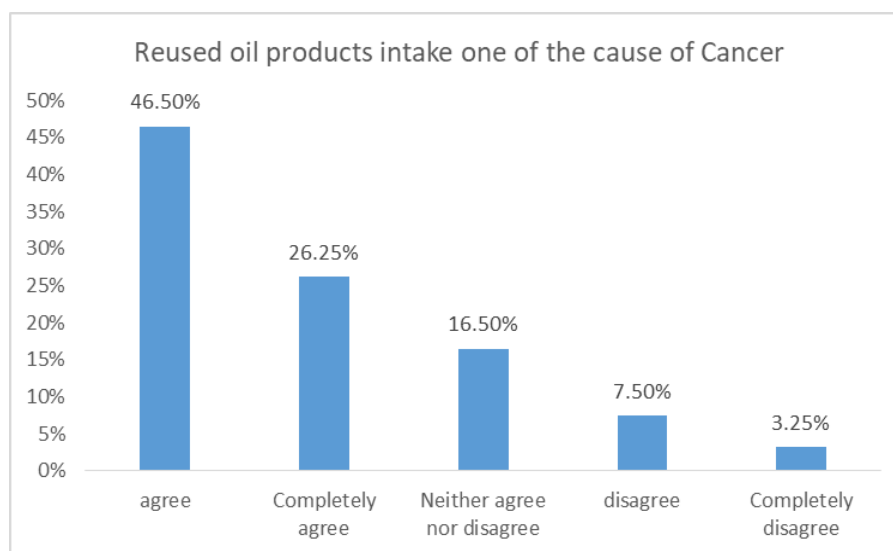
5- Chemicals used in cleaning house and utensils can also cause cancer?



**Fig: 4.91 Domestic chemicals are one the cause of cancer**

Figure 5.91 highlights that 46% participants agreed with the fact that chemicals used in cleaning house and utensils may cause cancer.

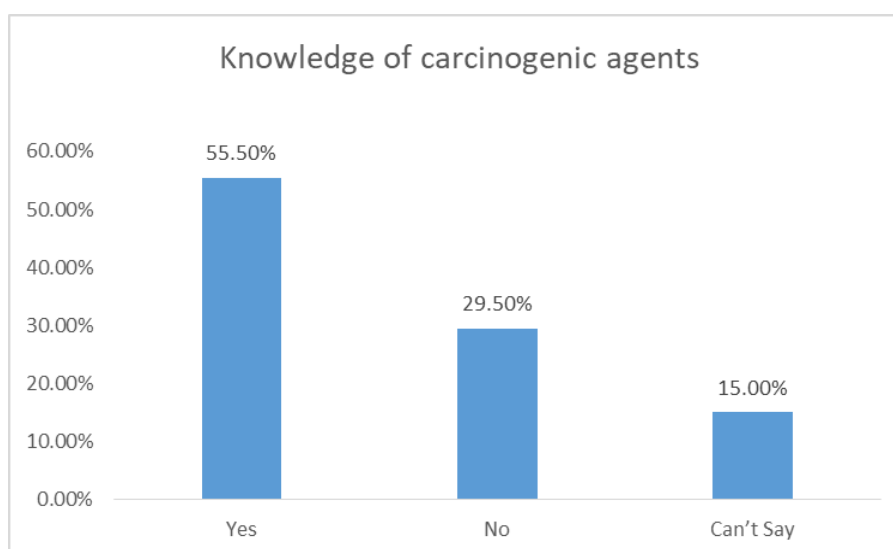
6- Do you agree that consumption of food made in oil which is heated and reheated again and again can cause cancer?



**Fig: 4.92 Reused oil product intake causes cancer**

Figure 4.92 shows that 46.50% of the respondents agreed with the fact that consumption of food made in oil which is heated and reheated again can cause cancer.

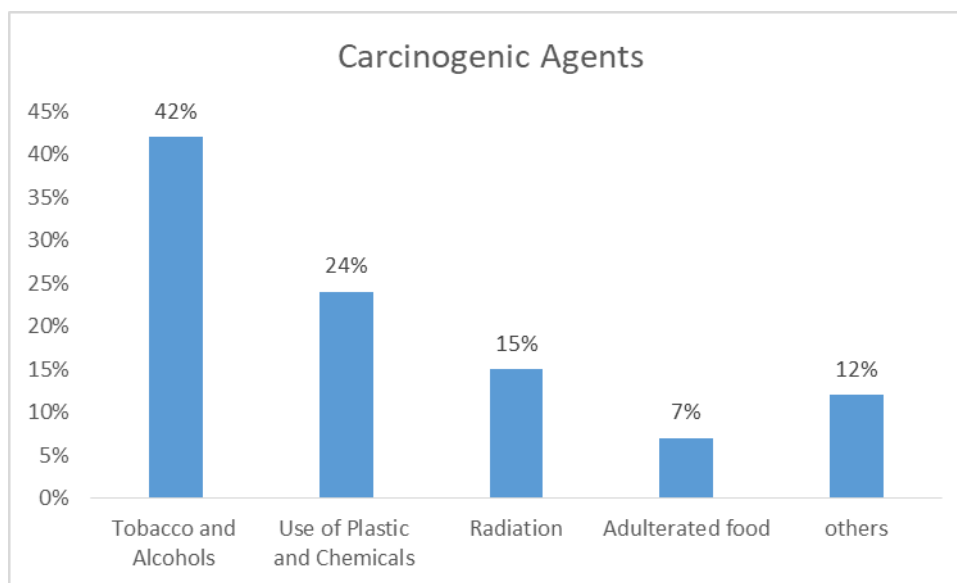
7- Do you know about carcinogenic agents?



**Fig: 4.93 Knowledge of carcinogenic agents**

Figure 4.93 depicts that 55.50% of the respondents have knowledge about the carcinogenic agents post strategic media interventions.

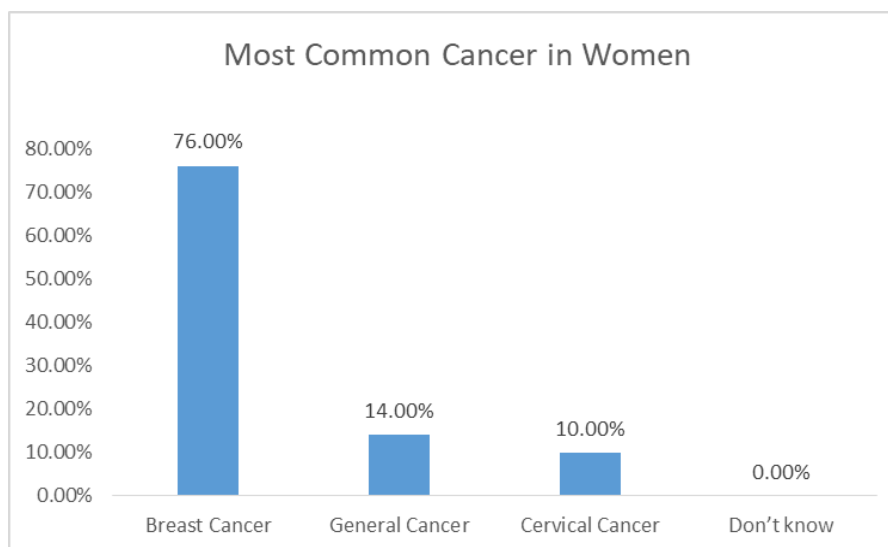
7a- If yes, kindly define?



**Fig: 4.94- Carcinogenic agents**

Figure 4.94 shows that 42% of the respondents who have the knowledge about carcinogenic agents considered tobacco and alcohol as Carcinogenic agents.

8- Which is the most common cancer in women?



**Fig: 4.95 Most common cancer in women**

Figure 4.95 shows that 76% of the respondents responded that Breast Cancer is the most common cancer in women.

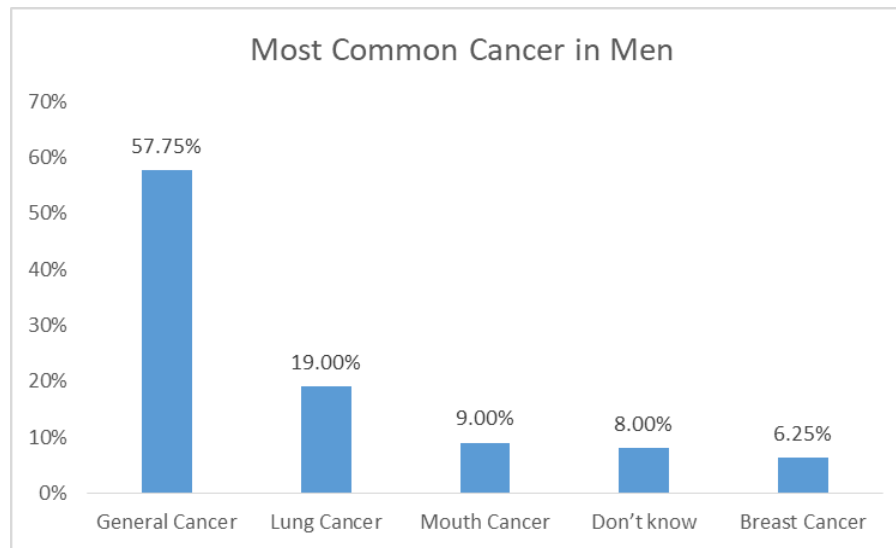
**9-Which is the most common cancer in men?****Fig: 4.96 Most common cancer in men**

Figure 4.96 states that 57.75% of the respondents responded that Cancer is the most common cancer in men, they were unable to specify the name of cancer.

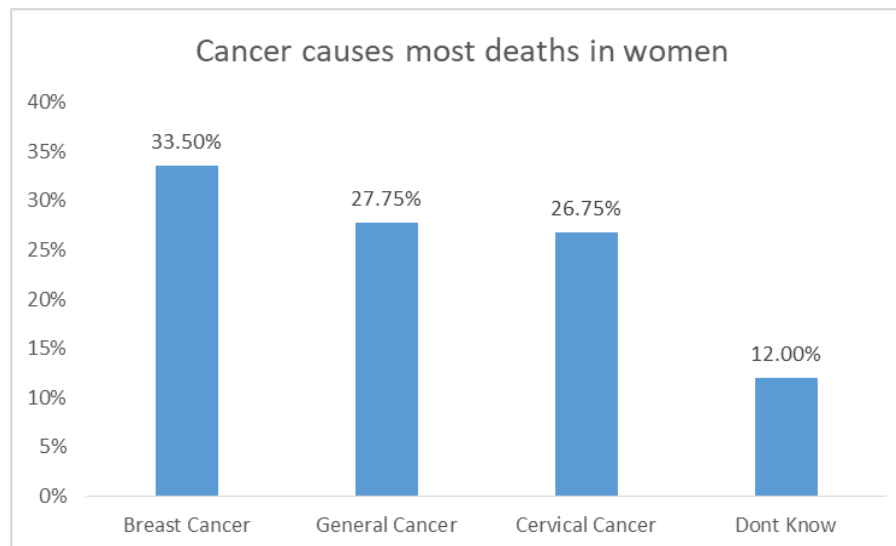
**10- Which cancer causes most deaths in women?****Fig: 4.97 Cancer causes most death among women**

Figure 4.97 shows that 33.50% of the respondents responded to the question correctly stating that the cancer which causes maximum death among women is Breast Cancer.

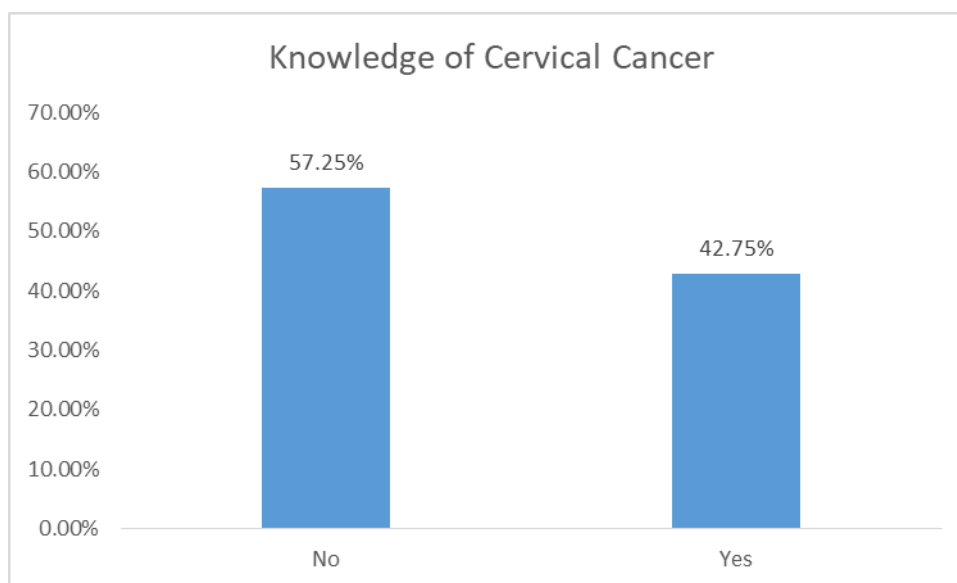
**11- Do you what is cervical cancer?****Fig: 4.98 Knowledge of cervical cancer**

Figure 4.98 shows that post strategic media intervention 42.75% of the respondents have knowledge about cervical cancer, which showcases increase in the level of awareness regarding cervical cancer.

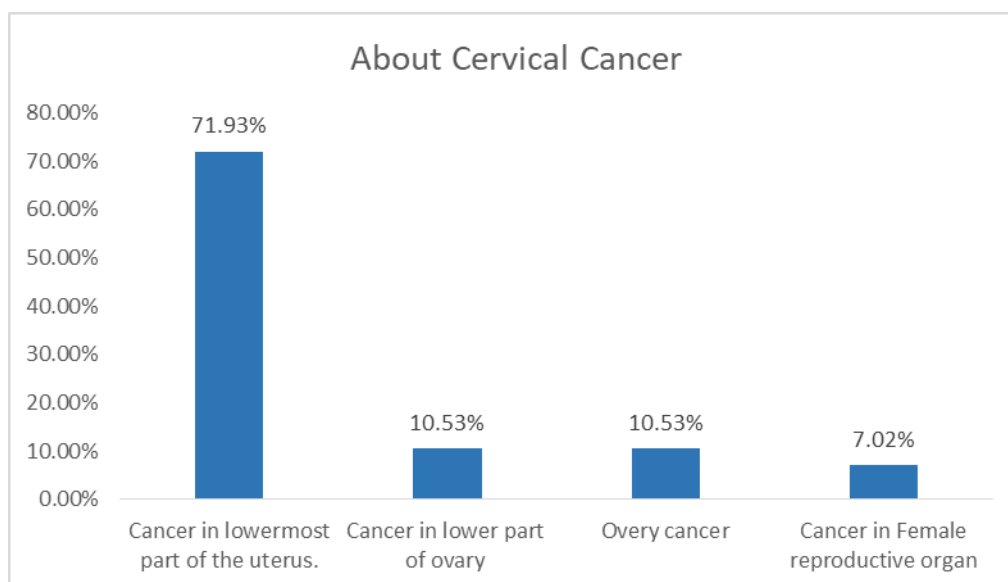
**11-a If yes, please define....****Fig: 4.99 Define cervical cancer**

Figure 4.99 showcases a drastic change in the awareness at granular level regarding cervical cancer as majority of respondents described cervical cancer correctly post strategic media intervention.

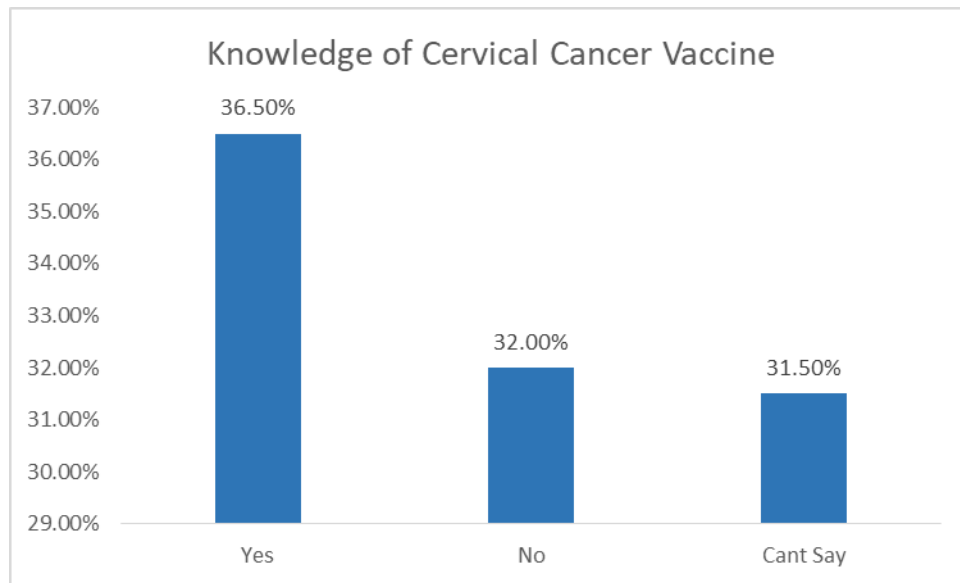
**12- Do you know that there is any vaccine which can prevent cervical cancer?****Fig: 4.100 Cervical cancer vaccine knowledge**

Figure 4.100 shows that 36.50% of the respondents have knowledge about the cervical cancer vaccine post strategic media intervention.

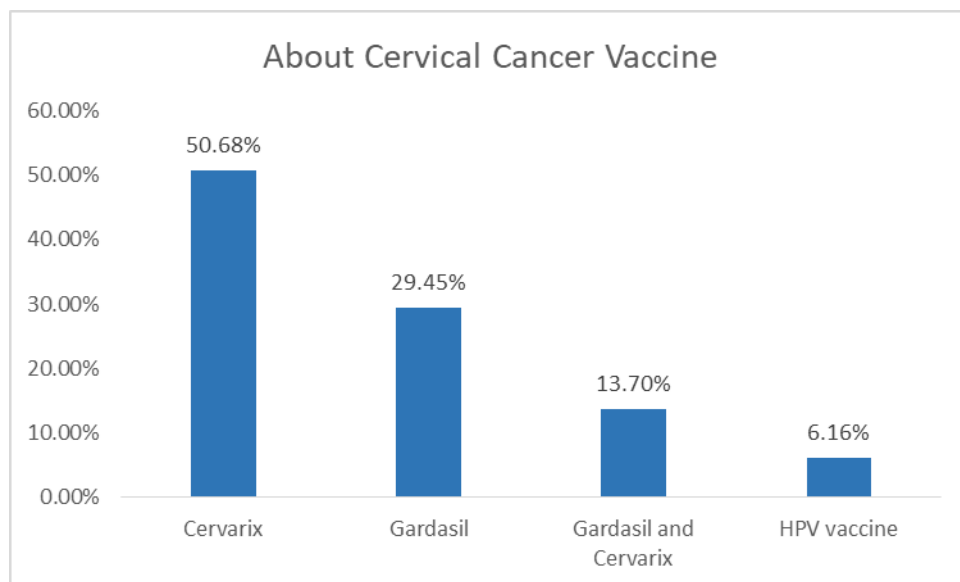
**12 a- If yes, please name it.****Fig: 4.101 Name of cervical cancer vaccine**

Figure 4.101 shows majority of the respondents have name the vaccine correctly.

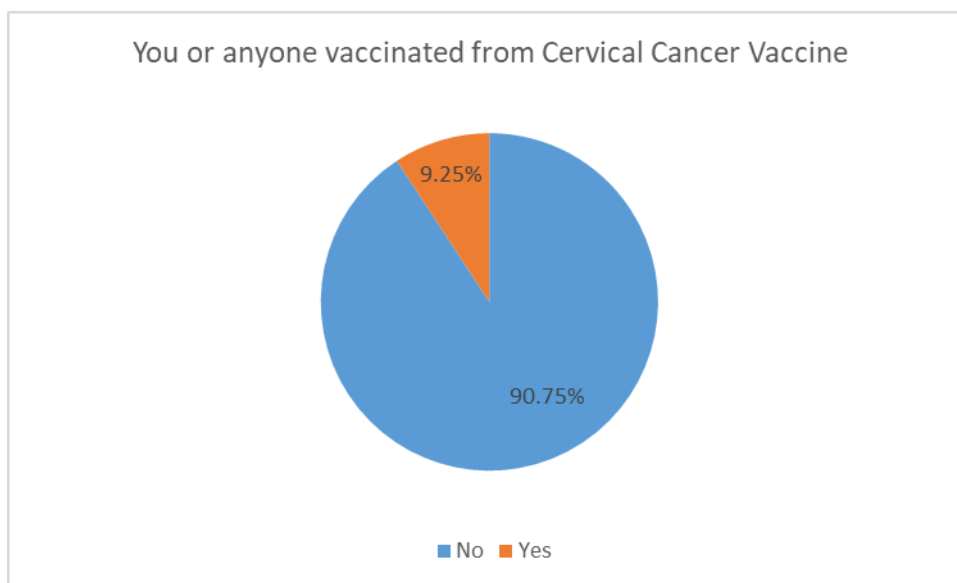
**13- Did you or someone you know have themselves vaccinated?****Fig: 4.102 You or anyone you know got themselves vaccinated**

Figure 4.102 shows that only 9.25 % of the participants or anyone they know have got vaccinated for protection against cervical cancer.

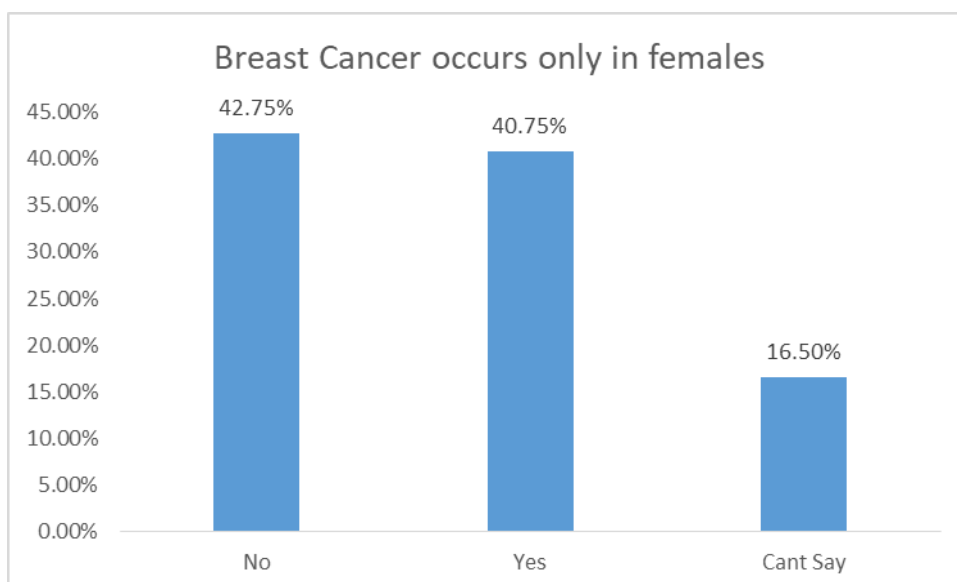
**14- Does breast cancer only happen to women?****Fig: 4.103 Breast cancer occurs only to women**

Figure 4.103 shows that 42.75% of the respondents agreed that breast cancer does not occur only to women.

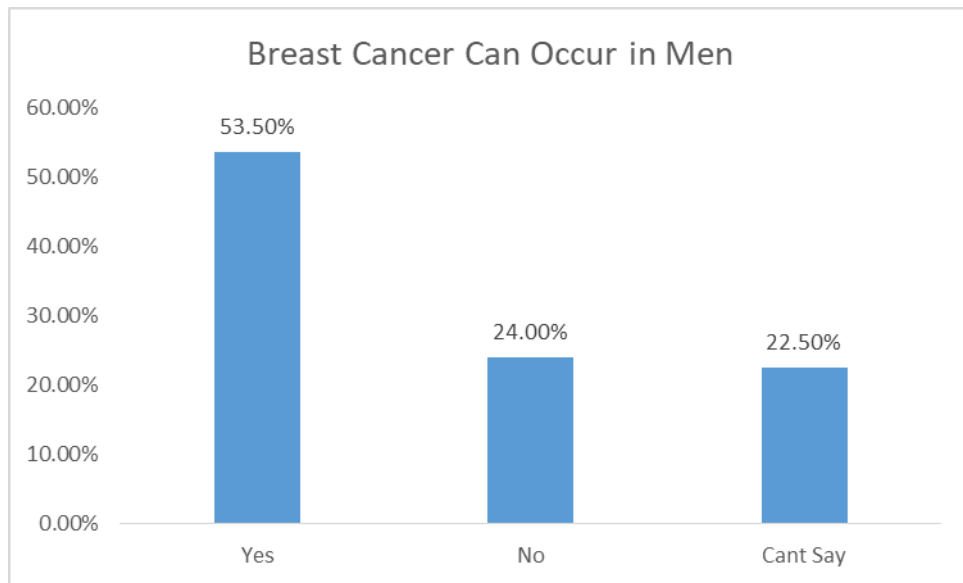
**14- Do you know that breast cancer can occur in men?****Fig: 4.104 Breast cancer can occur to men**

Figure 4.104 shows that 53.50% of the respondents agreed that Breast Cancer can occur in males.

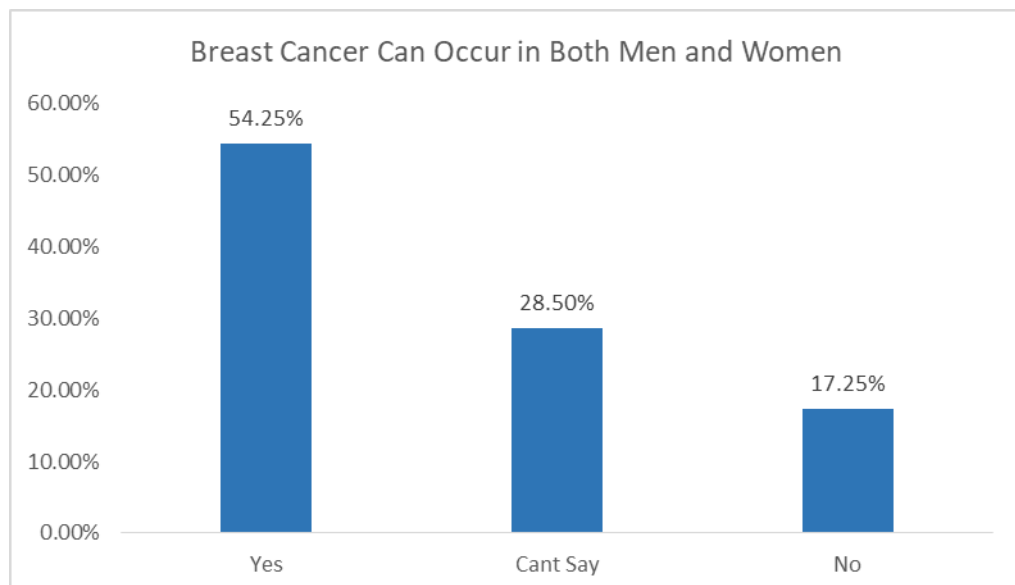
**16- Breast cancer can happen to both men and women?****Fig: 4.105 Breast cancer can occur in both men and women**

Figure 4.105 showcases that 54.25% of the respondents agreed that Breast Cancer can occur in both men and women.

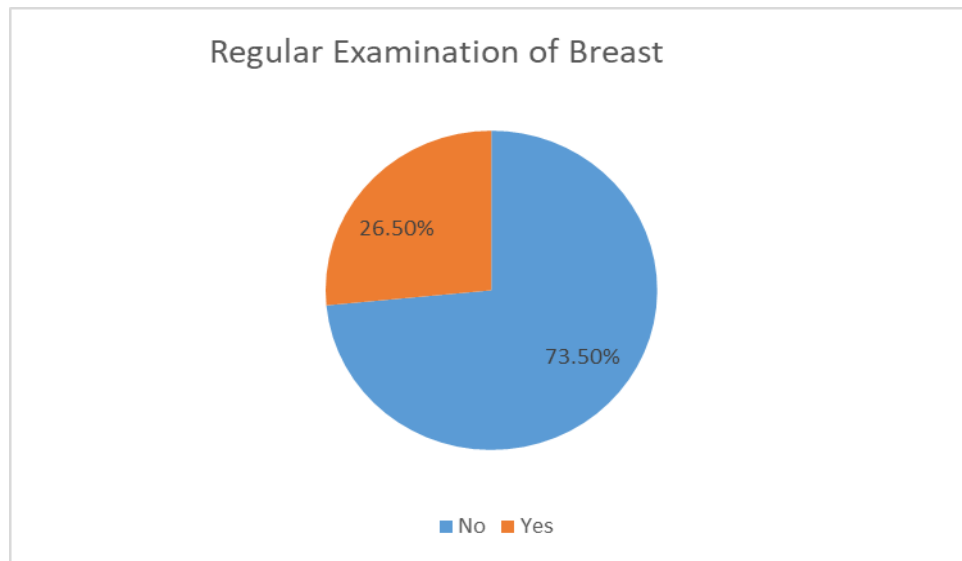
**17- Do you regularly do Self Examination of your breast?****Fig: 4.106 Regular self-examination of breast**

Figure 4.106 depicts that 73.50% of the respondents do not regularly self-examination their breast.

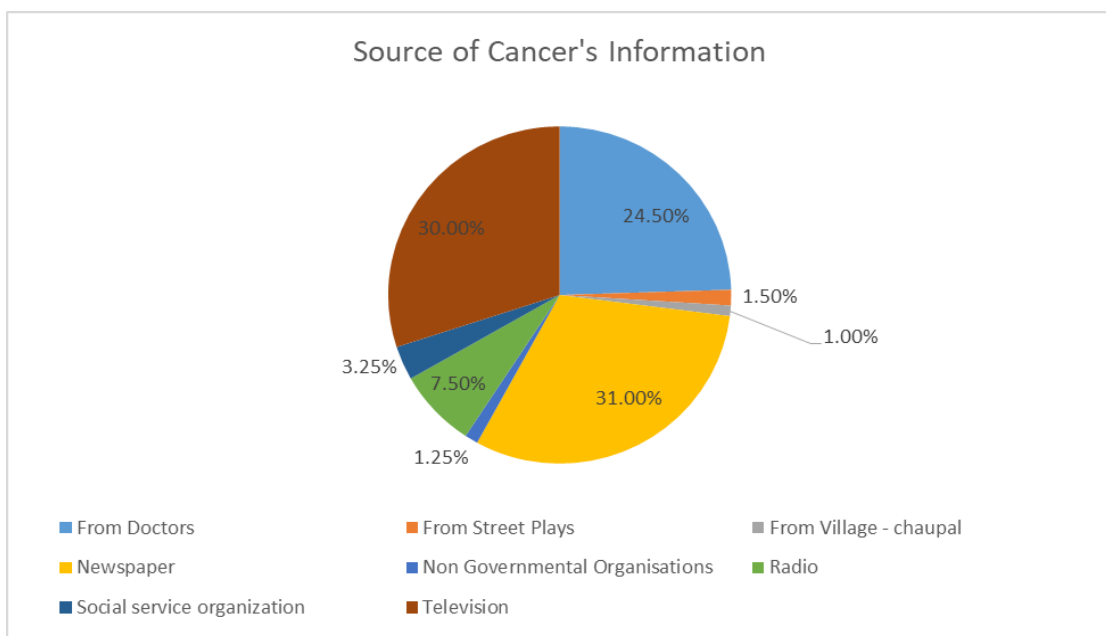
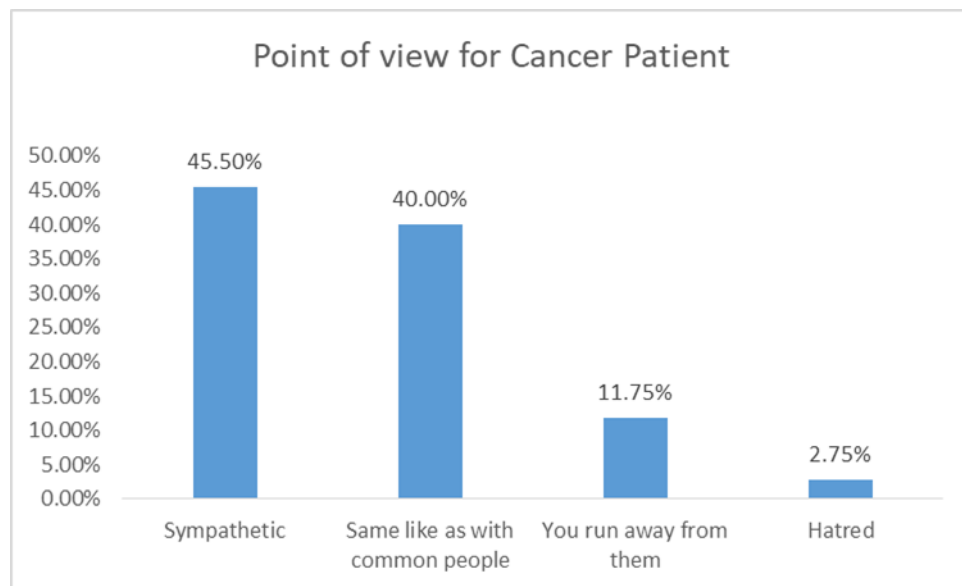
**18- Where do you get cancer and health related information from?****Fig: 4.107 Source of cancer and health related information**

Figure 4.107 shows that television (30%) and Newspaper (31%) are most preferred source for Cancer related information.

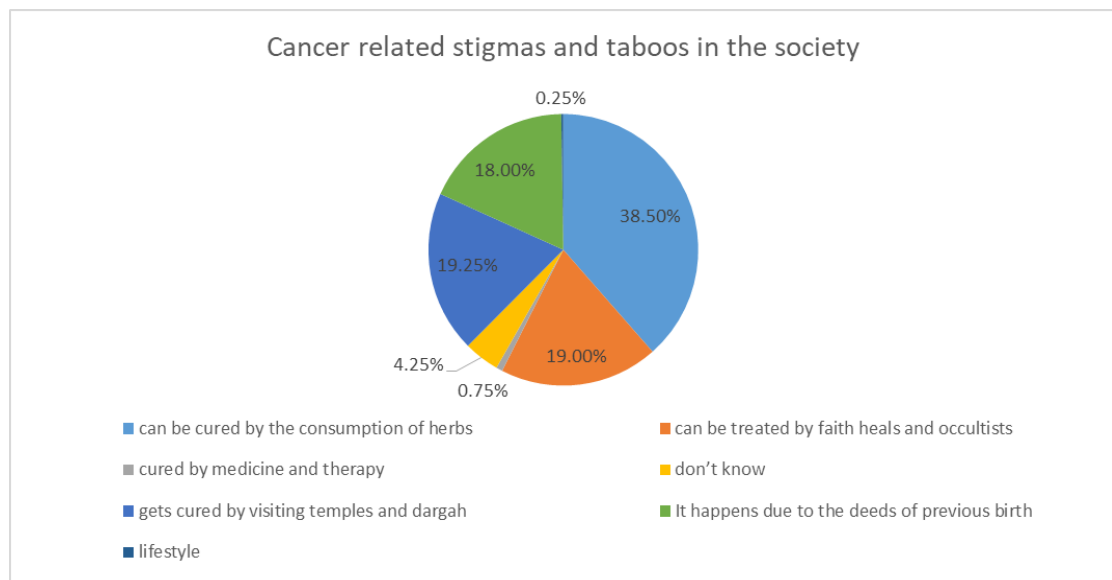
### 19-What is your attitude / behavior towards cancer patients?



**Fig: 4.108 Attitude/behavior towards cancer patients**

Figure 4.108 shows that majority of respondents have sympathy for cancer patients.

### 20- What kind of stigmas and taboos exists in society in regard to cancer?



**Fig: 4.109 Cancer related stigmas and taboos in the society**

Figure 4.109 shows the deeply rooted stigmas and taboos in the society are that Cancer can be cured by the consumption of herbs (38.50%) and it can be cured by visiting temples and dargahs (19.25%).

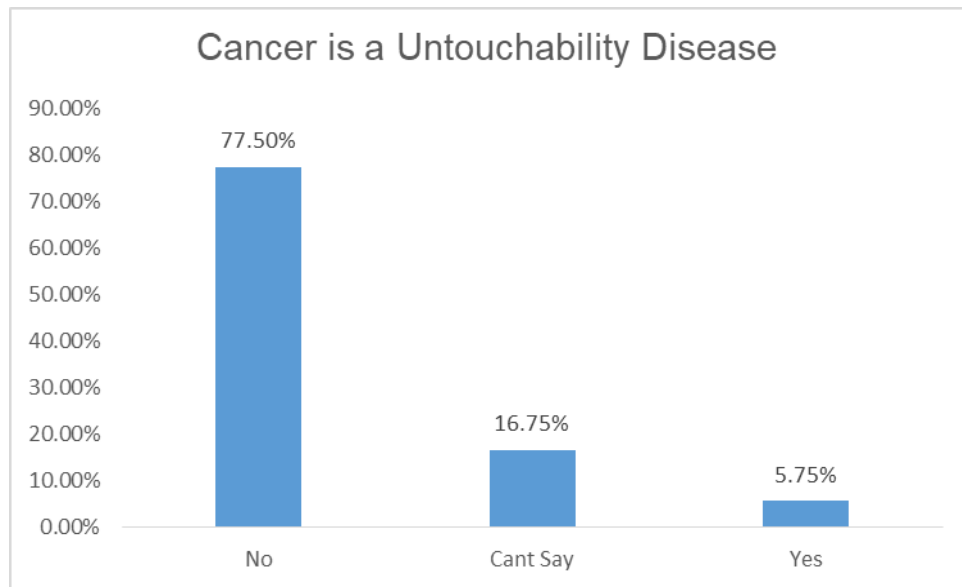
**21- Do you think that cancer is a disease of untouchability?****Fig: 4.110 Cancer is a disease of untouchability**

Figure 4.110 shows that 77.50% of the respondents agreed that Cancer is not a disease of untouchability.

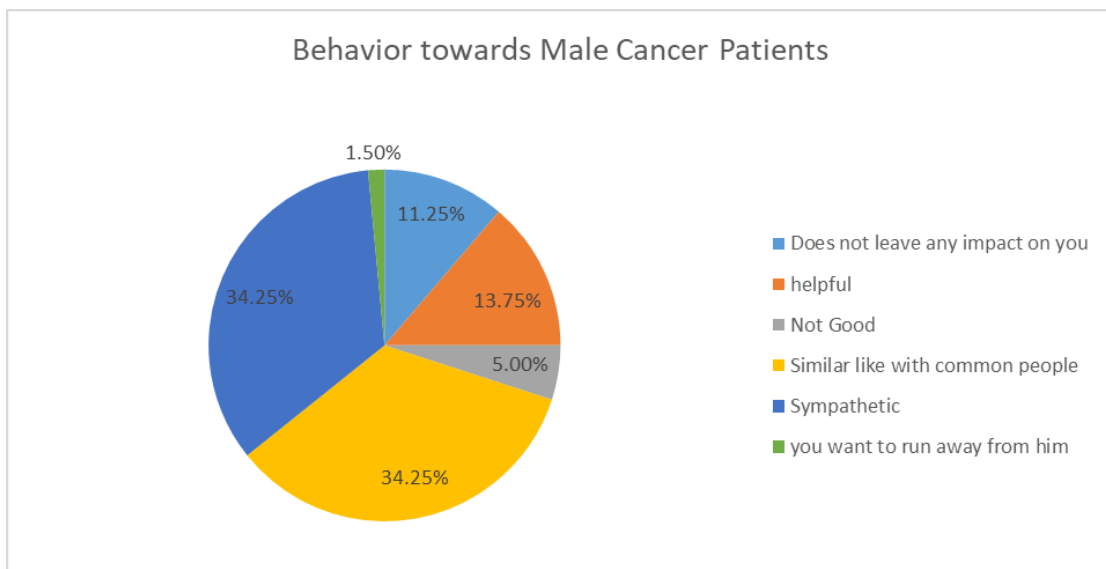
**22- How is your behavior towards men who are cancer patients?****Fig: 4.111 Behavior towards male cancer patients**

Figure 4.111 depicts that majority of the respondents are of the belief that their behaviour towards male cancer patients is sympathetic and similar to others.

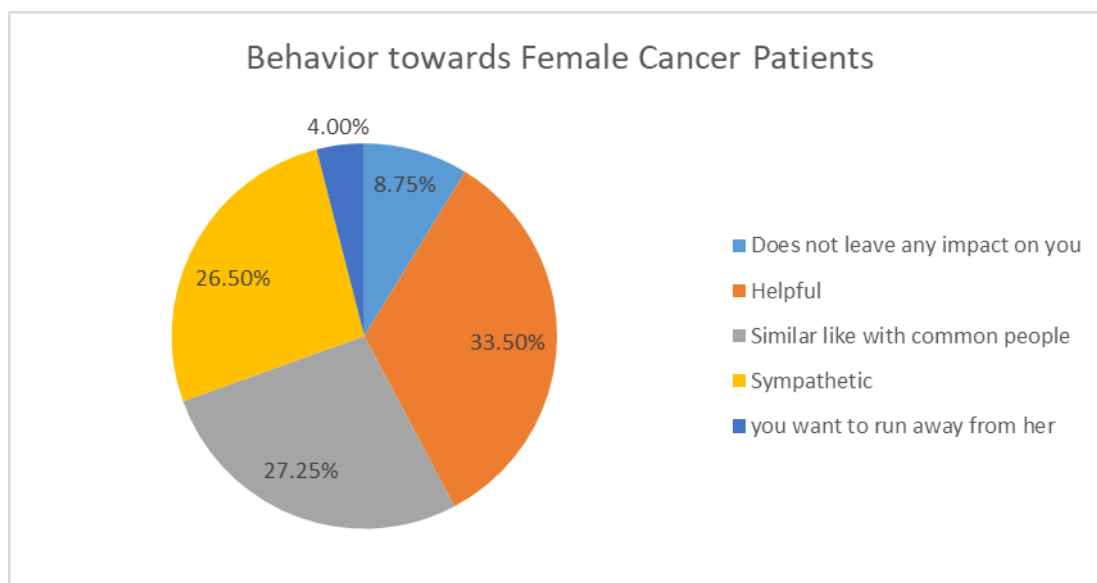
**23- How is your behavior towards women who are cancer patients?****Fig: 4.112 Behavior towards female cancer patients**

Figure 4.112 depicts that majority of the respondents are of the belief that their behaviour towards female cancer patients is helpful, sympathetic and similar to others.

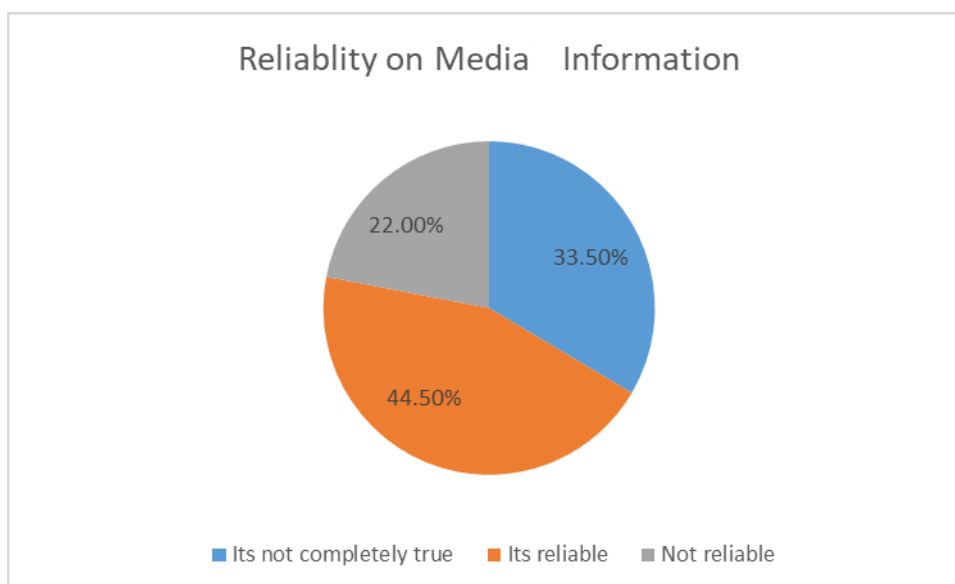
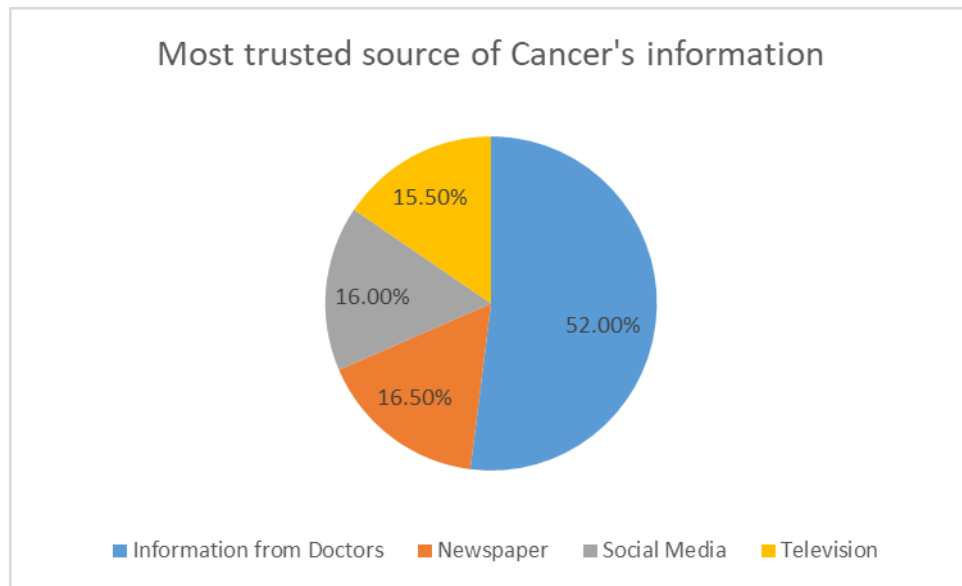
**24- How reliable the information about cancer from the media seems to be?****Fig: 4.113 Reliability on media information about cancer**

Figure 4.113 shows that majority of the respondents believed that information from the media is reliable.

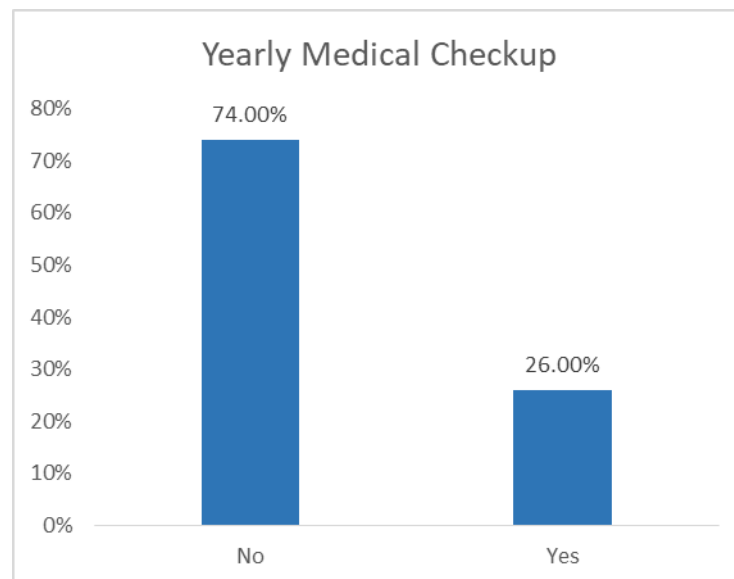
25- Which medium do you trust the most for cancer news?



**Fig: 4.114 Most trusted source for cancer related information**

Figure 4.114 shows that 52% of the respondents trust cancer related information provided by the doctors the most.

26- Do you get your medical examination done every year?



**Fig: 4.115 Yearly medical check-up**

Figure 4.115 shows that 74% of the respondents do not get their medical examination done every year.

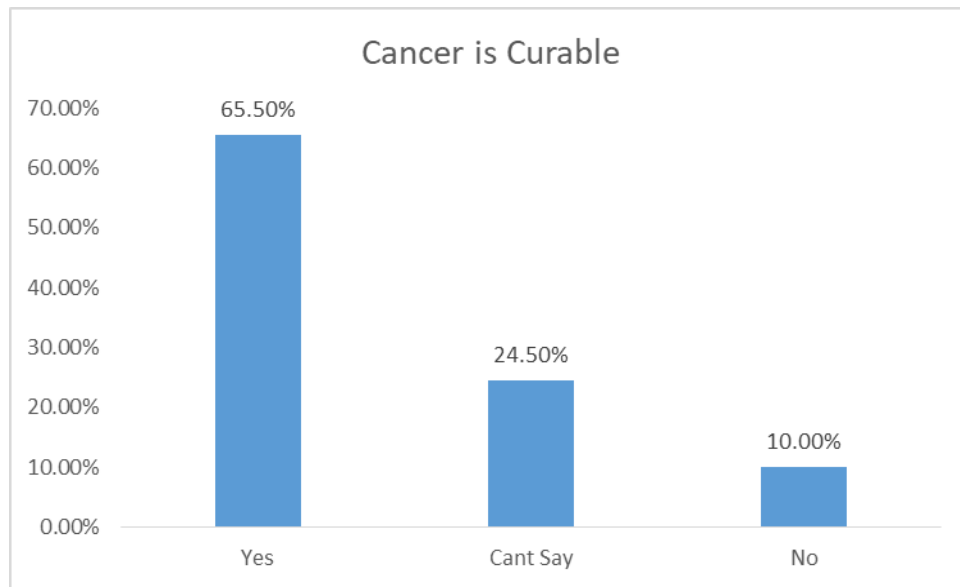
**27- Do you think that Cancer is curable?****Fig: 4.116 Prevention from cancer is possible**

Figure 4.116 shows that 65.50% of the respondents think that prevention from Cancer is possible.

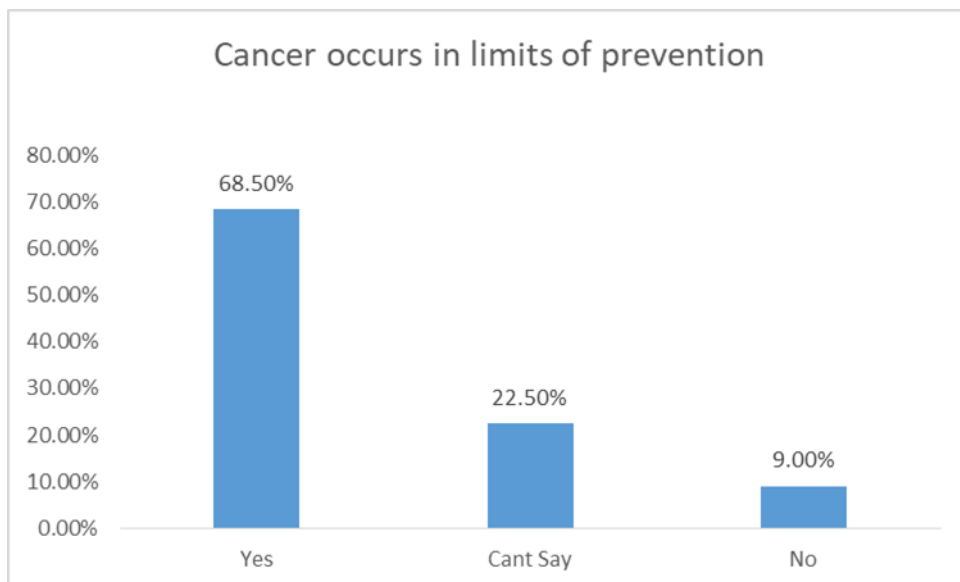
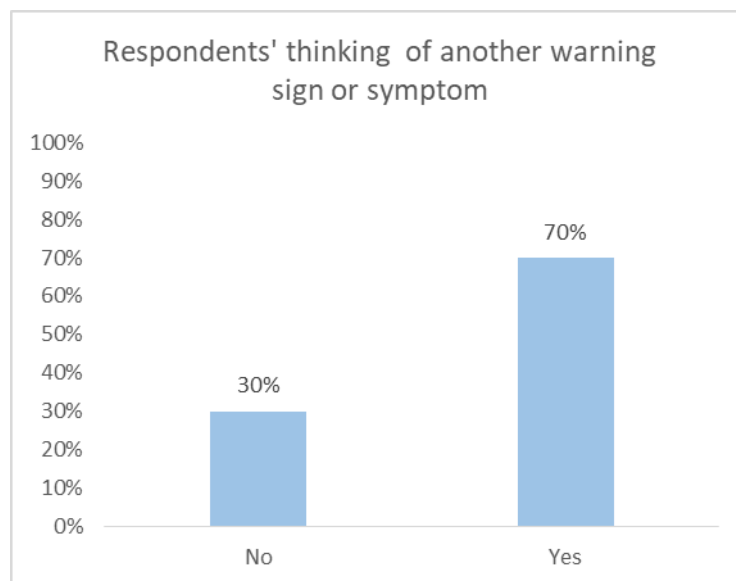
**28- Do you think that cancer is within the limits of prevention?****Fig: 4.117- Cancer is within the limits of prevention**

Figure 4.110 shows that 68% of the respondents believed that cancer is within the limits of prevention.

## SECTION-3 The Cancer Awareness Measures (CAM)

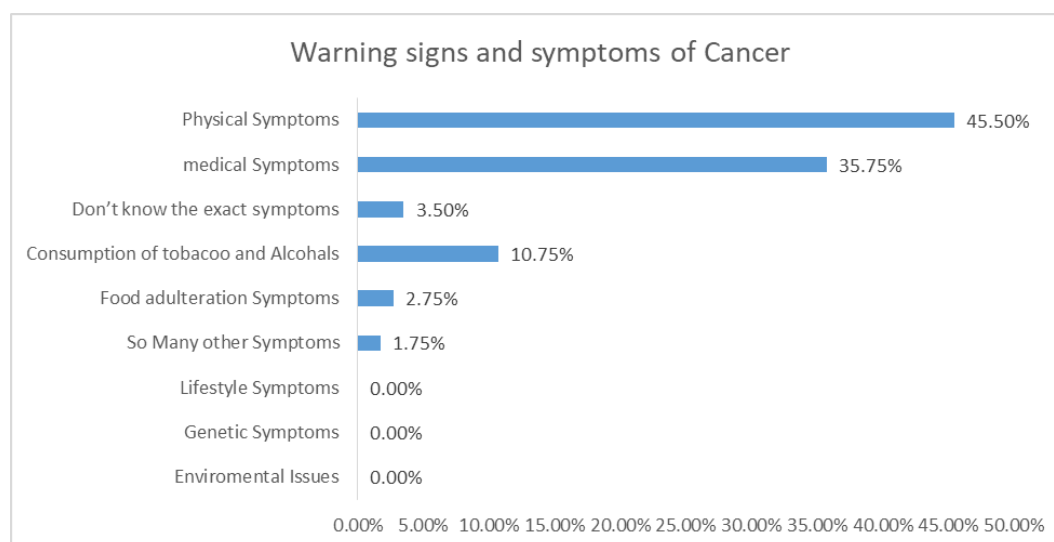
## 1-Can you think of another warning sign or symptom?



**Fig: 4.118 Another warning sign or symptom**

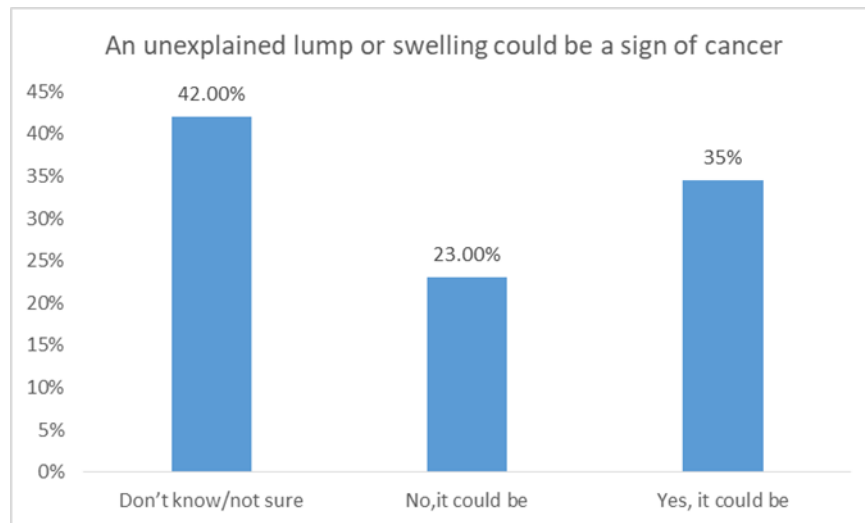
Figure 4.118 states that majority of the respondents think that there are other warning signs and symptoms of cancer.

**2-Cancer has many warning signs and symptoms. Write the name of the one you believe to be a symptom?**



**Fig: 4.119 Warning signs and symptoms of cancer**

45.50% of the respondents consider that physical symptoms such as vomiting, body pain, weakness, lumps etc. are the most common symptoms of cancer.

**3- Do you think an unexplained lump or swelling could be a sign of cancer?****Fig: 4.120 An unexplained lump or swelling would be a sign of cancer**

35% of the respondents responded that an unexplained lump or swelling could be a sign of cancer.

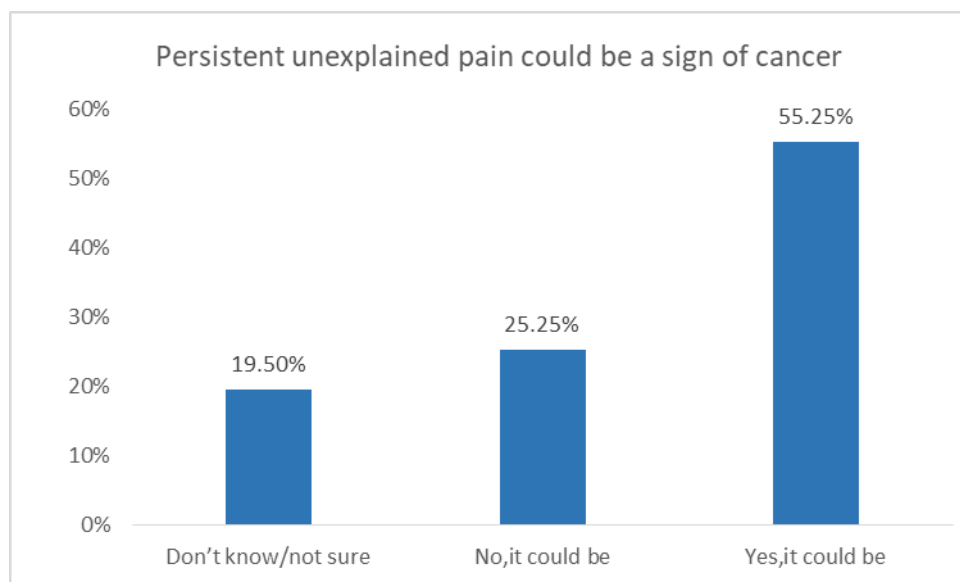
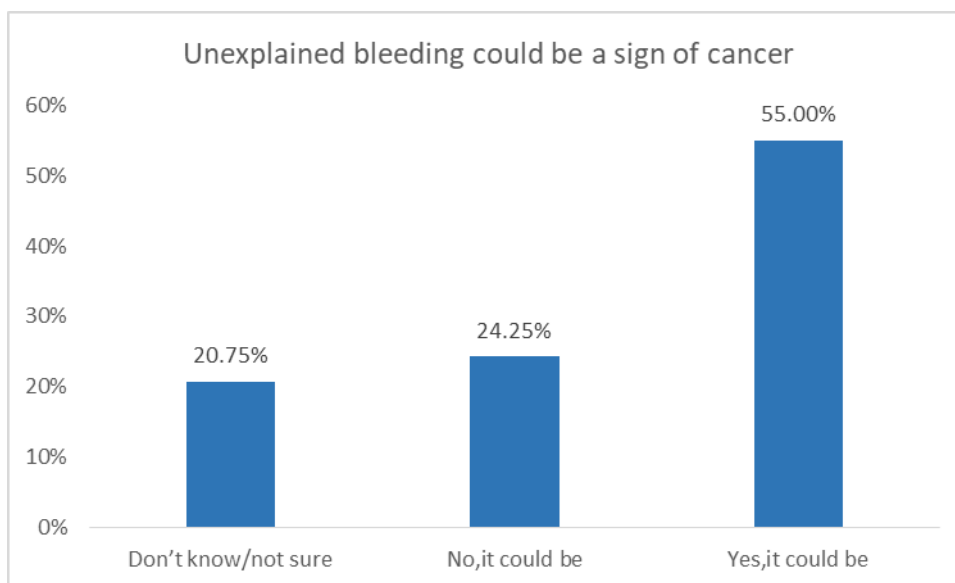
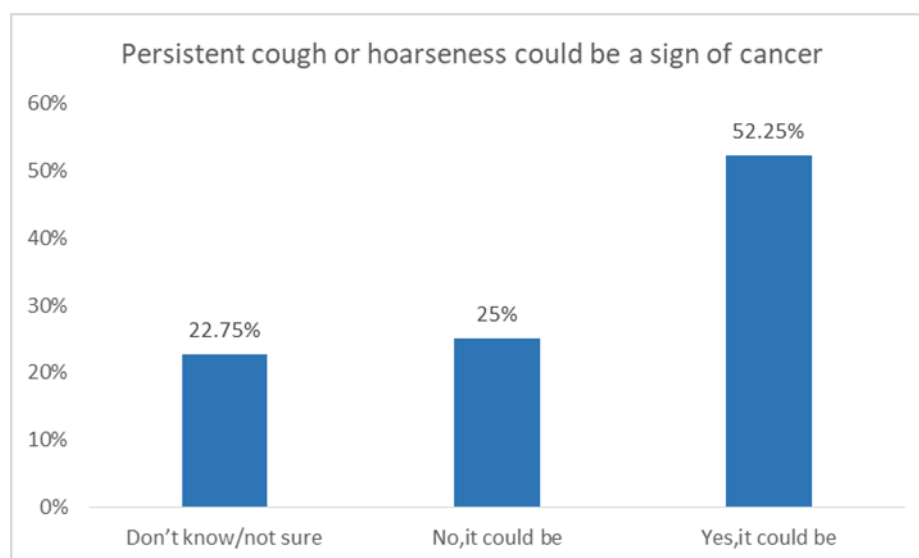
**4- Do you think persistent unexplained pain could be a sign of cancer?****Fig: 4.121 Persistent unexplained pain could be a sign of cancer**

Figure 4.121 states that 55.25% of the respondents think that persistent unexplained pain could be a sign of cancer.

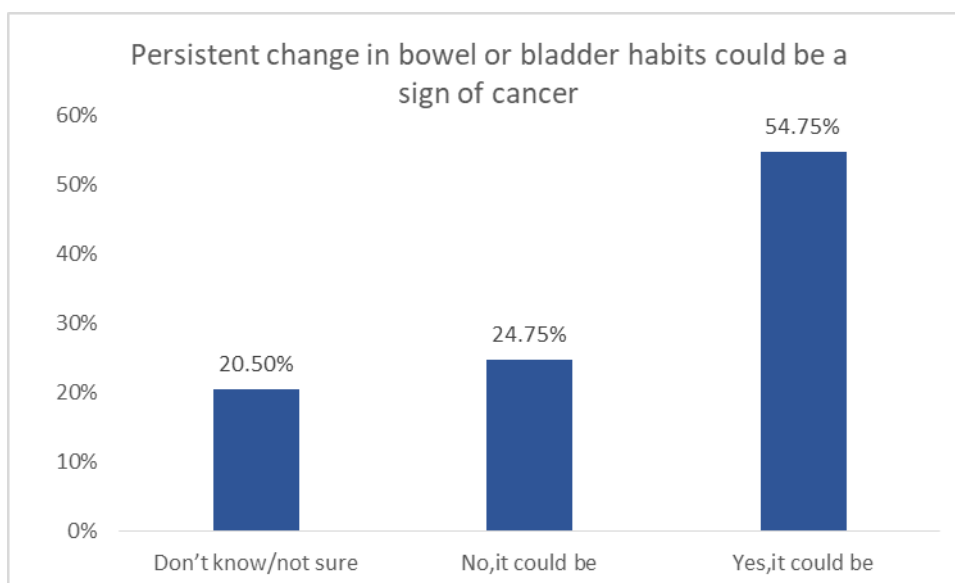
**5- Do you think unexplained bleeding could be a sign of cancer?****Fig: 4.122**

55.00% of the respondents think that unexplained bleeding could be a sign of cancer.

**6- Do you think a persistent cough or hoarseness could be a sign of cancer?****Fig: 4.123 Persistent cough or hoarseness could be a sign of cancer**

52.25% of the respondents think that persistent cough or hoarseness could be a sign of cancer.

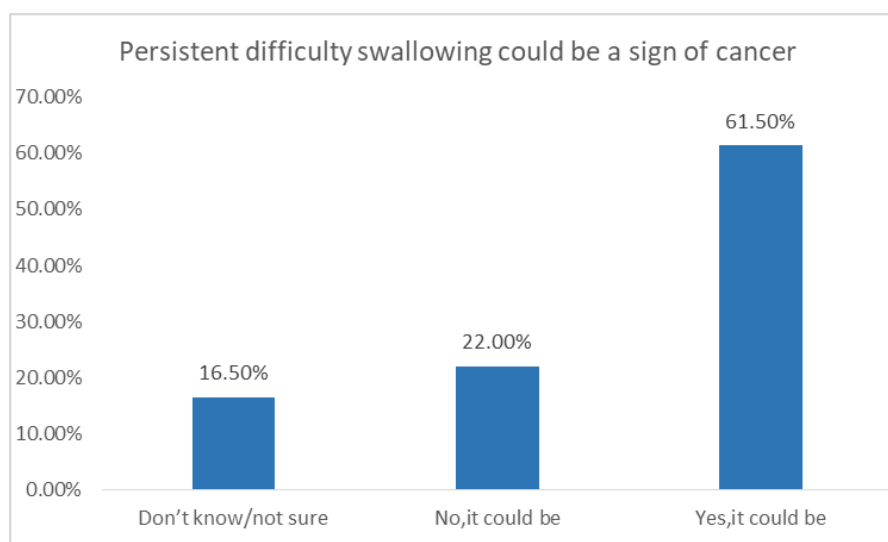
**7-Do you think persistent change in bowel or bladder habits could be a sign of cancer?**



**Fig: 4.124 Persistent change in bowel or bladder habits could be a sign of cancer**

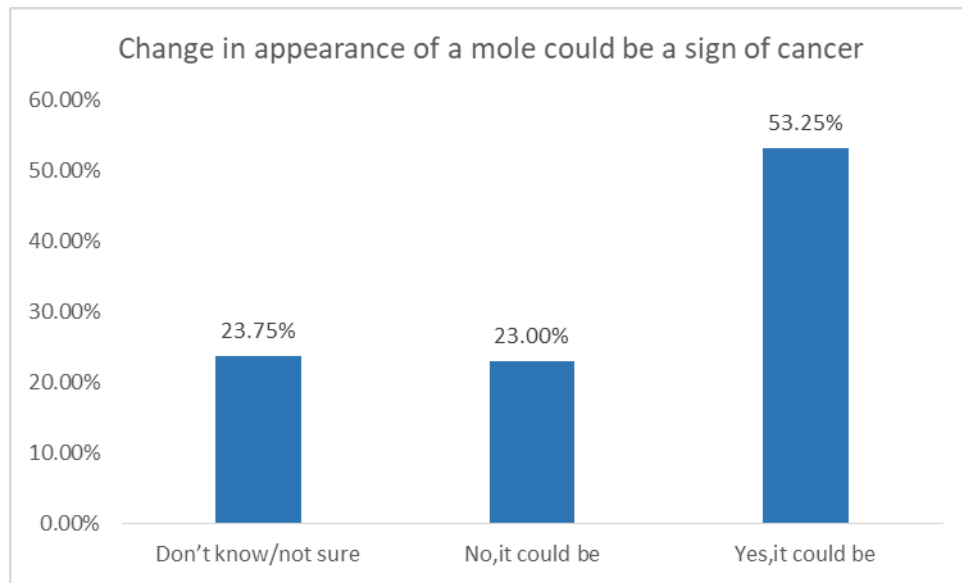
54.75% of the respondents think that persistent change in bowel or bladder habits could be a sign of cancer.

**8- Do you think persistent difficulty swallowing could be a sign of cancer?**

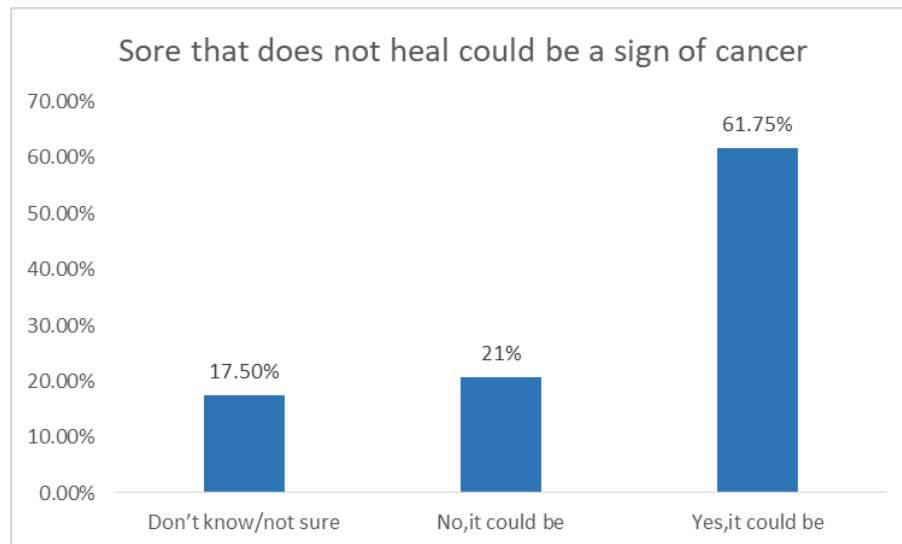


**Fig: 4.125 Persistent difficulty swallowing could be a sign of cancer**

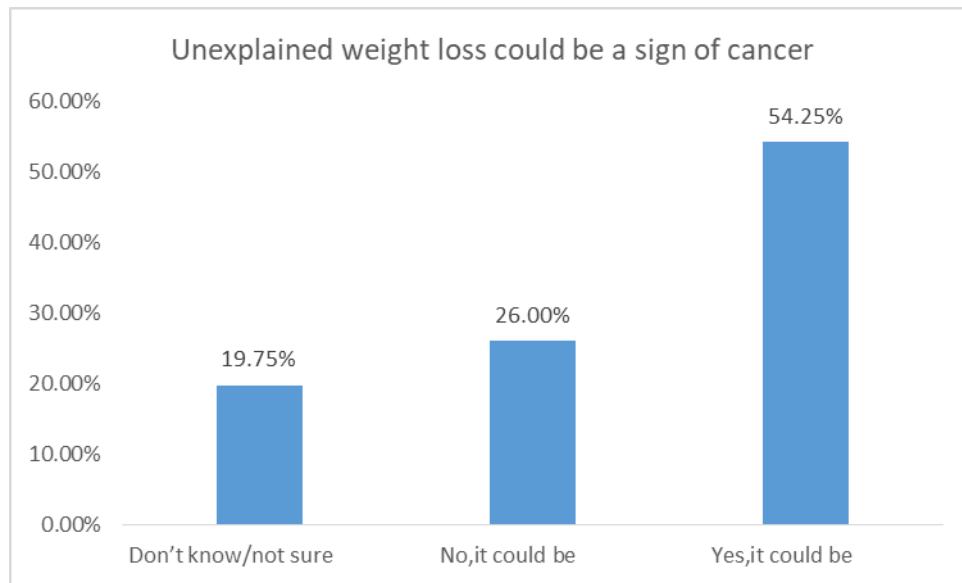
61.50% of the respondents think persistent difficulty swallowing could be a sign of cancer.

**9-Do you think a change in appearance of a mole could be a sign of cancer?****Fig: 4.126 Change in appearance of a mole could be a sign of cancer**

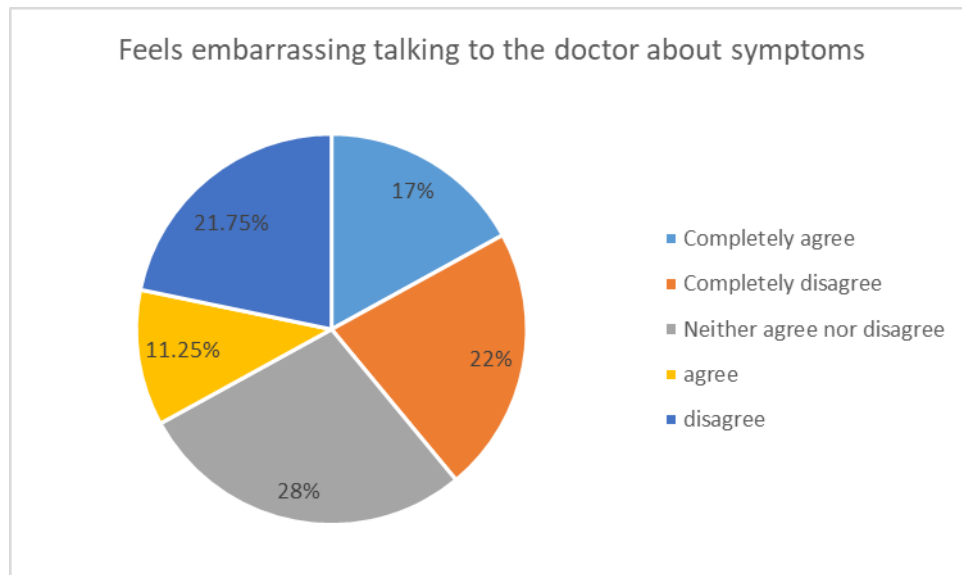
53.25% of the respondents think that change in appearance of a mole could be a sign of cancer.

**10- Do you think a sore that does not heal could be a sign of cancer?****Fig: 4.127 Sore that does not heal could be a sign of cancer**

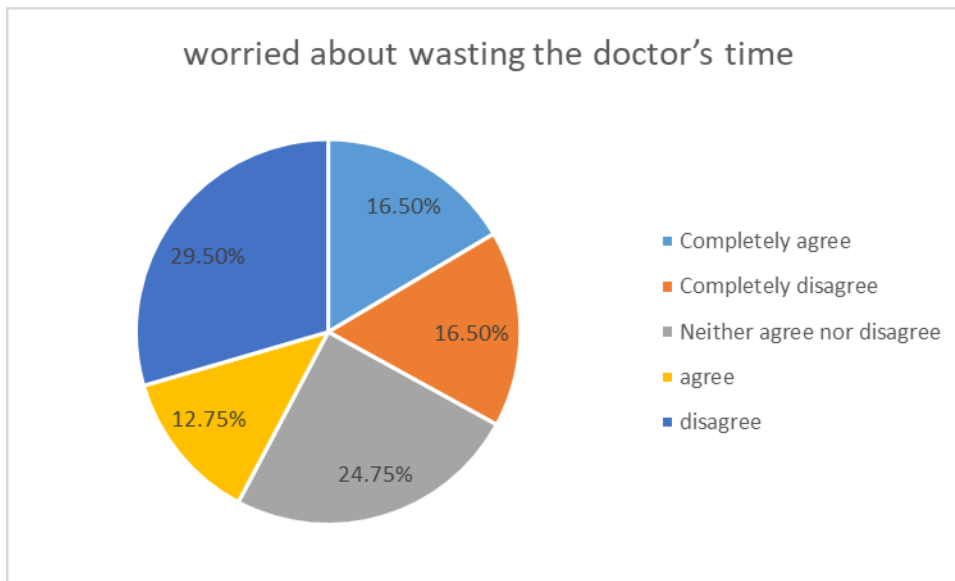
61.75% of the respondents think that a sore that does not heal could be a sign of cancer.

**11- Do you think unexplained weight loss could be a sign of cancer?****Fig: 4.128 Unexplained weight loss could be a sign of cancer**

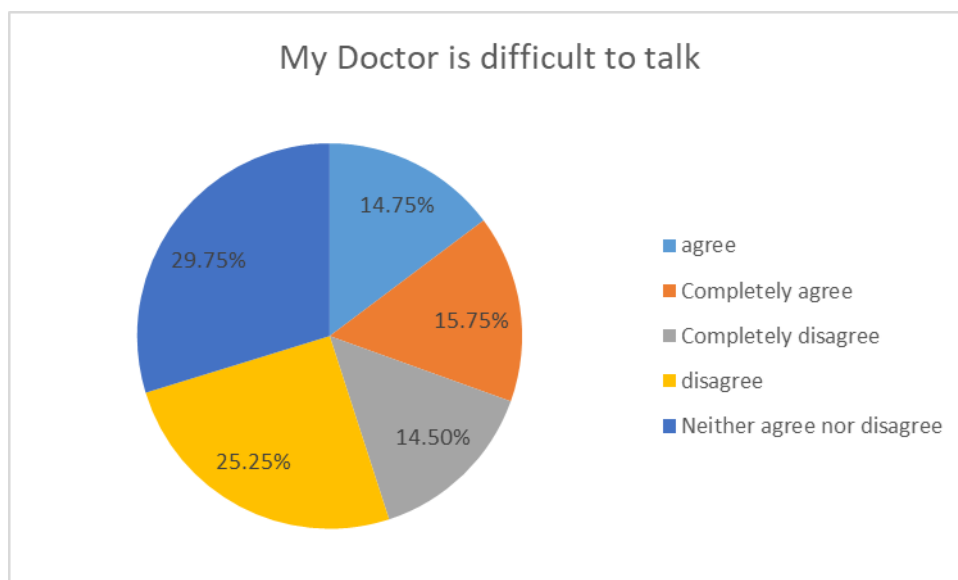
54.25% of the respondents are of an opinion that unexplained weight loss could be a sign of cancer.

**12- I find it embarrassing talking to the doctor about my symptoms.****Fig: 4.129 Feel embarrassing talking to the doctor about my symptoms**

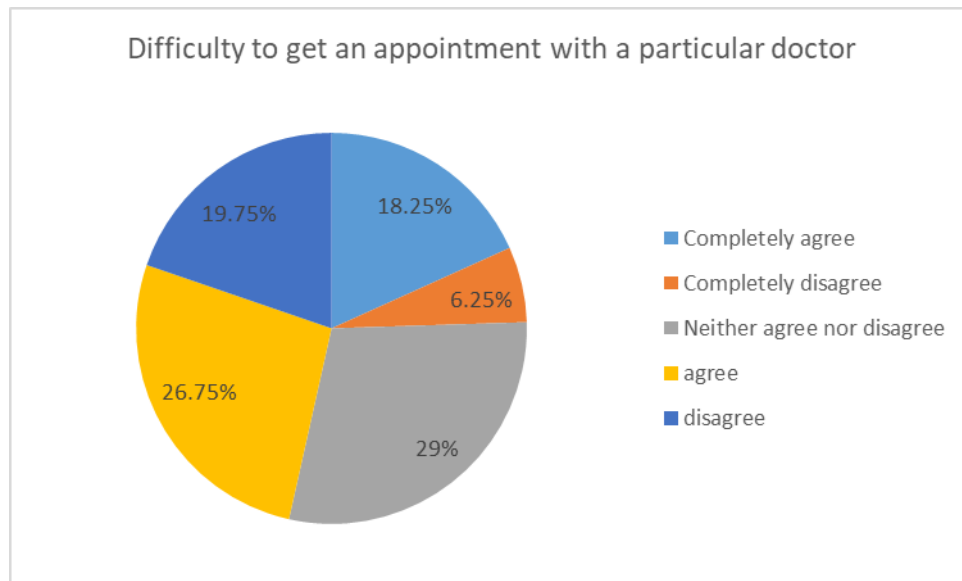
17% of the respondents completely agreed that they find it embarrassing to talk to doctor about their symptoms.

**13- I would be worried about wasting the doctor's time.****Fig: 4.130 Worried about wasting the doctor's time**

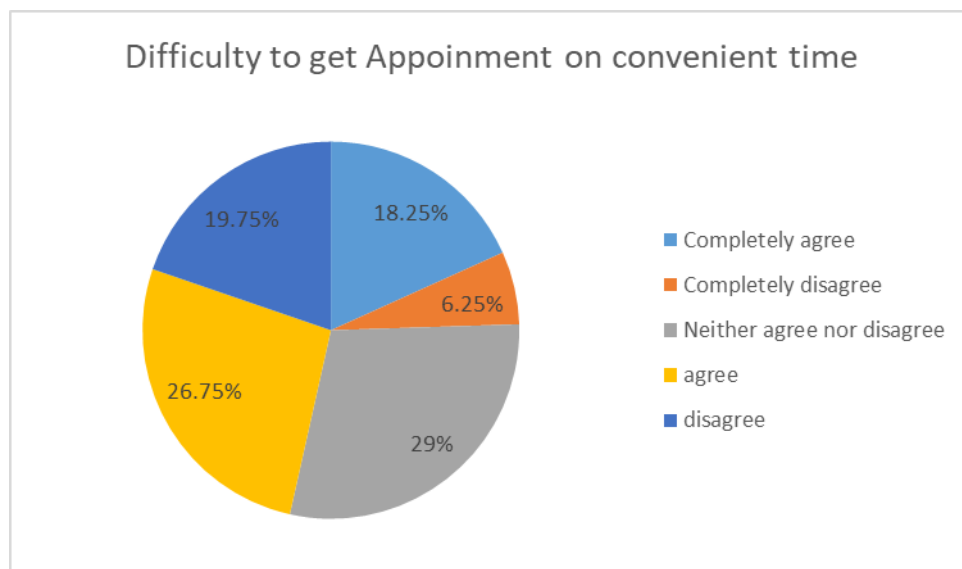
29.50% of the respondents disagreed that they worry about wasting the doctor's time.

**14- My doctor is difficult to talk with.****Fig: 4.131 My doctor is difficult to talk with**

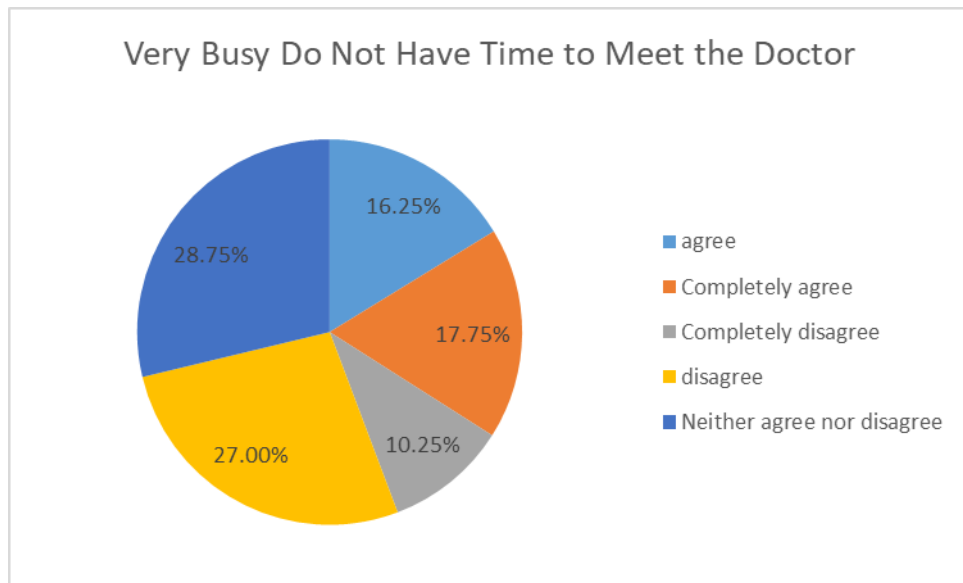
25.25% of the respondents stated their doctor is not difficult to talk with .

**15- I find it difficult to get an appointment with a particular doctor.****Fig: 4.132 Difficulty to get an appointment with a particular doctor**

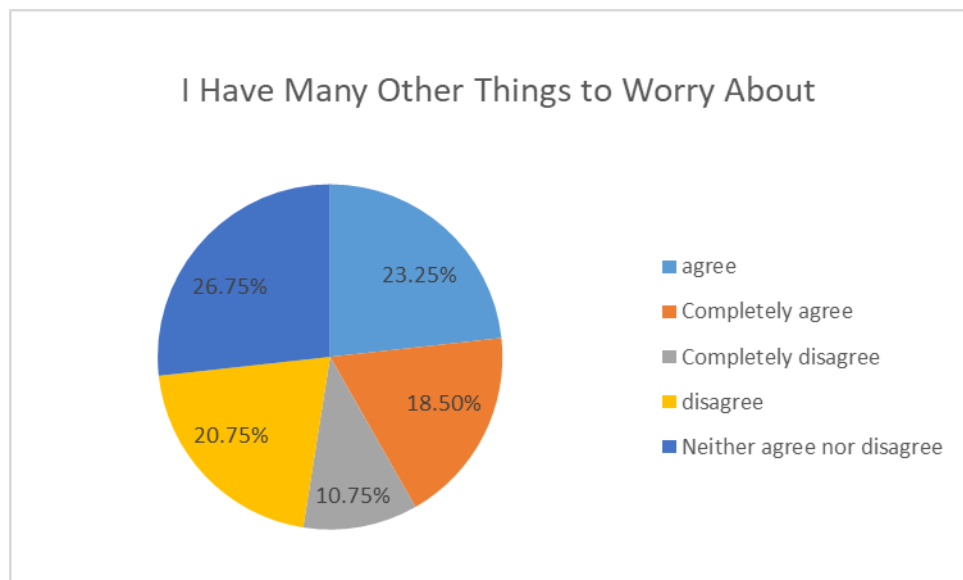
26.75% of the respondents agreed that they find it difficult to get an appointment with a particular doctor.

**16- I find it difficult to get an appointment with a doctor at a convenient time.****Fig: 4.133 Difficulty to get an appointment on a continent time**

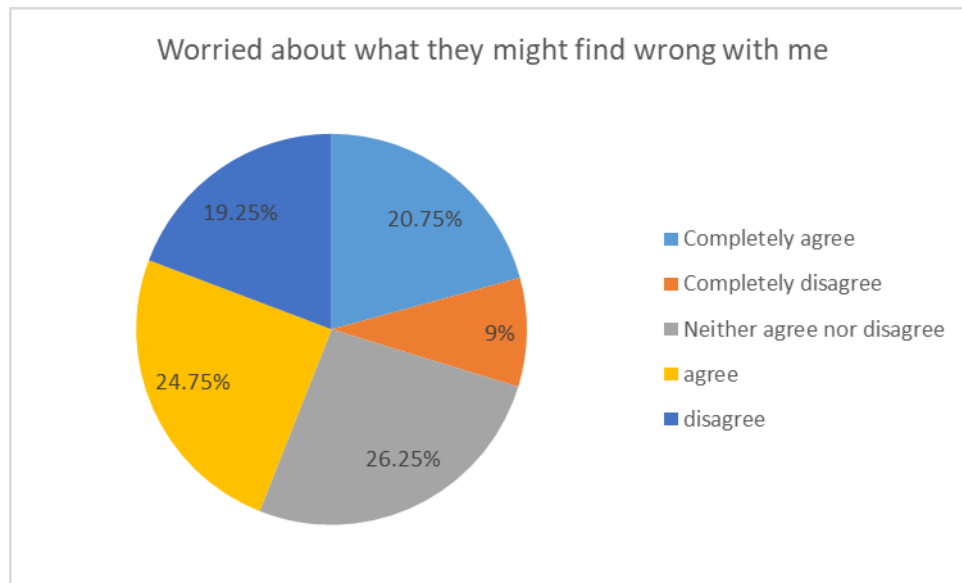
26.75% of the respondents agreed that they find it difficult to get an appointment with a doctor at a convenient time.

**17- I would be too busy to take out time to go to the doctor.****Fig: 4.134 Very busy do not have time to meet the doctor**

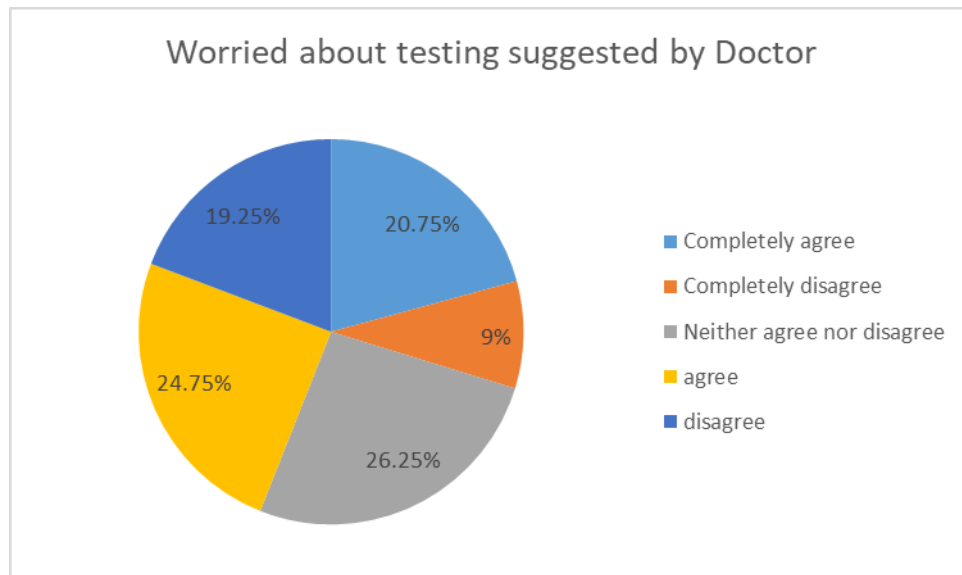
17.75 % of the respondents completely agree that they would be too busy to visit a doctor.

**18- I have many other things to worry about.****Fig: 4.135 I have many other things to worry about**

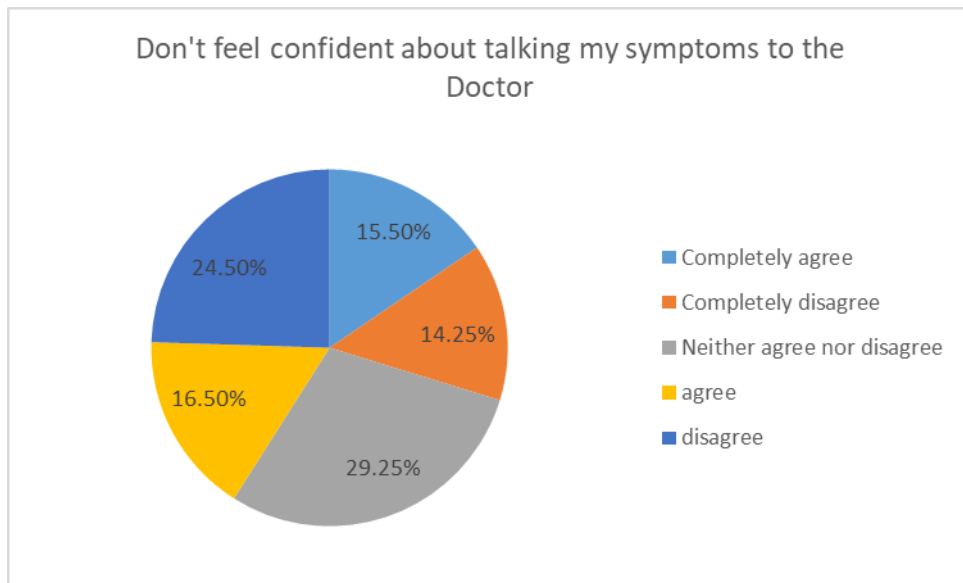
23.25% of the respondents agreed that they have many others things to worry about.

**19- I would be worried about what they might find wrong with me.****Fig: 4.136 worried about what they might find wrong with me**

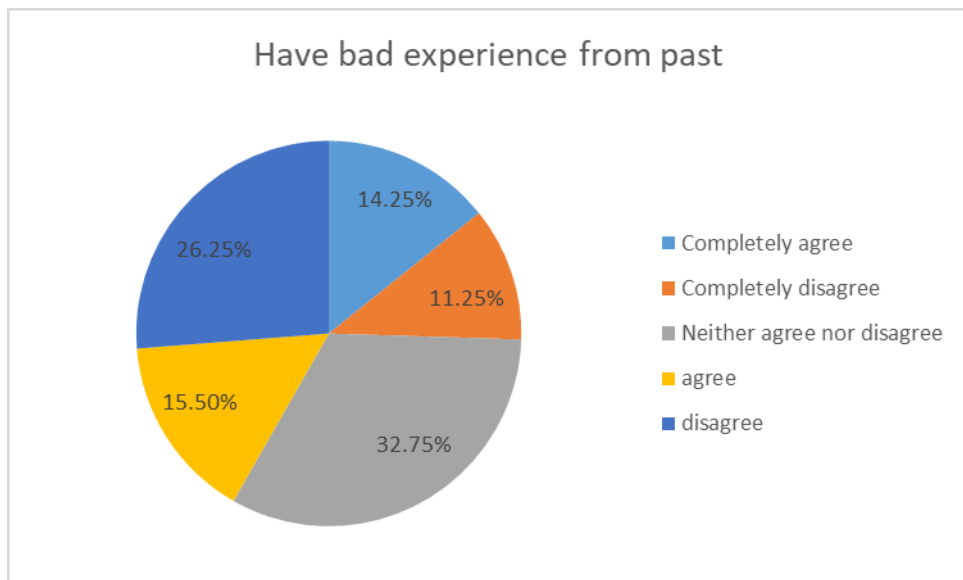
24.75% of the respondents agreed that they are worried about what doctor might find wrong with them.

**20- I would be worried about what tests they might want to do.****Fig: 4.137 worried about tests suggested by doctor**

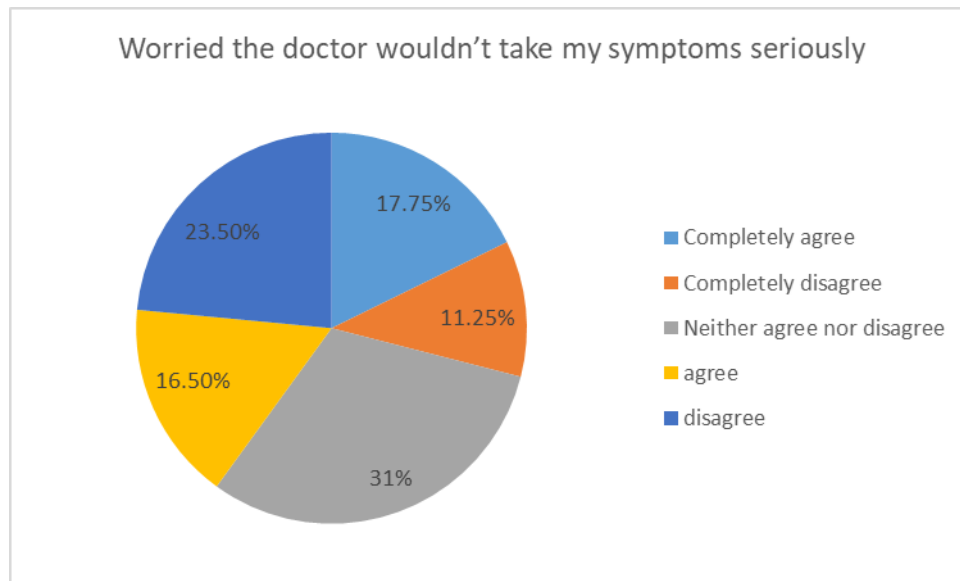
24.75% of the respondents are worried about what tests doctors might want them to undergo.

**21- I wouldn't feel confident talking about my symptom(s) with the doctor.****Fig: 4.138 Wouldn't feel confident talking about my symptoms with the doctor**

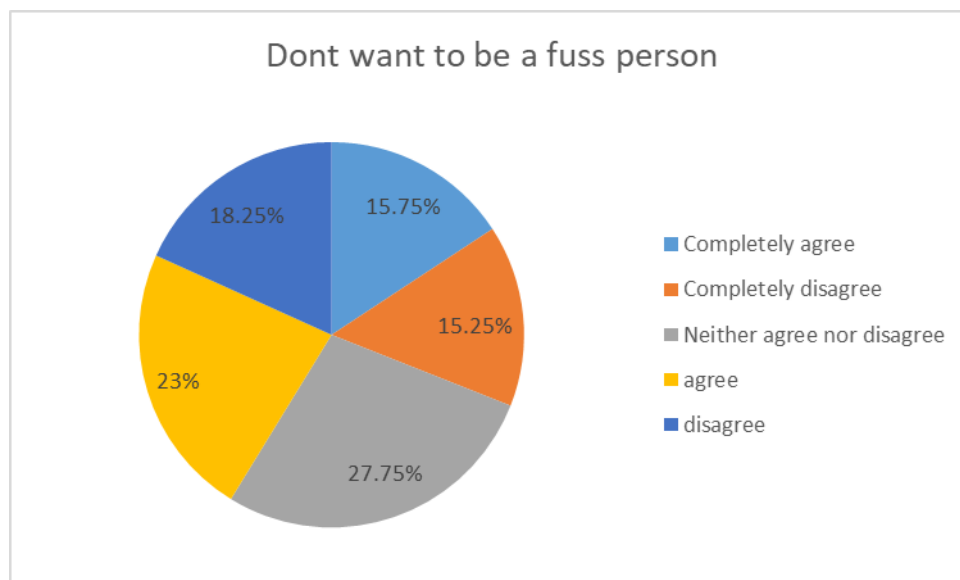
24.50% of the participants completely agree with the fact they would not feel confident talking about their symptom(s) with the Doctor.

**22- I've had a bad experience at the doctor's in the past.****Fig: 4.139 Have had a bad experience at the doctor's in the past**

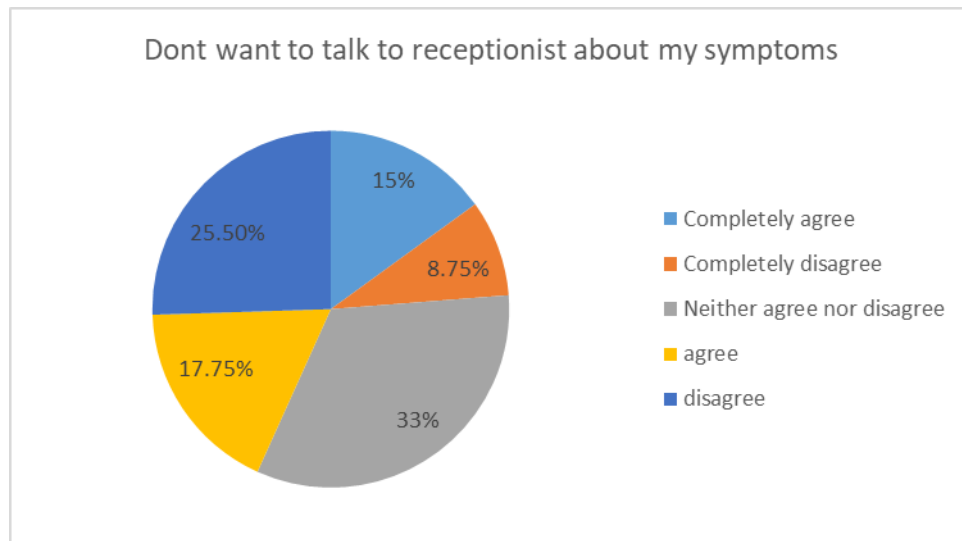
26.25% of the respondents completely agree that they had a bad experience with the Doctor in the past.

**23- I would be worried the doctor wouldn't take my symptom(s) seriously.****Fig: 4.140 Worried that the doctor wouldn't take my symptoms seriously**

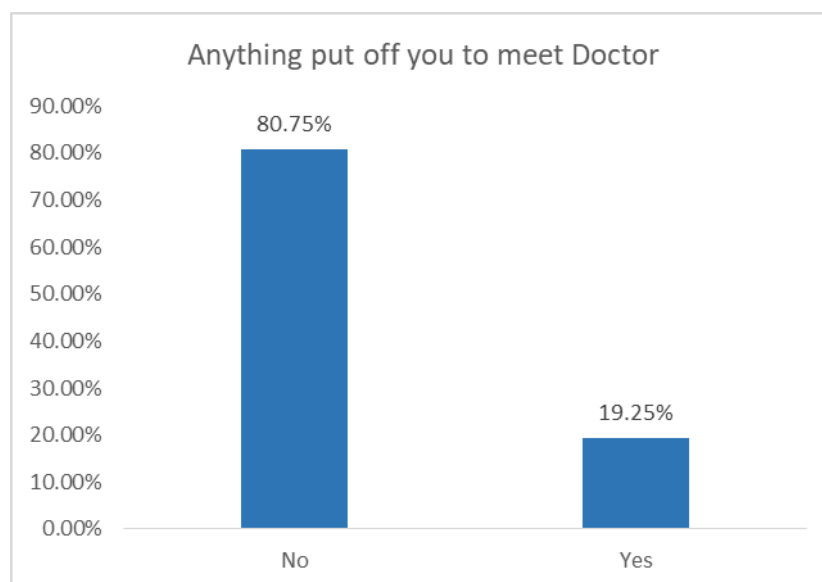
23.50% of the respondents completely agreed that they are worried that the doctor would not take their symptoms seriously.

**24- I don't want to be seen as somebody who makes a fuss****Fig: 4.141 I don't want to be seen as somebody who creates fuss**

23% of the participants agreed that they don't want to look like somebody who makes a fuss.

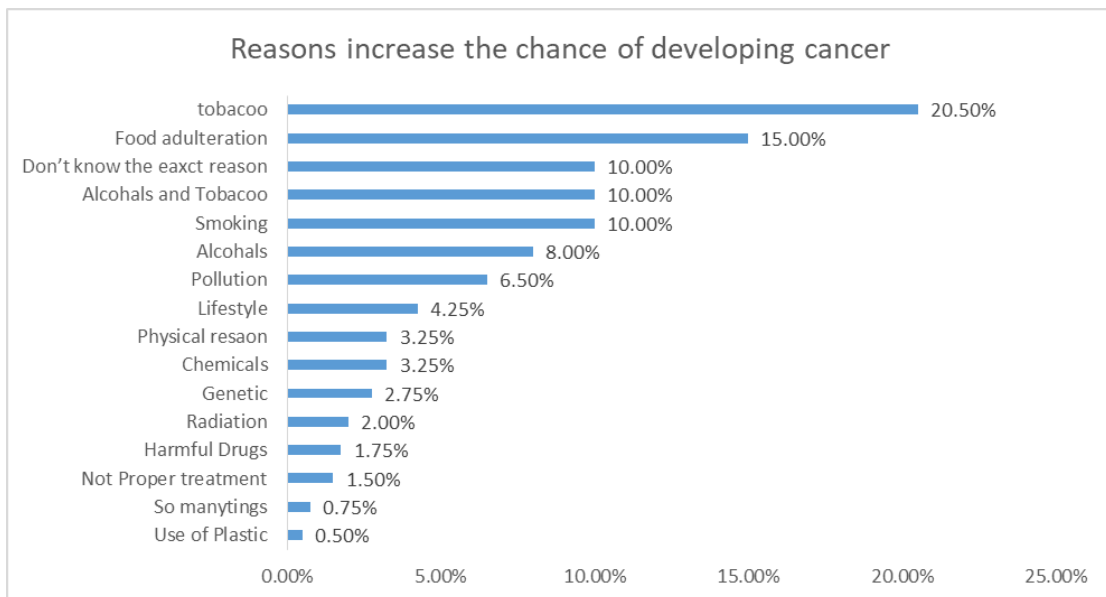
**25- I don't like having to talk to the G.P. receptionist about my symptoms.****Fig: 4.142 Don't want to talk to doctor's receptionist about my symptoms**

17.5% of the participants agreed that they don't want to talk about their symptoms with doctor's receptionist.

**26- Is there anything else that would put you off going to the doctor?****Fig: 4.143 Anything else puts you off going to the doctor**

80.75% of the participants responded that there is nothing that would put them off from going to the Doctor.

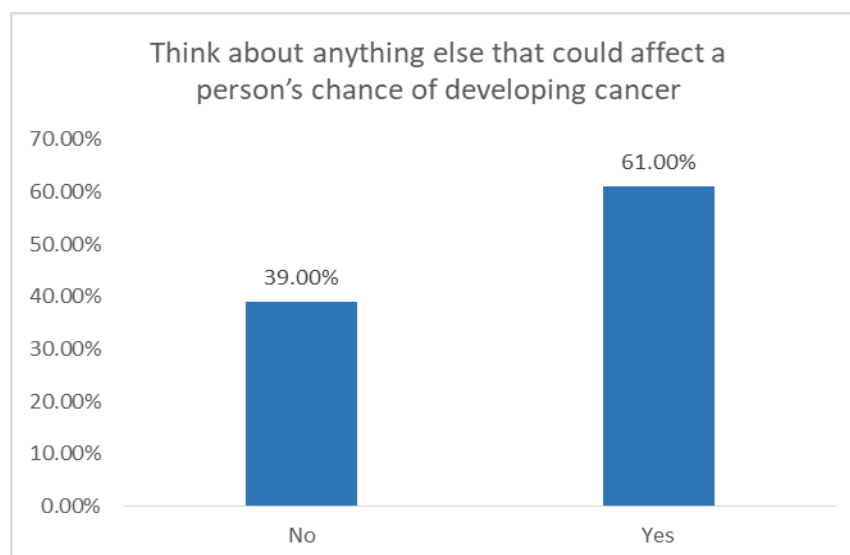
**27-What things do you think affect a person's chance of developing cancer? Please name as many as you can think of.**



**Fig: 4.144 Things that affect a person's chance of developing cancer**

Respondents stated many reasons that can affect a person's chance of developing cancer, viz., tobacco, food adulteration, etc.

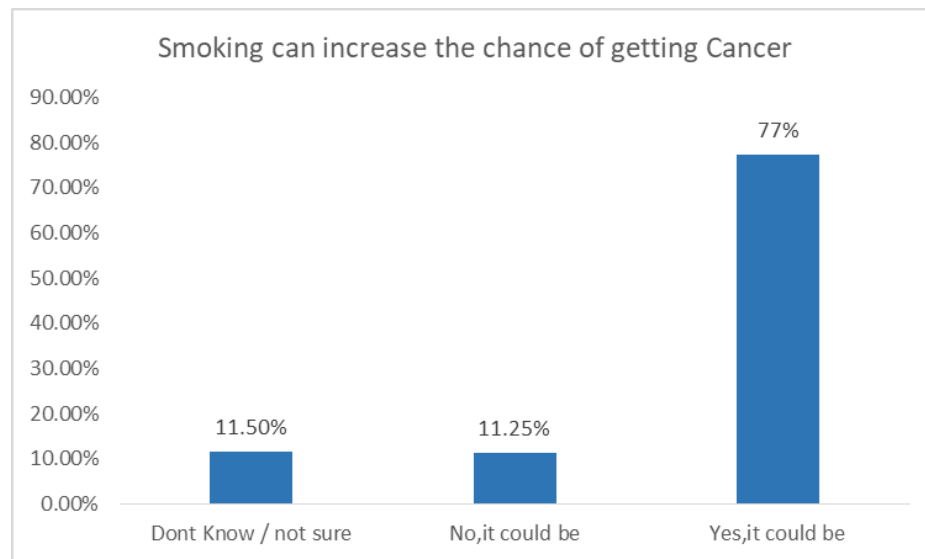
**28- Can you think of anything else that could affect a person's chance of developing cancer?**



**Fig: 4.145 Anything else that could affect a person's chance of developing cancer**

61% of the respondents believed that a lot of things can contribute towards the chance of developing cancer.

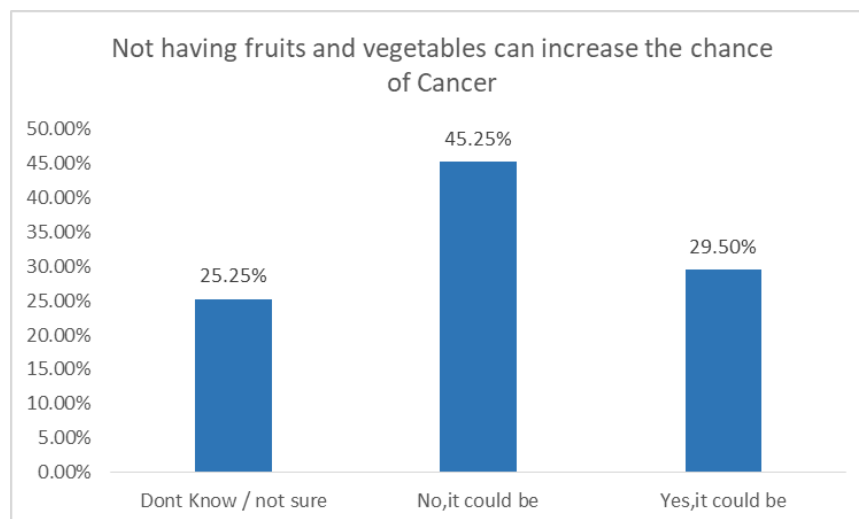
**29- Do you think that smoking can increase a person's chance of developing cancer?**



**Fig: 4.146 Smoking can increase a chance of getting cancer**

77% of the respondents think that smoking can increase a person's chance of developing cancer.

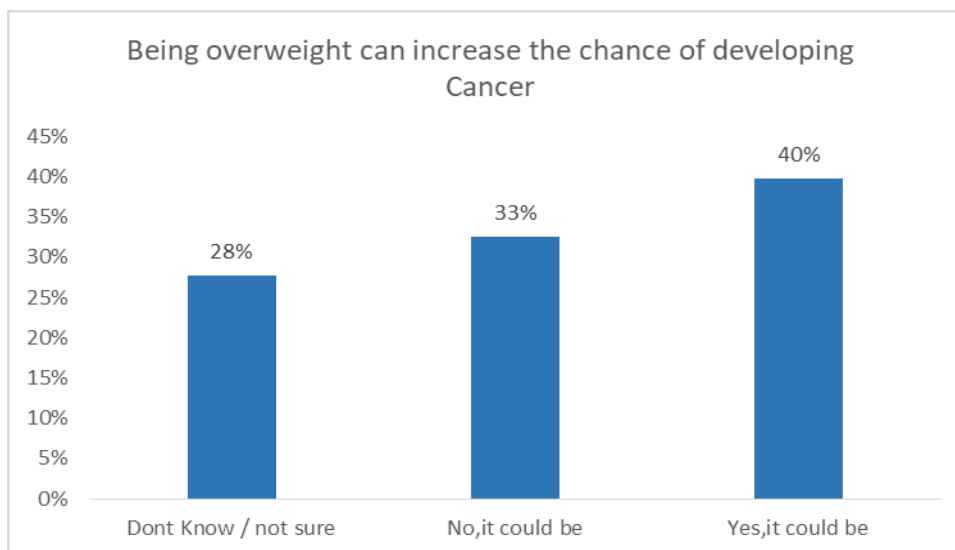
**30- Do you think that not eating many fruits or vegetables can increase a person's chance of developing cancer?**



**Fig: 4.147 Not having many fruits or vegetables can increase the chance of developing cancer**

45.25% of the participants think that not eating many fruits or vegetables cannot increase a person's chance of developing cancer.

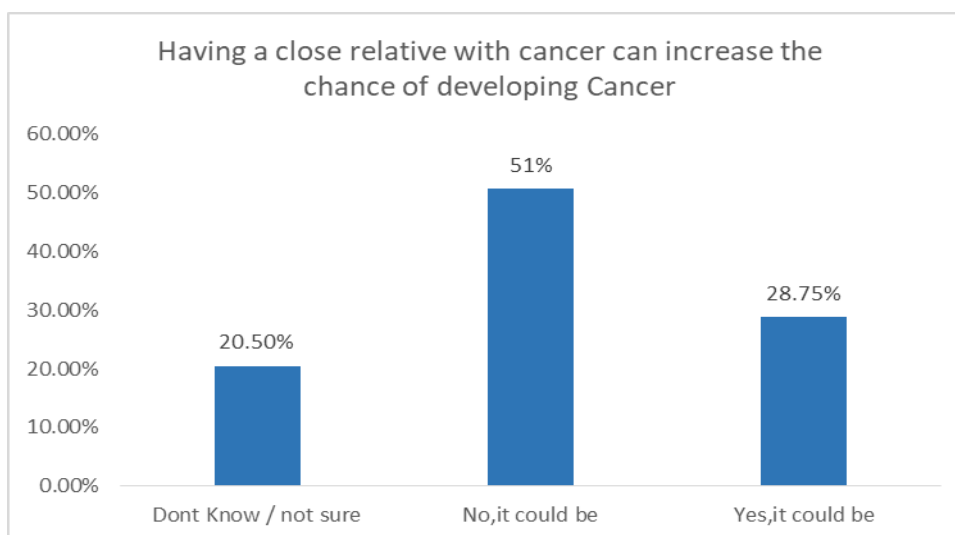
**31- Do you think that being overweight can increase a person's chance of developing cancer?**



**Fig: 4.148 Being overweight can increase the chance of developing cancer**

40% of the respondents responded that being overweight can increase a person's chance of developing cancer.

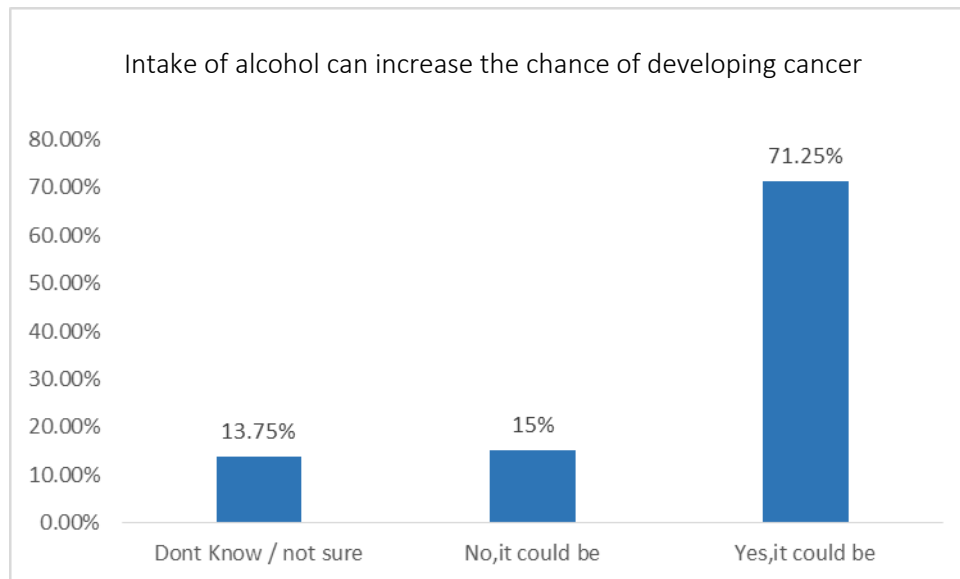
**32-Do you think that having a close relative with cancer can increase a person's chance of developing cancer?**



**Fig: 4.149 Having a close relative with cancer can increase a person's chance of developing cancer**

51% of the respondents think that having a close relative with cancer cannot increase a person's chance of developing cancer.

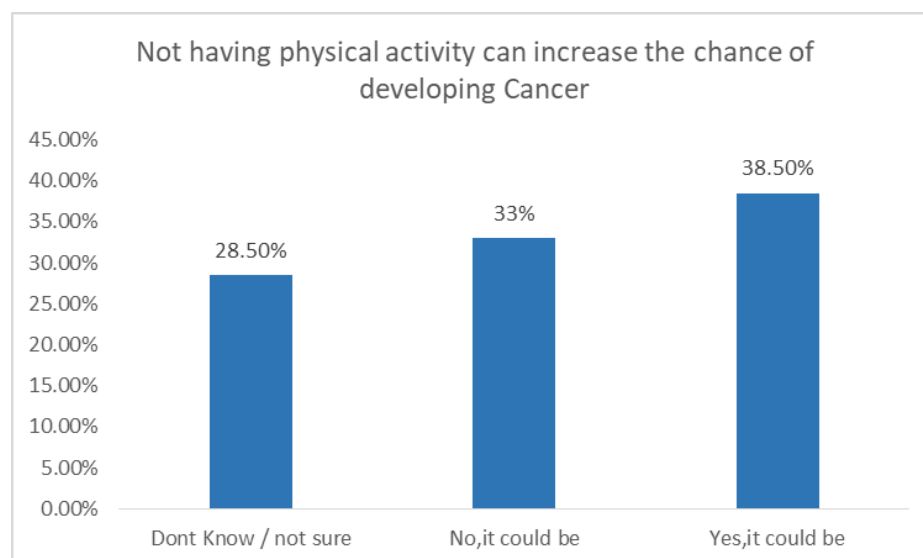
**33-Do you think that drinking alcohol can increase a person's chance of developing cancer?**



**Fig: 4.150 Intake of alcohol can increase the chance of developing cancer**

71.25% of the respondents thought that drinking alcohol can increase a person's chance of developing cancer.

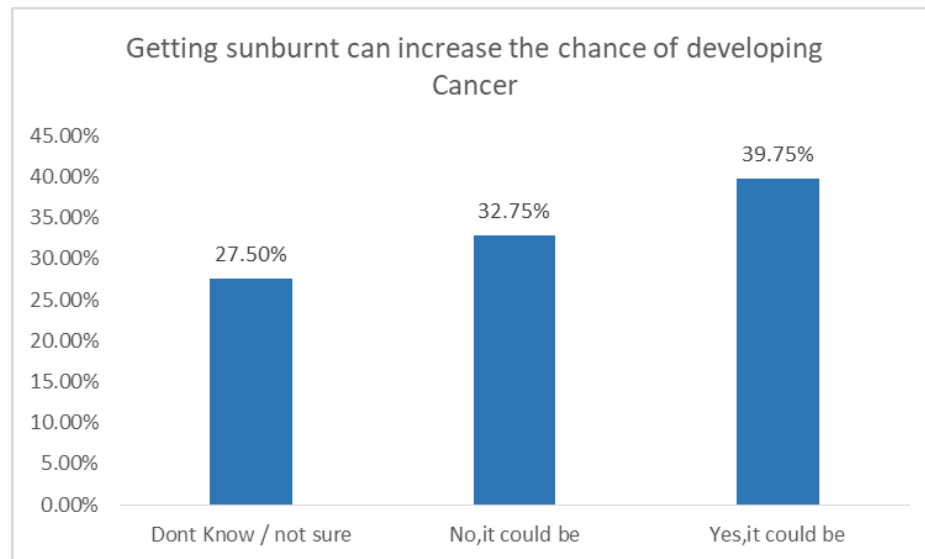
**34- Do you think that not doing much physical activity can increase a person's chance of developing cancer?**



**Fig: 4.151 Not having much physical activity can increase the chance of developing cancer**

38.50% of the participants think that not doing much physical activity can increase a person's chance of developing cancer.

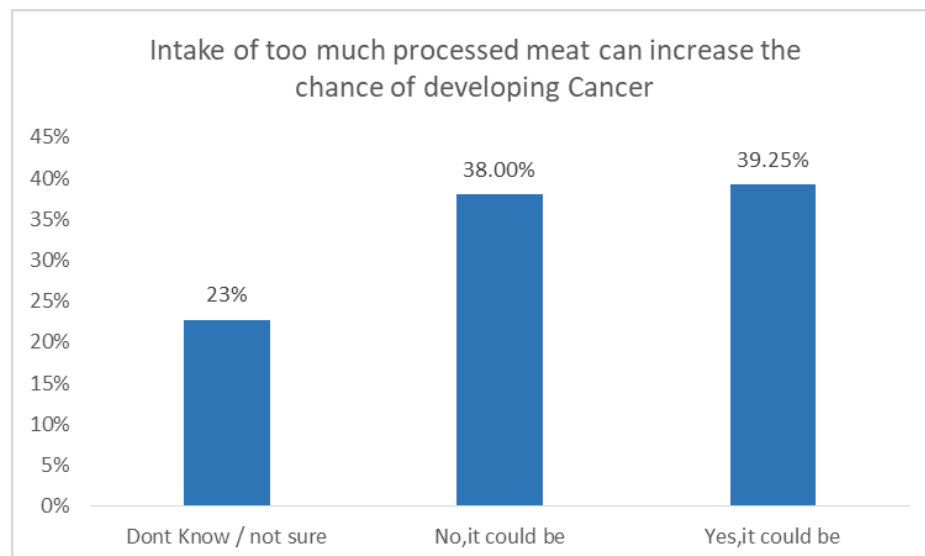
**35- Do you think that getting sunburnt can increase a person's chance of developing cancer?**



**Fig: 4.152 Getting sunburnt can increase the chance of developing cancer**

39.75% of the respondents think that getting sunburnt can increase a person's chance of developing cancer.

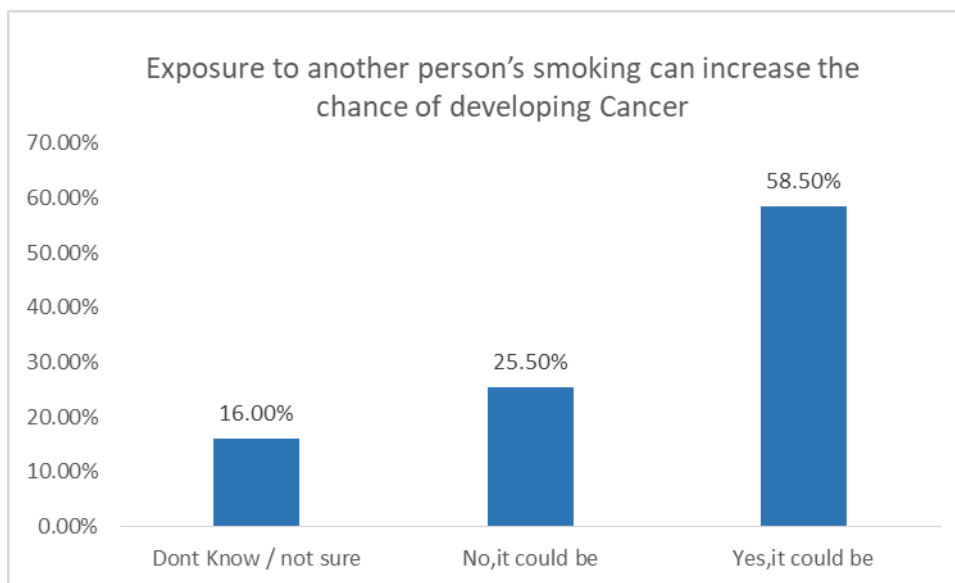
**36- Do you think that eating too much red or processed meat can increase a person's chance of developing cancer?**



**Fig: 4.153 Intake of too much processed meat can increase the chance of developing cancer**

39.25% of the respondents think that eating too much red or processed meat can increase a person's chance of developing cancer.

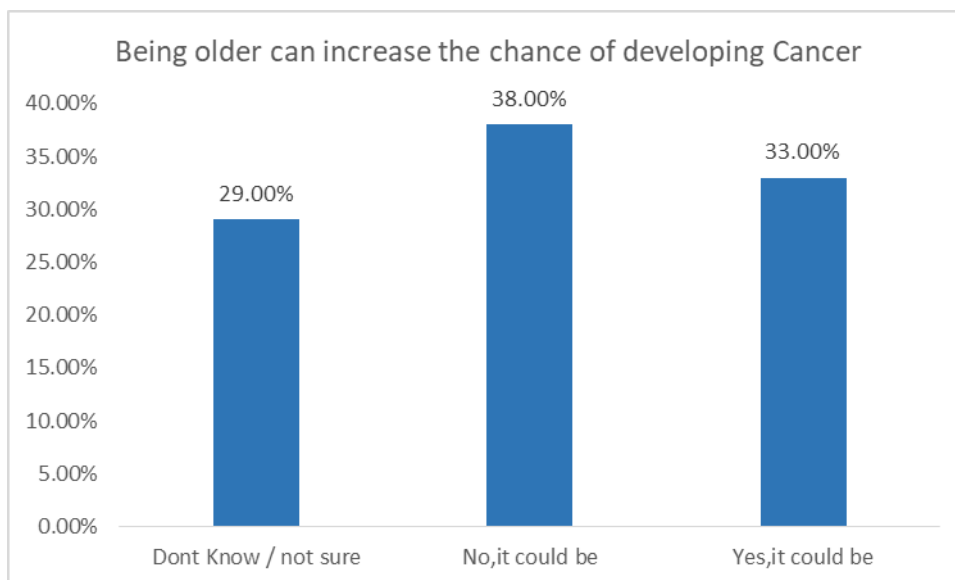
**37-Do you think that exposure to another person’s smoking can increase a person’s chance of developing cancer?**



**Fig: 4.154 Exposure to another person’s smoking can increase the chance of developing cancer**

58.50% of the respondents think that exposure to another person’s smoking can increase a person’s chance of developing cancer.

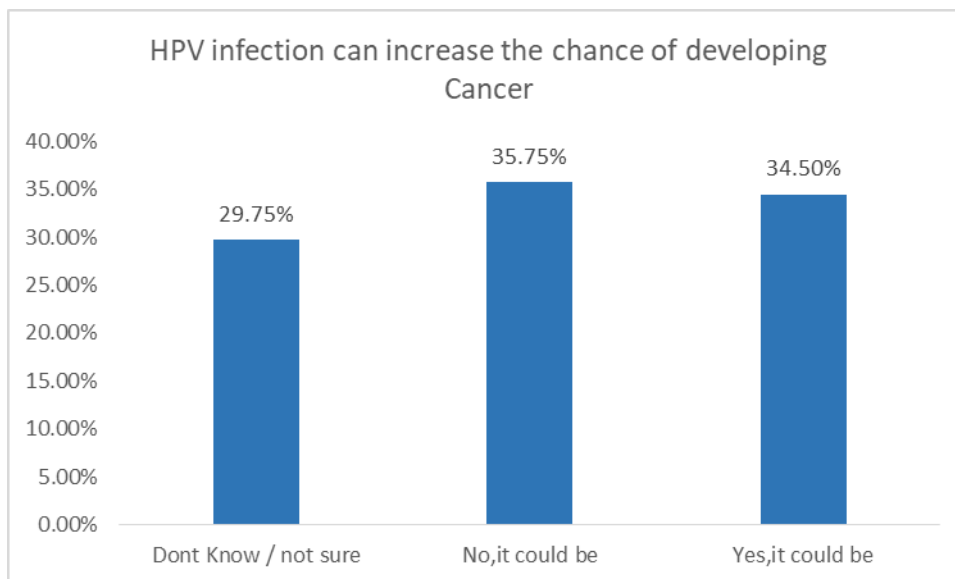
**38- Do you think that being older can increase a person’s chance of developing cancer?**



**Fig: 4.155 Being older can increase a person’s chance of developing cancer**

38% of the participants think that being older cannot increase a person’s chance of developing cancer.

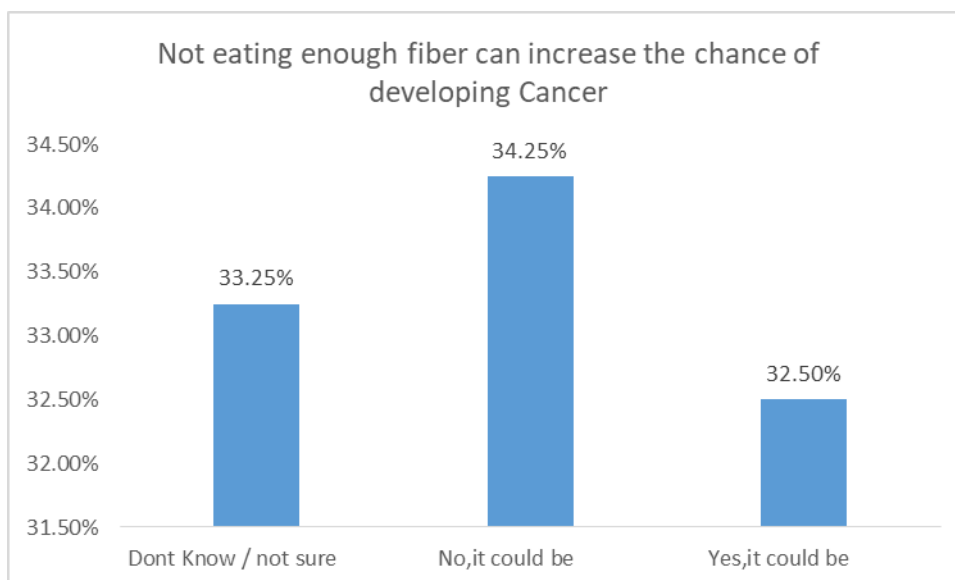
**39- Do you think that infection with HPV (human papillomavirus) can increase a person's chance of developing cancer?**



**Fig: 4.156 HPV infection can increase the chance of developing cancer**

34.50% of the respondents said that infection with HPV (human papillomavirus) will increase a person's chance of developing cancer.

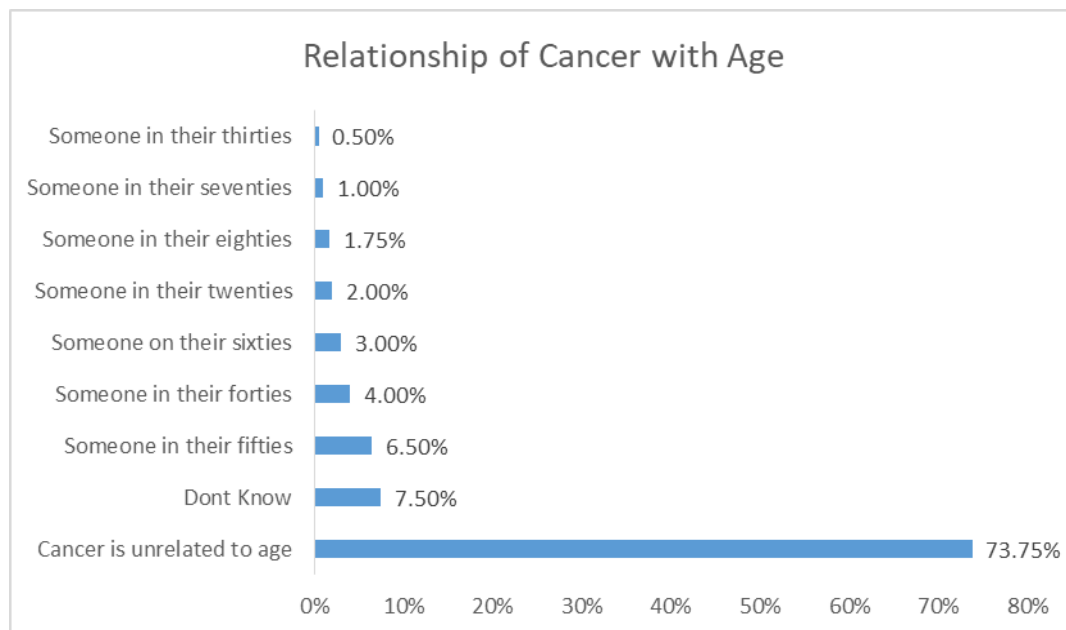
**40- Do you think that not eating enough fiber can increase a person's chance of developing cancer?**



**Fig: 4.157 Not eating enough fiber can increase a person's chance of developing cancer**

34.25% of the respondents responded that not eating enough fiber can increase a person's chance of developing cancer.

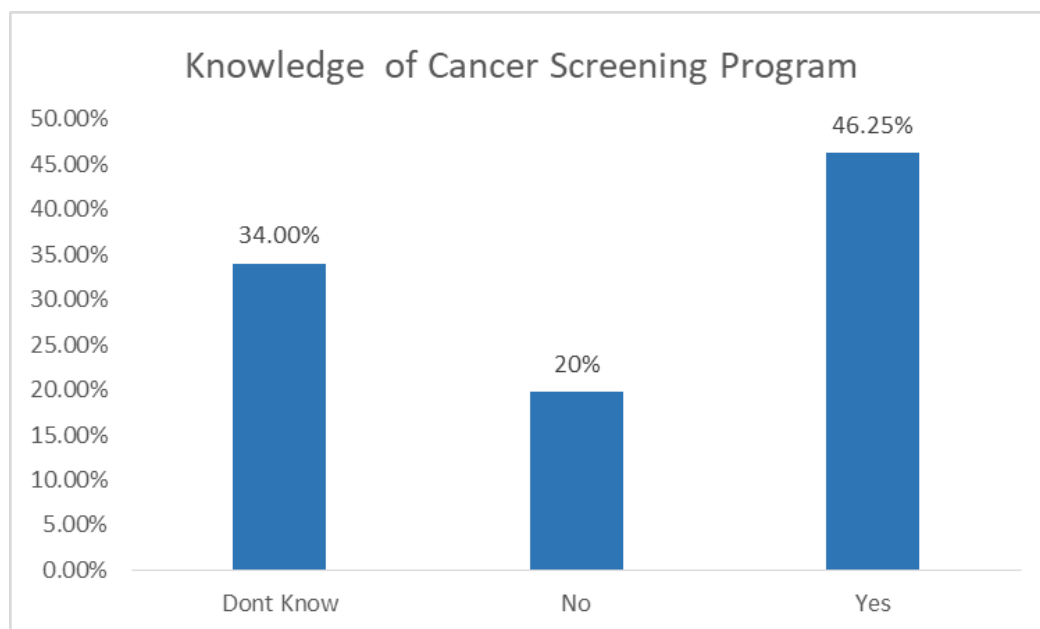
**41- Looking at the options on the card, who do you think is most likely to develop cancer?**



**Fig: 4.158 Relationship of cancer with age**

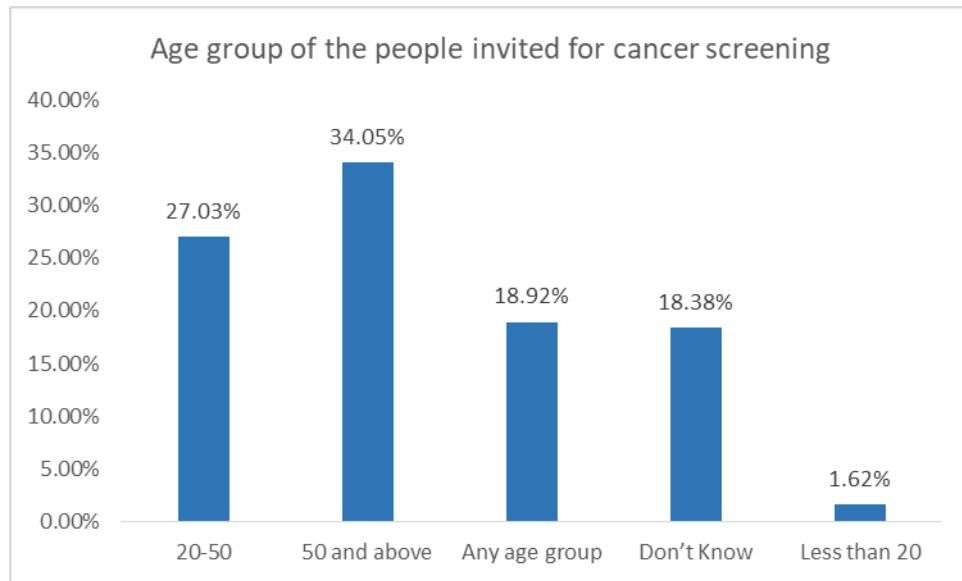
73.75% of the respondents said that Cancer is not related with age.

**42-As far as you're aware, is there any cancer screening program?**

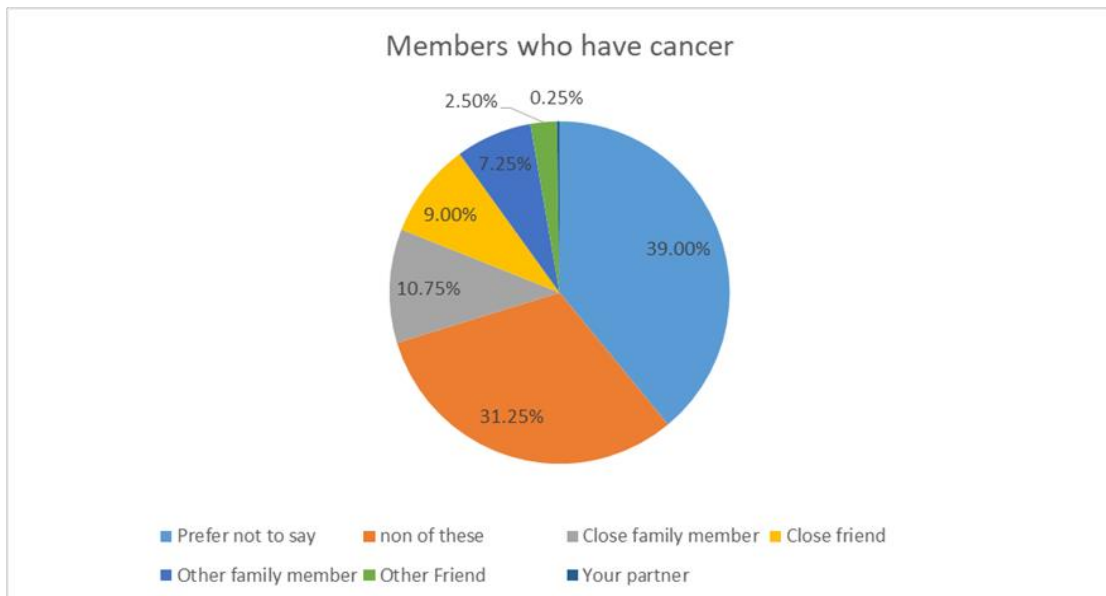


**Fig: 4.159 Knowledge of cancer screening program**

46.25% of the respondents have the basic knowledge about Cancer screening Program.

**42 a- If yes at what age are people invited for cancer screening?****Fig: 4.160 Age group of the people invited for cancer screening**

Out of the participants who have the knowledge of Cancer screening program, 27.03% of the respondents said that people belonging to the age group of 20-50 are invited for Cancer screening program.

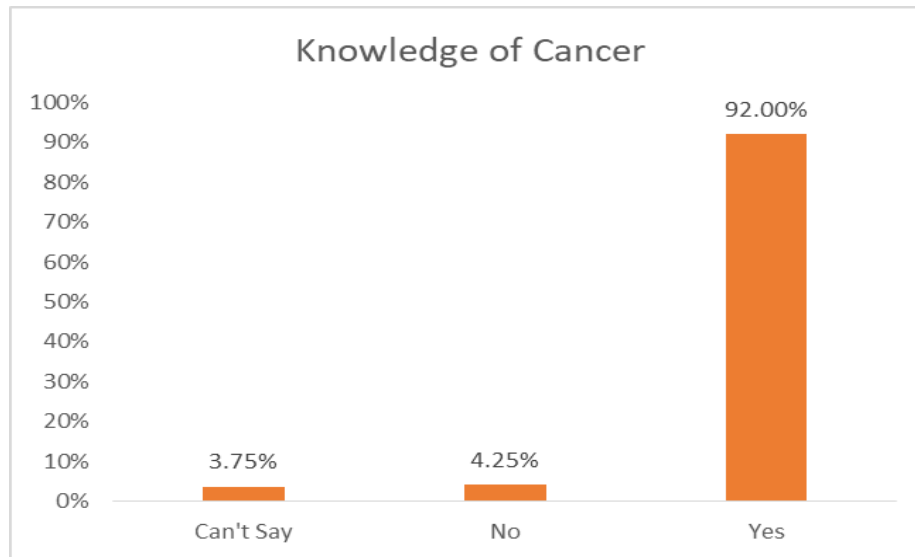
**43- Have you, or any of your friends or family had cancer?****Fig: 4.161 You or any of your friends or family had cancer**

39% of the respondents said they will not reveal anything about whether they or any of their friends or family member had Cancer.

*Pre media intervention results comparisons with the post media intervention results*

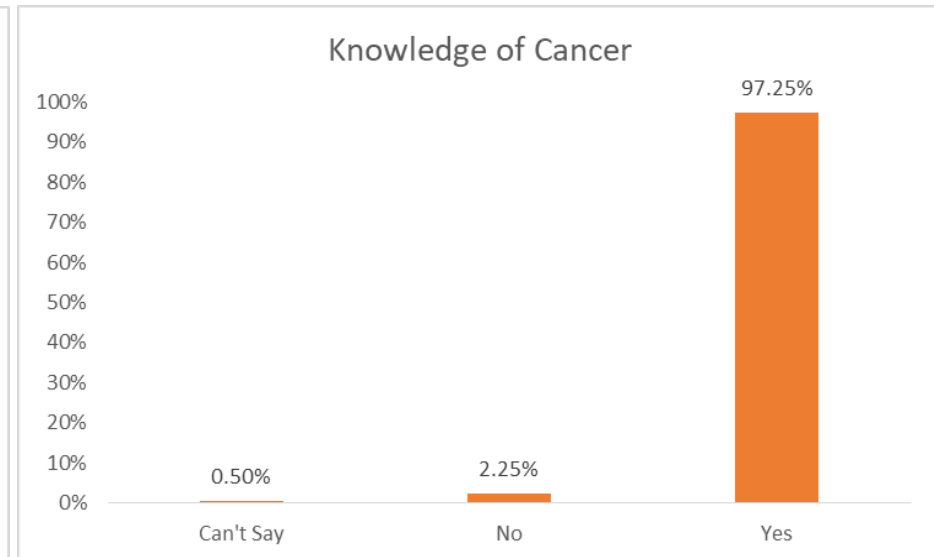
**1-DO YOU KNOW ANYTHING ABOUT CANCER?**

*Pre*



**Figure 4.10**

*Post*

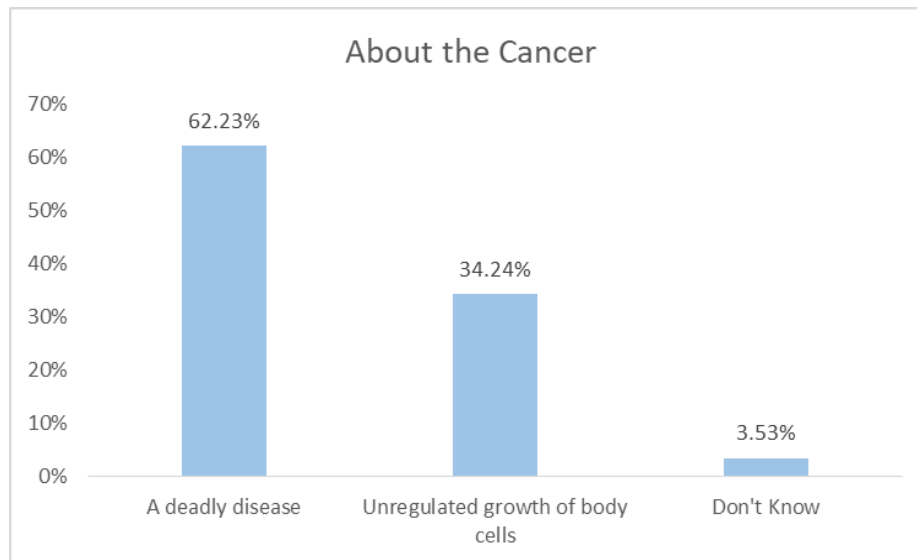


**Figure 4.86**

Above figures show that post intervention knowledge regarding Cancer of the respondents has increase by 5.25%.

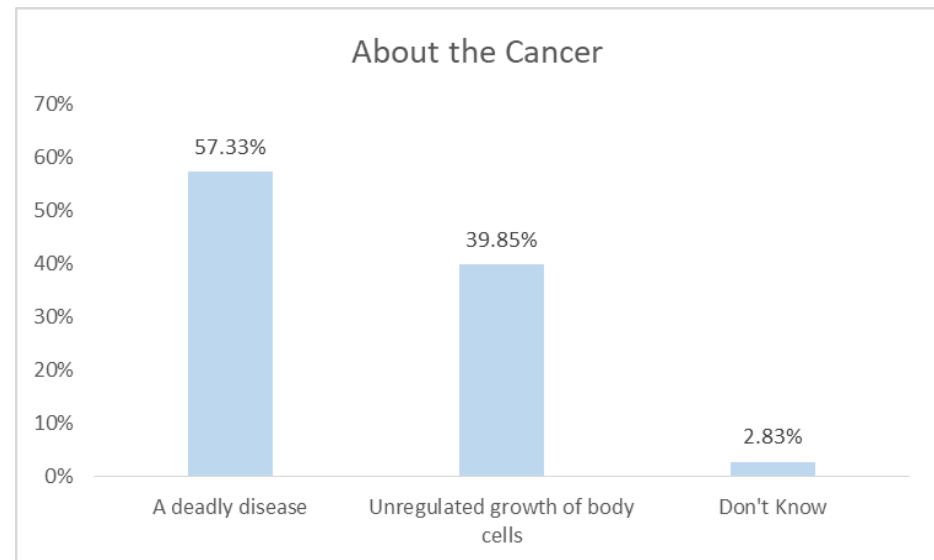
1a-If Yes, Kindly tell what is cancer?

*Pre*



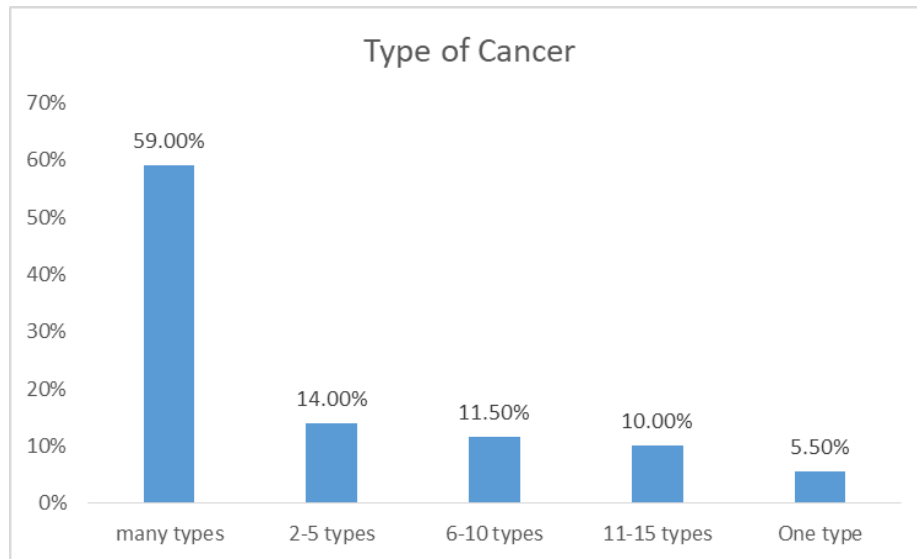
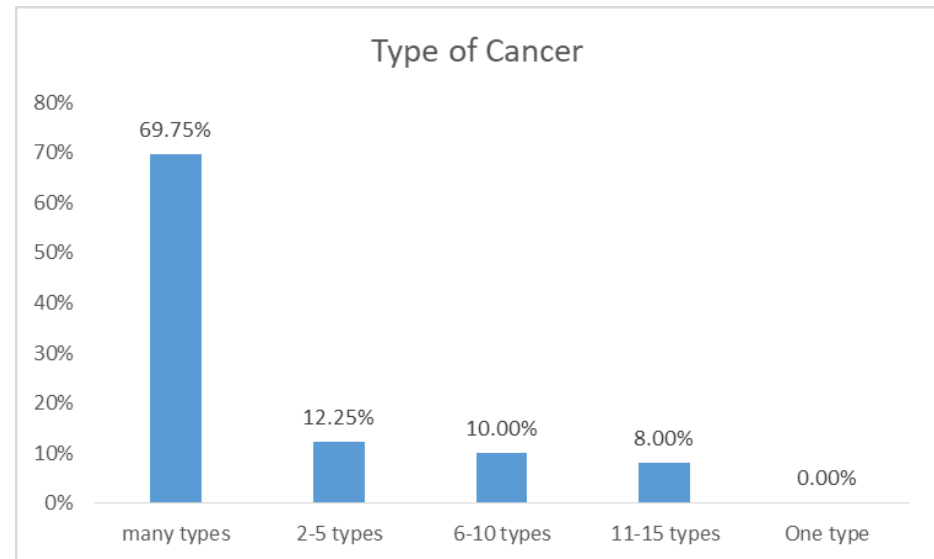
**Figure 4.11**

*Post*



**Figure 4.87**

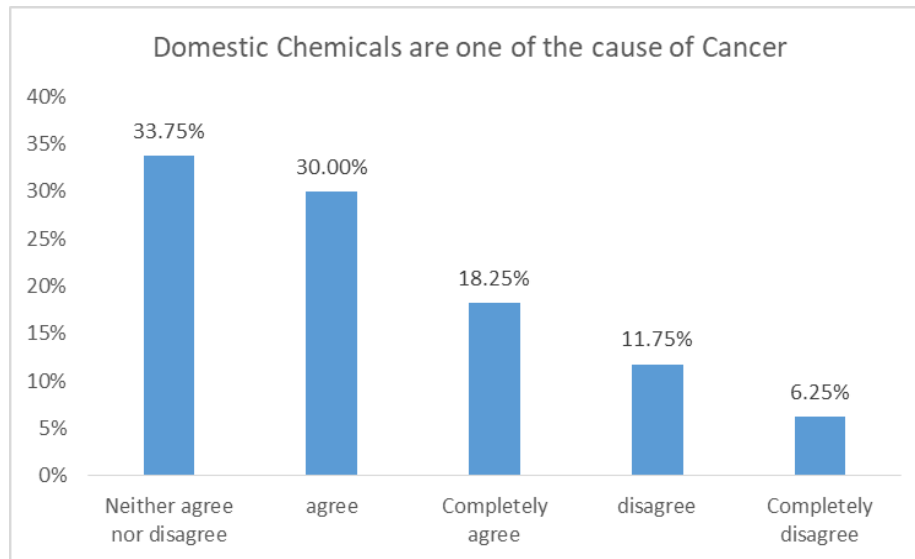
Above figures show that post intervention, 5% of the respondents stopped thinking that cancer is a deadly disease while 5% of the respondents agreed that cancer is unregulated growth of body cells.

**3-How many types of cancer are there?***Pre***Figure 4.13***Post***Figure 4.89**

Above figures show that post intervention 10% of the respondents agreed that cancer has many types.

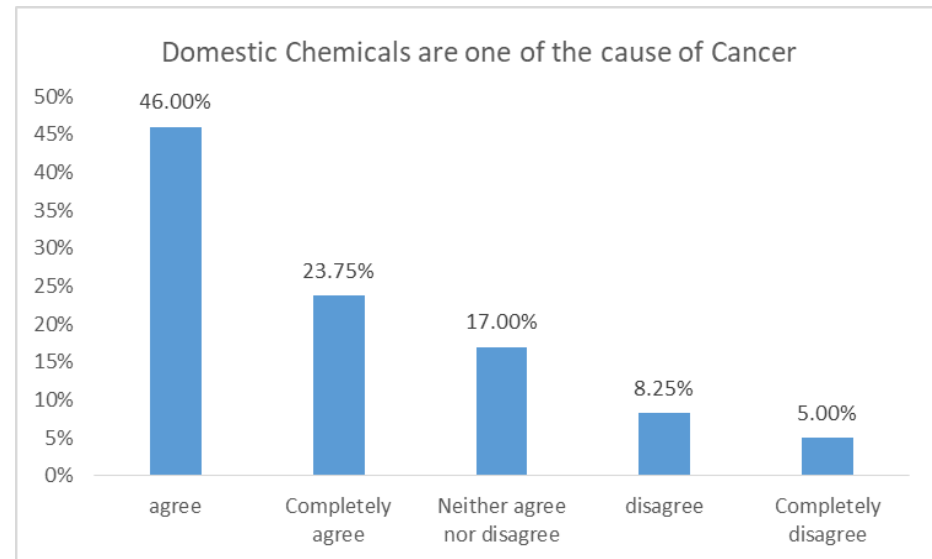
### 5-Chemicals used in cleaning house and utensils can also cause cancer?

*Pre*



**Figure 4.15**

*Post*

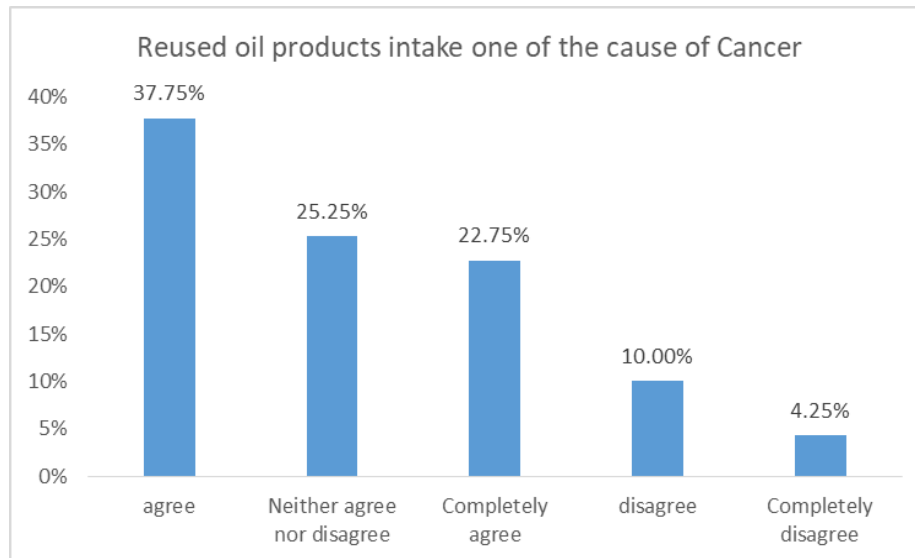


**Figure 4.91**

Above figures show that post intervention 46% of the respondents agreed that Chemicals used in cleaning house and utensils can also cause cancer.

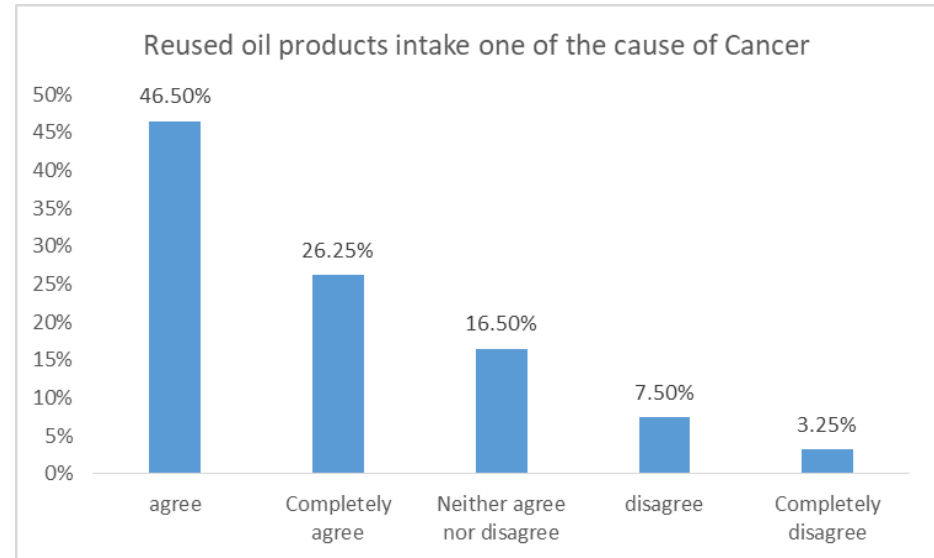
6 Do you agree that consumption of food made in an oil which is heated and reheated again and again can cause cancer?

*Pre*



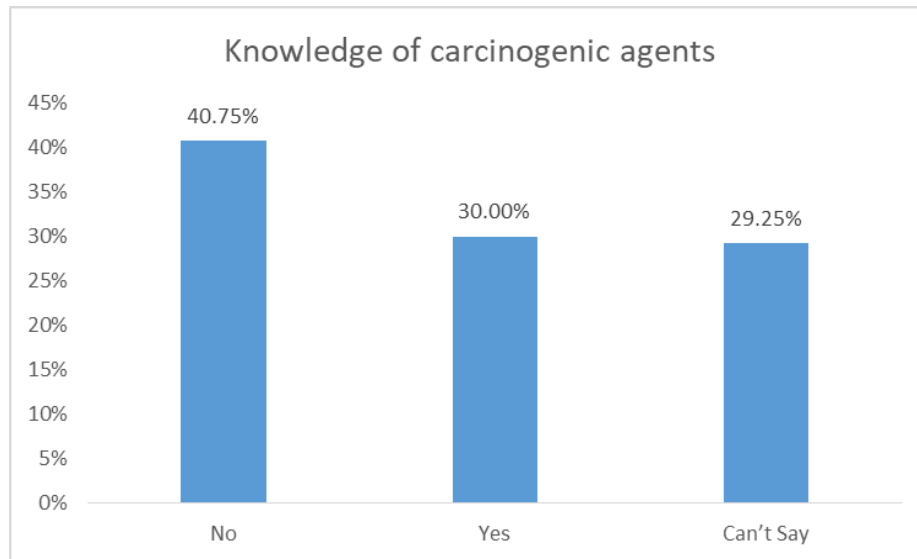
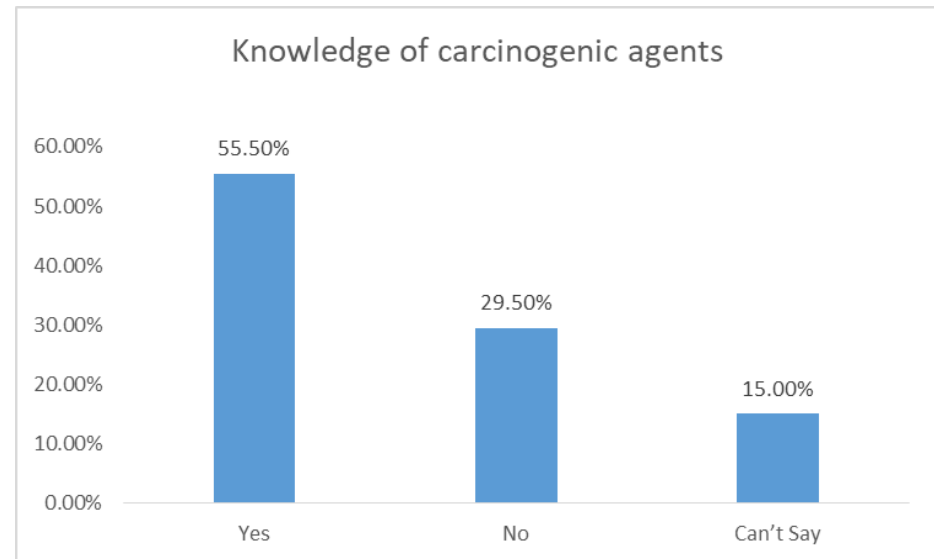
**Figure 4.16**

*Post*

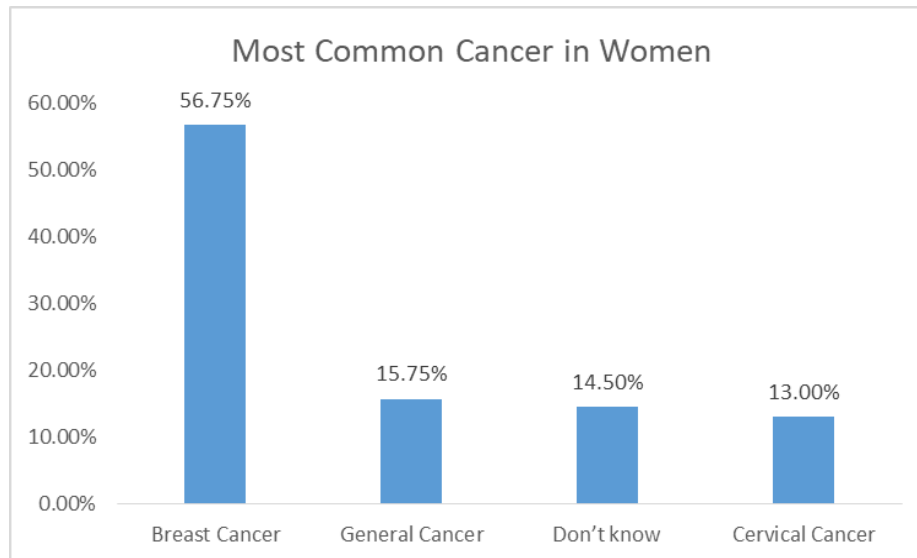
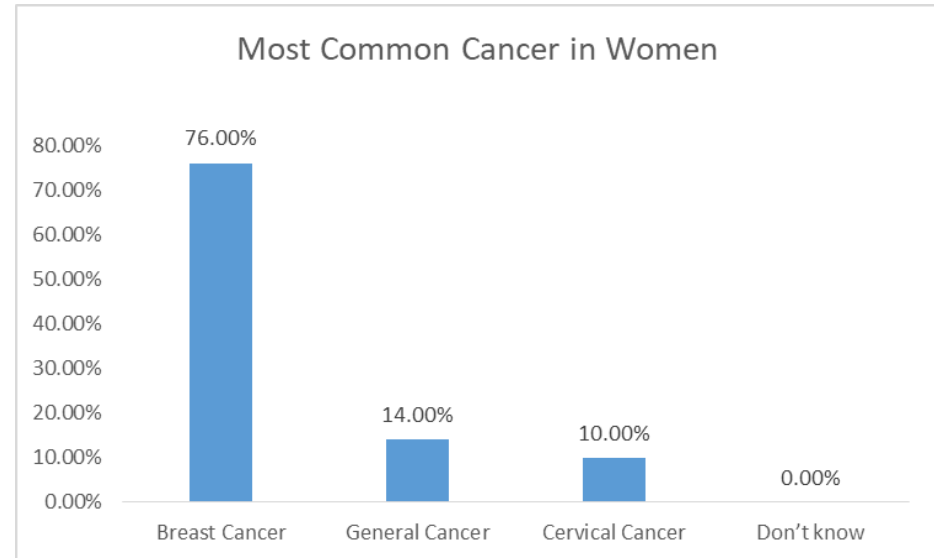


**Figure 4.92**

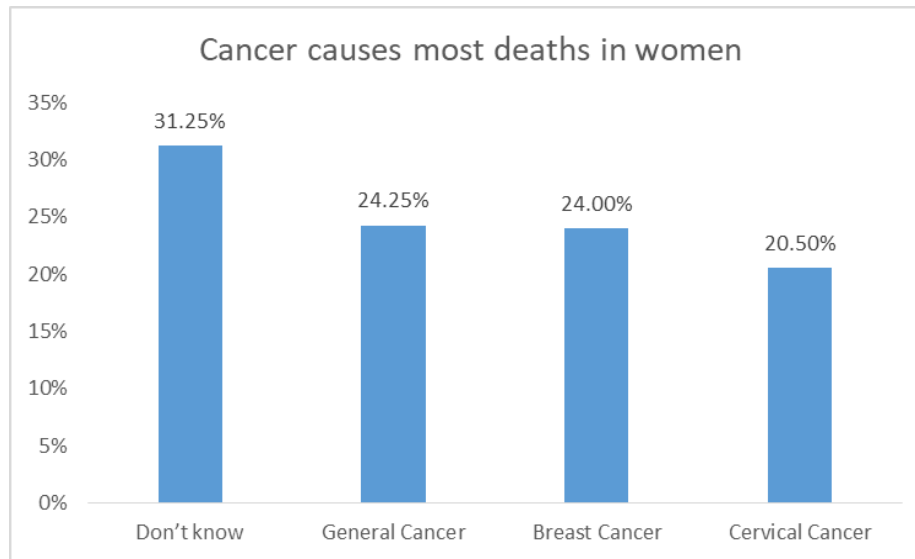
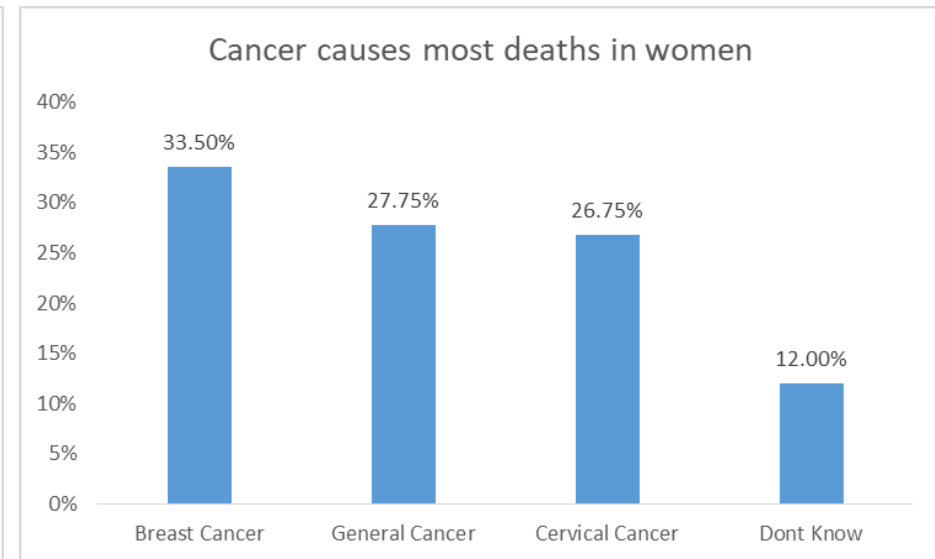
Above figures show that post intervention 46.50% of the respondents agreed with the fact that consumption of food made in oil which is heated and reheated again can cause cancer.

**7-Do you know about carcinogenic agents?***Pre***Figure 4.17***Post***Figure 4.93**

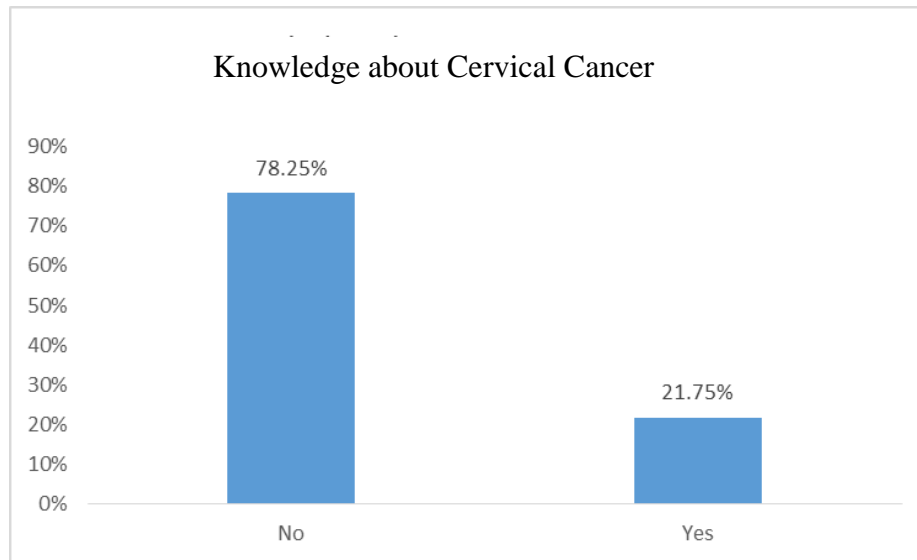
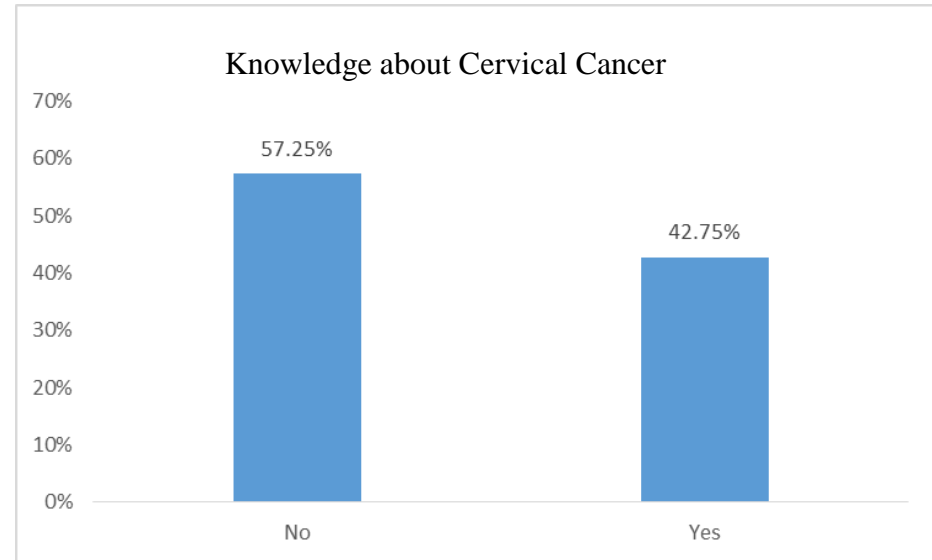
Above figures show that post intervention 55.55% of the respondents gained knowledge about carcinogenic agents.

**8-Which is the most common cancer in women?***Pre***Figure 4.19***Post***Figure 4.95**

Above figures show that post intervention 76% of the respondents responses believed that most common cancer among women is Breast Cancer.

**10-Which cancer causes most deaths in women?***Pre***Figure 4.21***Post***Figure 4.97**

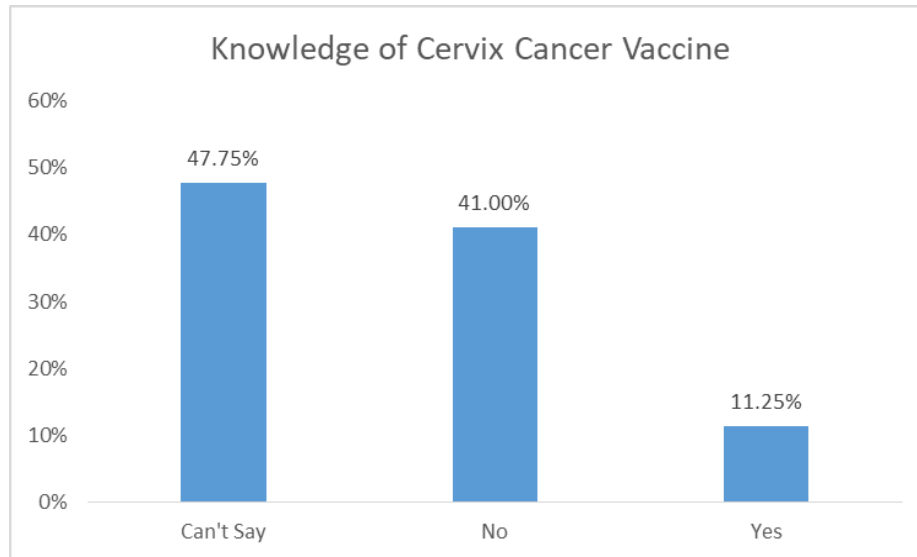
Above figures show that post intervention 33.50% of the respondents responded that Breast Cancer causes most deaths in females.

**11- Do you what is cervical cancer?***Pre***Figure 4.22***Post***Figure 4.98**

Above figures show that respondents' knowledge about Cervical Cancer has increased from 21.75% to 42.75%.

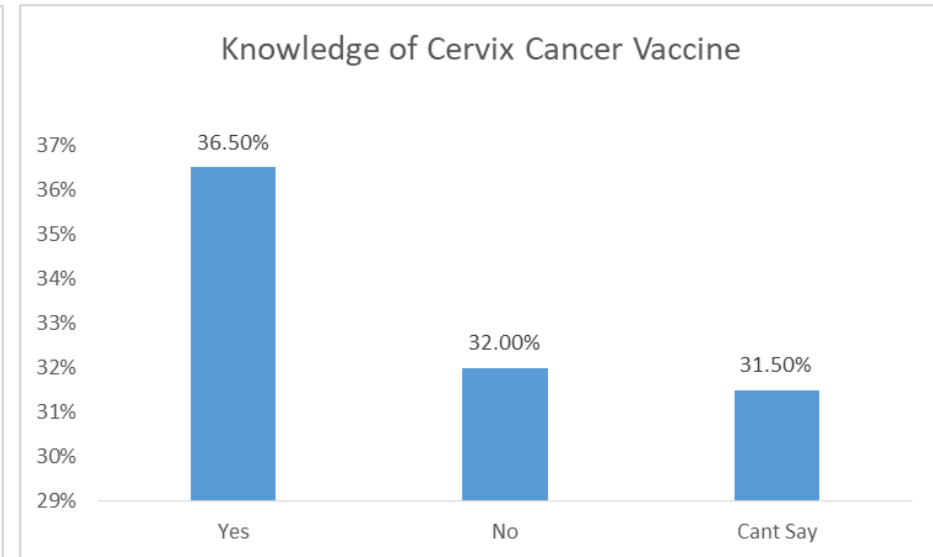
12-Do you know that there is any vaccine which can prevent cervix cancer?

*Pre*



**Figure 4.24**

*Post*

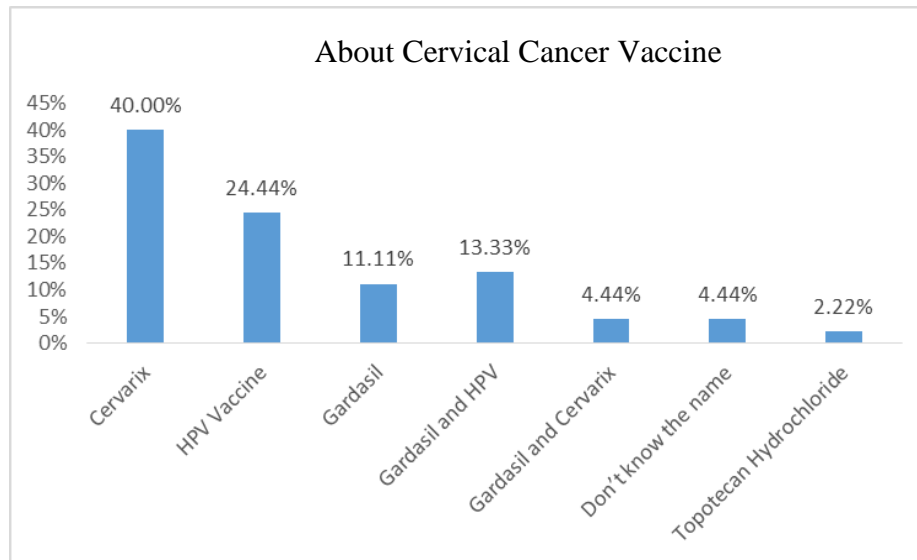


**Figure 4.100**

Above figures show that the respondents knowledge about Cervical Cancer Vaccine has increased from 11.25% to 36.50%.

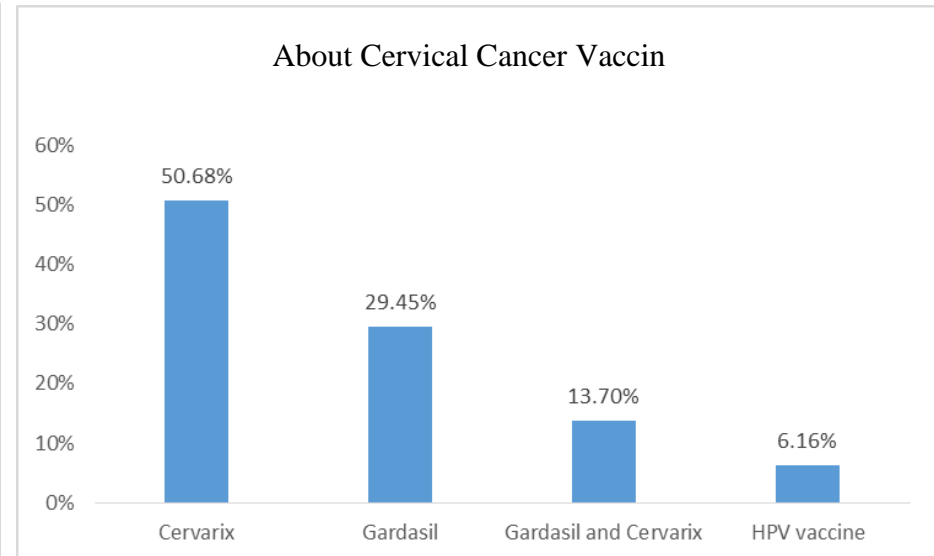
12 a- If yes, please name it

*Pre*



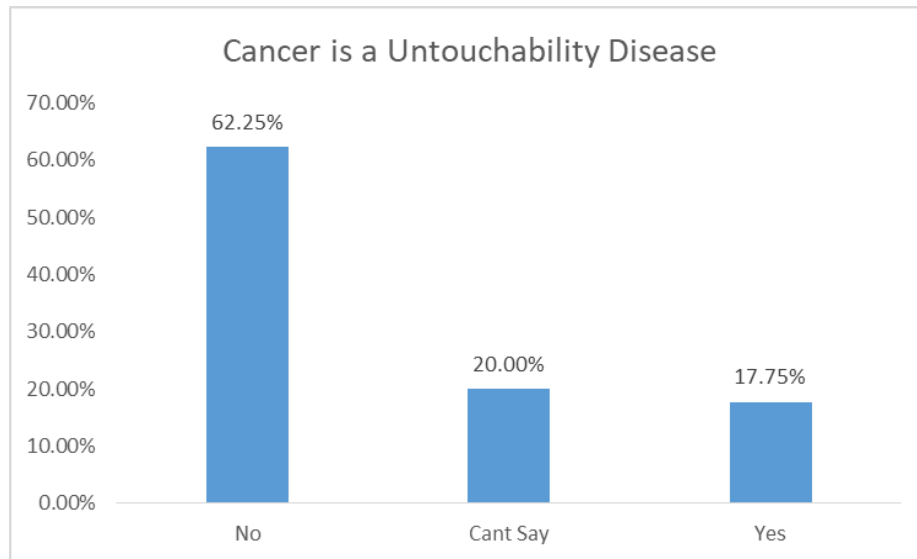
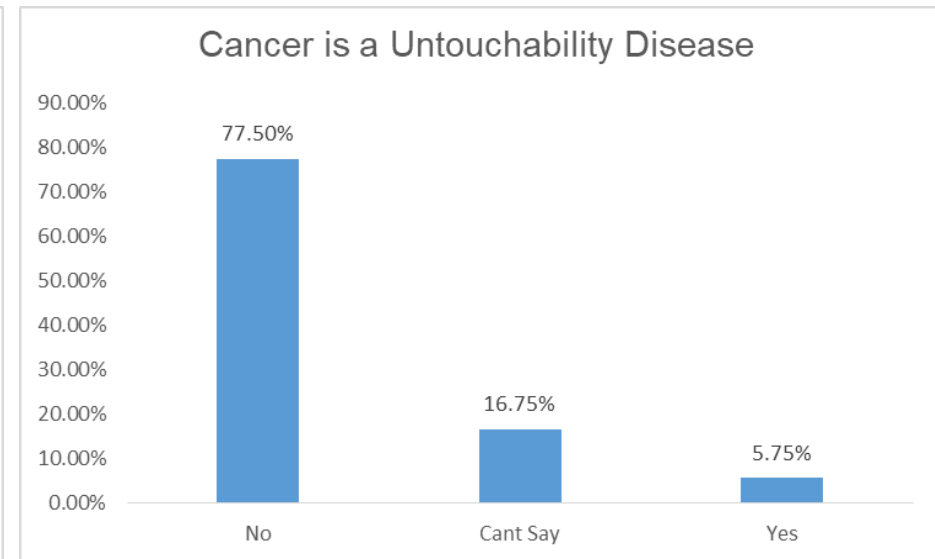
**Figure 4.25**

*Post.*

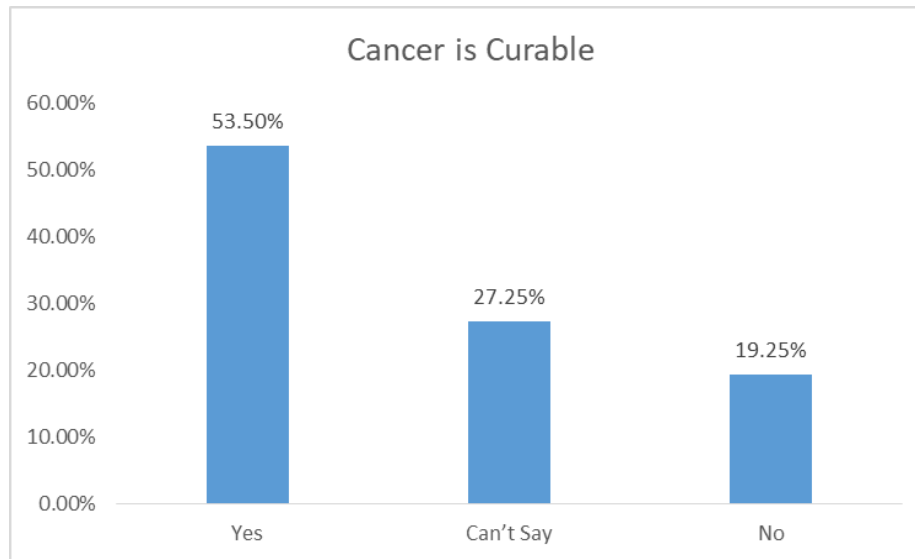
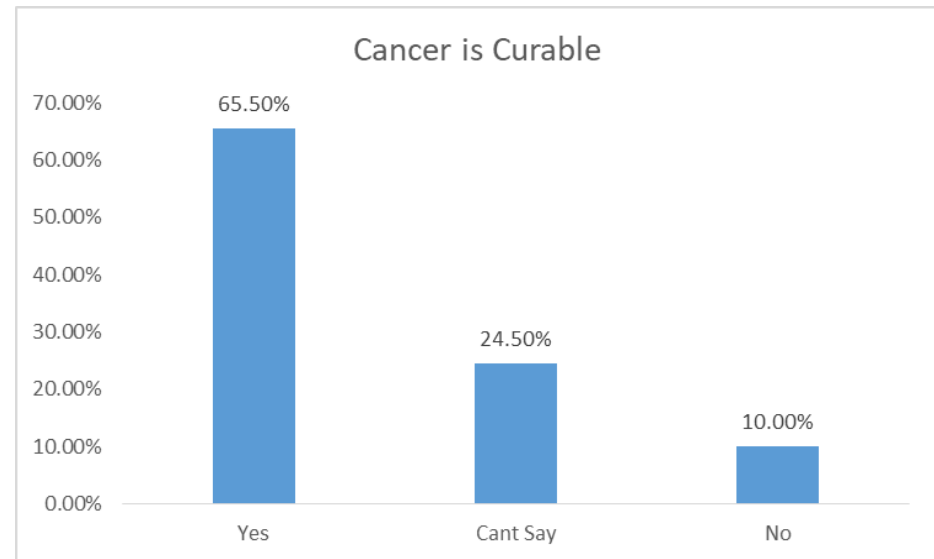


**Figure 4.101**

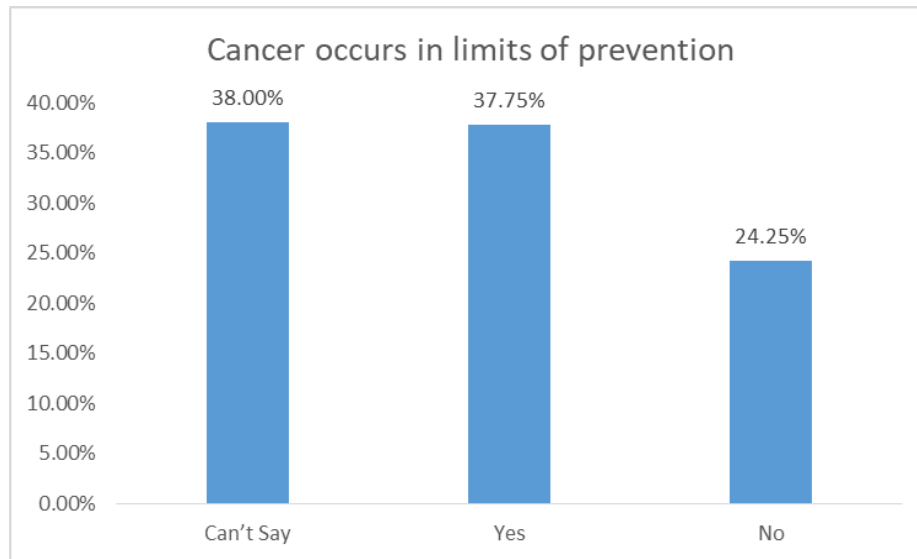
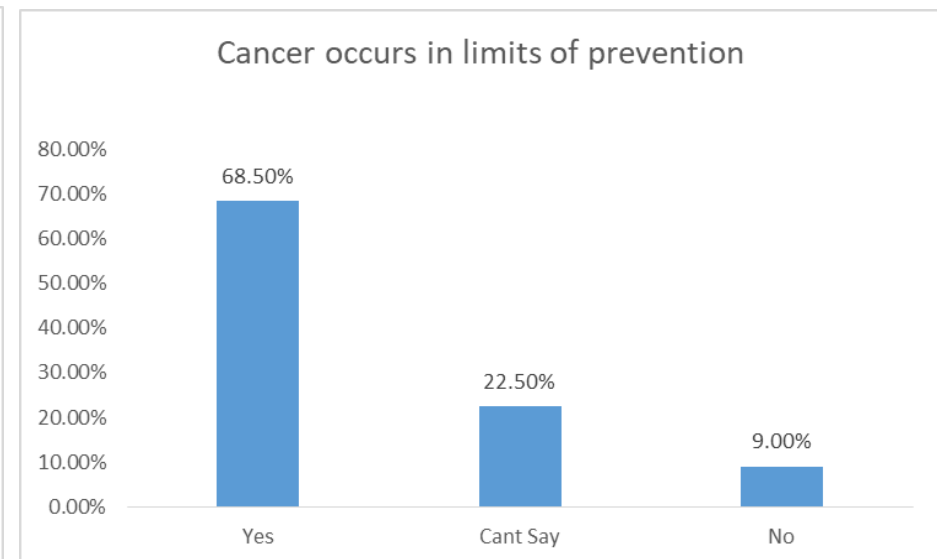
Above figures show that post intervention respondents named Cervical Cancer Vaccines correctly.

**21 Do you think that cancer is a disease of untouchability?***Pre***Figure 4.34***Post***Figure 4.110**

Above figures show post intervention 77.50% of the respondents responded that Cancer is not a disease of untouchability.

**27- Do you think that prevention from Cancer is possible?***Pre***Figure 4.40***Post***Figure 4.116**

Above figures show that 12% of the respondents response improved post intervention and researcher observed that 65.50% of the participants believed that Cancer is Curable.

**28- Do you think that cancer is within the limits of prevention?***Pre***Figure 4.41***Post***Figure 4.117**

Above figures show that 30.75% of the respondents response improved post intervention and researcher observed that 68.50% of the participants believed that Cancer is in the limits of prevention.

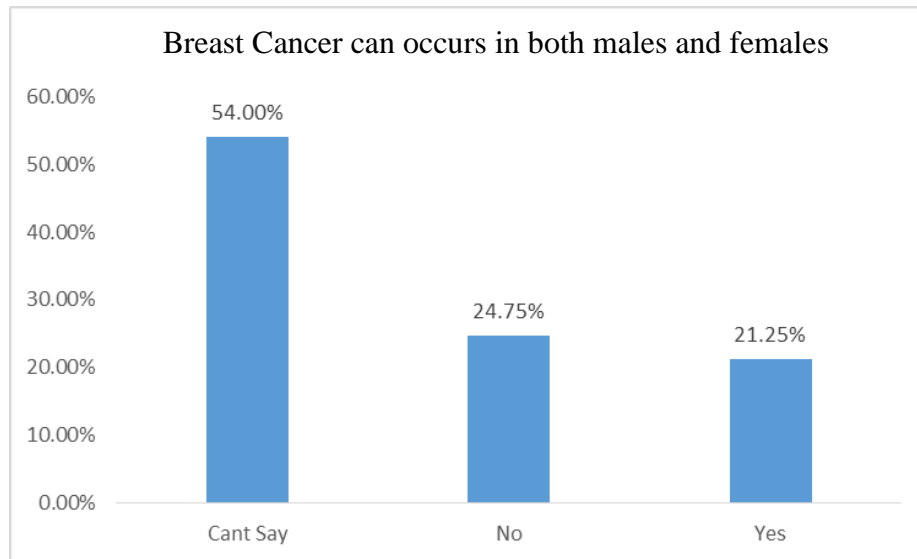
**16- Breast cancer can happen to both men and women?***Pre*

Figure 4.29

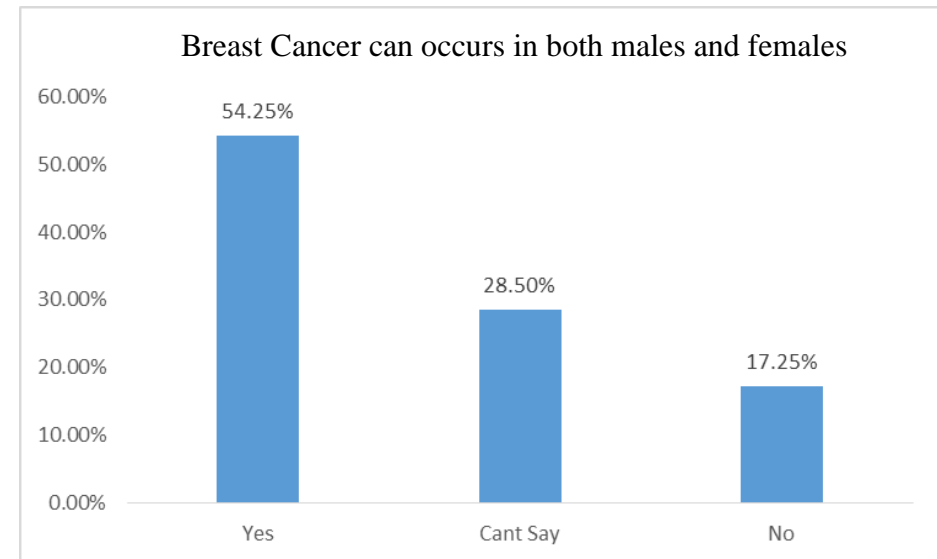
*Post*

Figure 4.105

Above figures show that 33% of the respondents' response improved post intervention, 54.25% of the respondents responded that Breast Cancer can occur in both male and female.

## Section 3 The Cancer Awareness Measure

## 6- Do you think a persistent cough or hoarseness could be a sign of cancer?

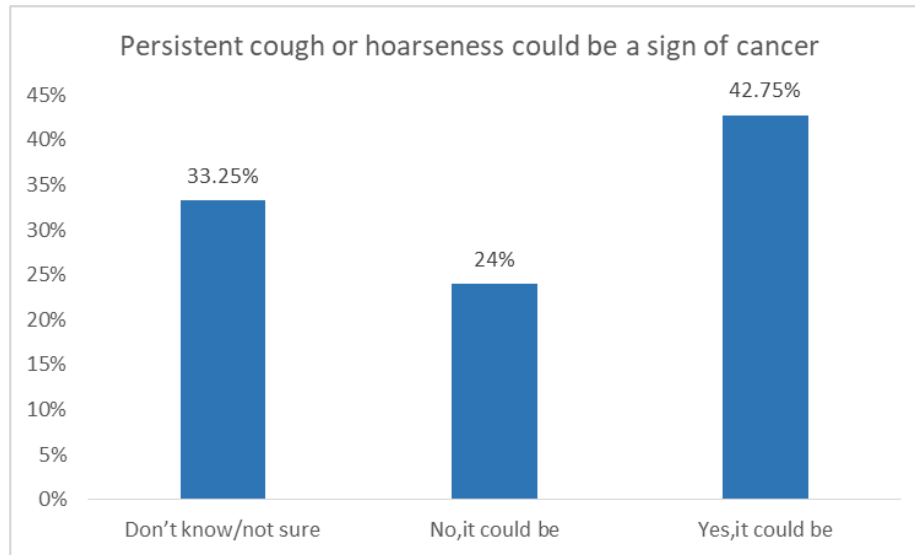
*Pre*

Figure 4.47

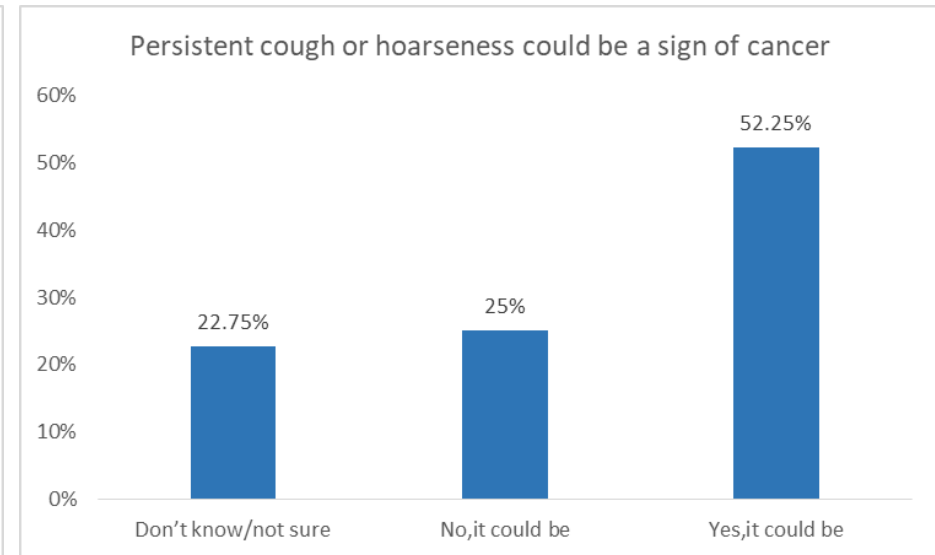
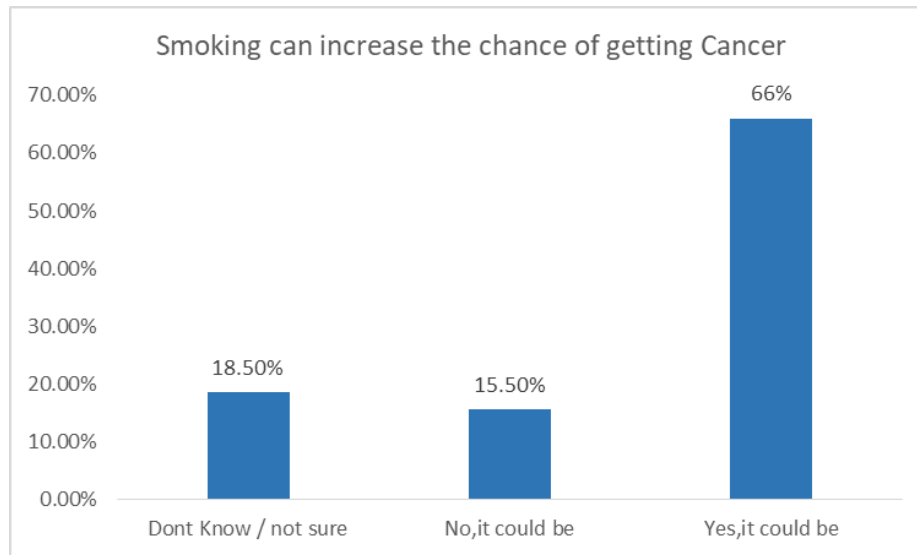
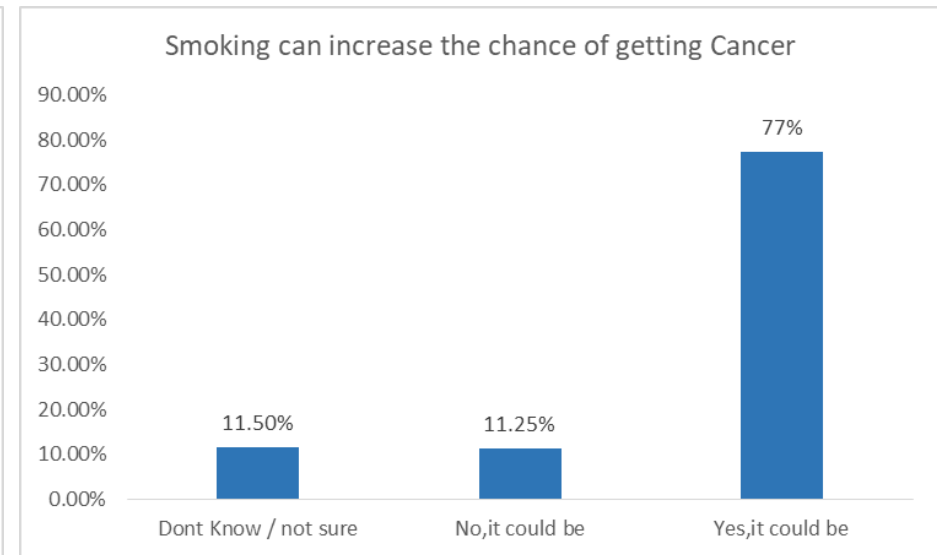
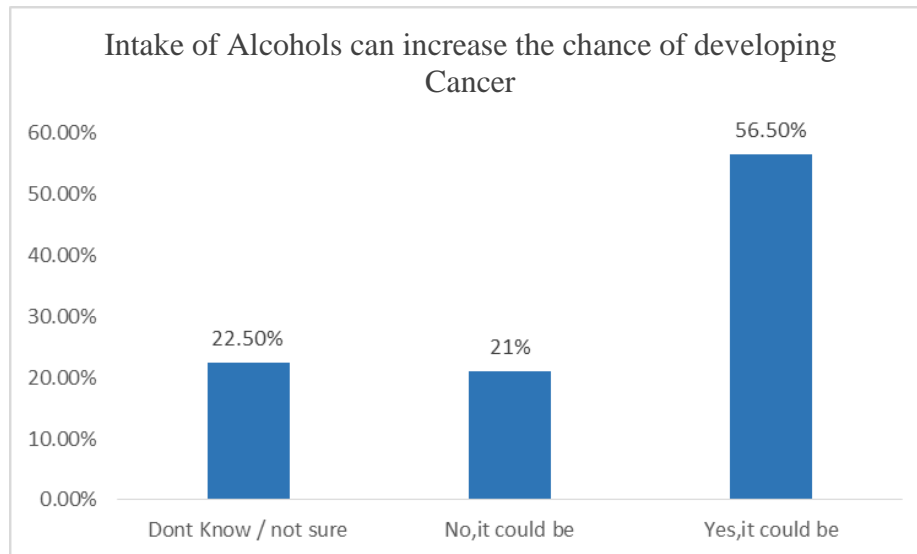
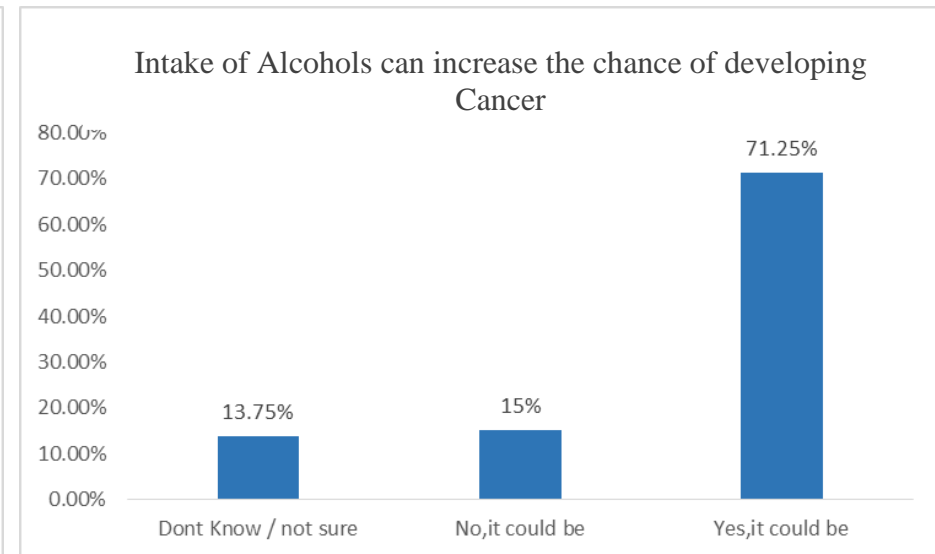
*Post*

Figure 4.123

Above figures show that post intervention 9.5% increase in the number of respondents regarding warning signs or symptoms.

**29- Do you think that smoking can increase a person's chance of developing cancer?***Pre***Figure 4.70***Post***Figure 4.146**

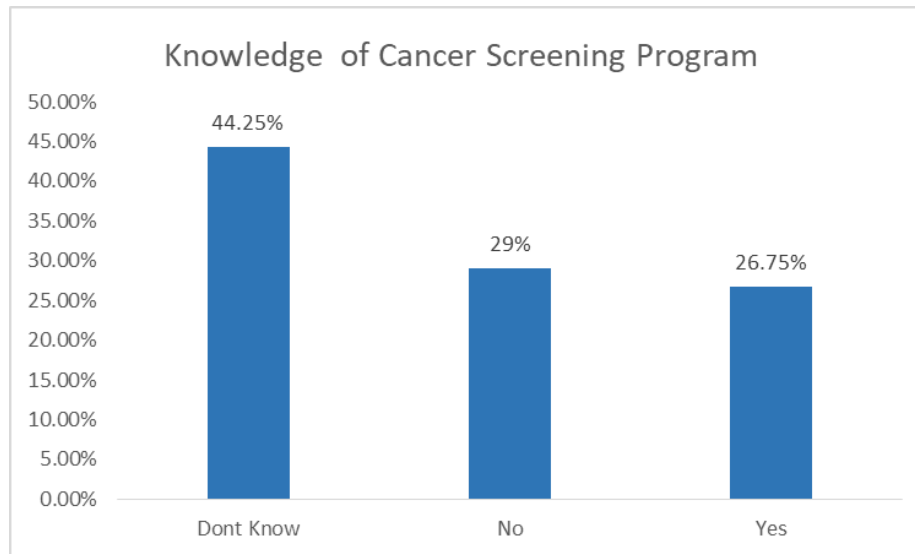
Above figures show that post intervention 11% increase in the participants' response regarding smoking can increase a person's chance of developing cancer.

**33-Do you think that drinking alcohol can increase a person's chance of developing cancer?***Pre***Figure 4.74***Post***Figure 4.150**

Above figures show that post intervention 14.75% more participants believed that drinking alcohol can increase a person's chance of developing cancer.

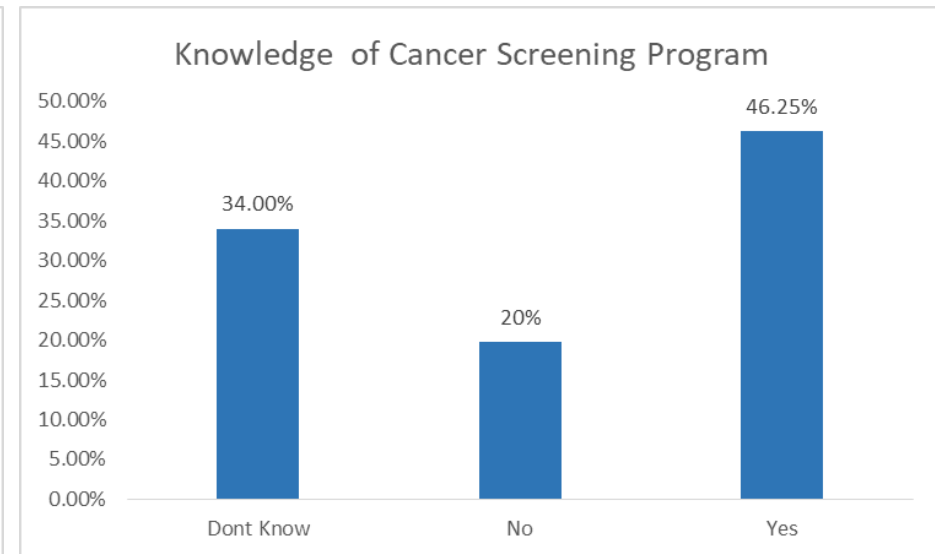
42-As far as you're aware, is there any cancer screening program?

*Pre*



**Figure 4.83**

*Post*

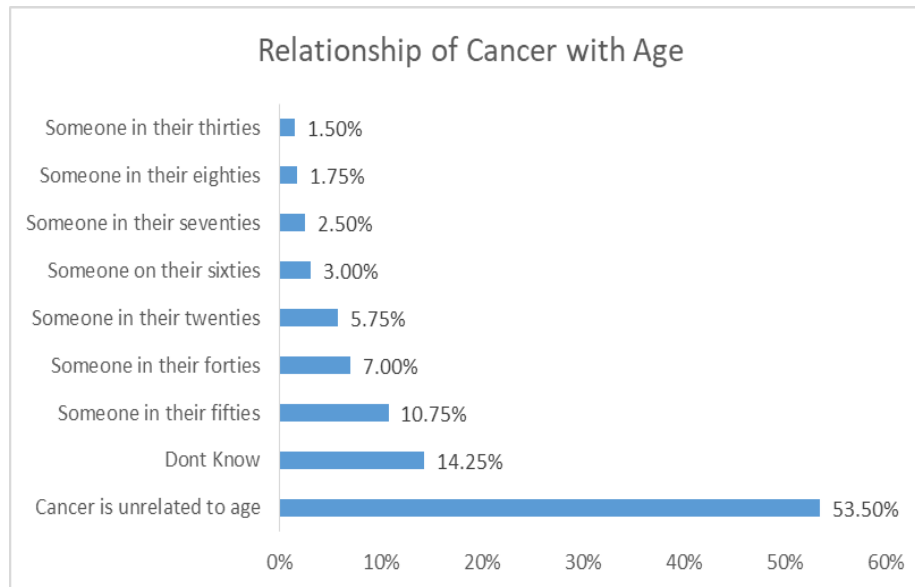


**Figure 4.159**

Above figures show that 19.5% of the participants' knowledge about Cancer Screening program has increased after post strategic media intervention.

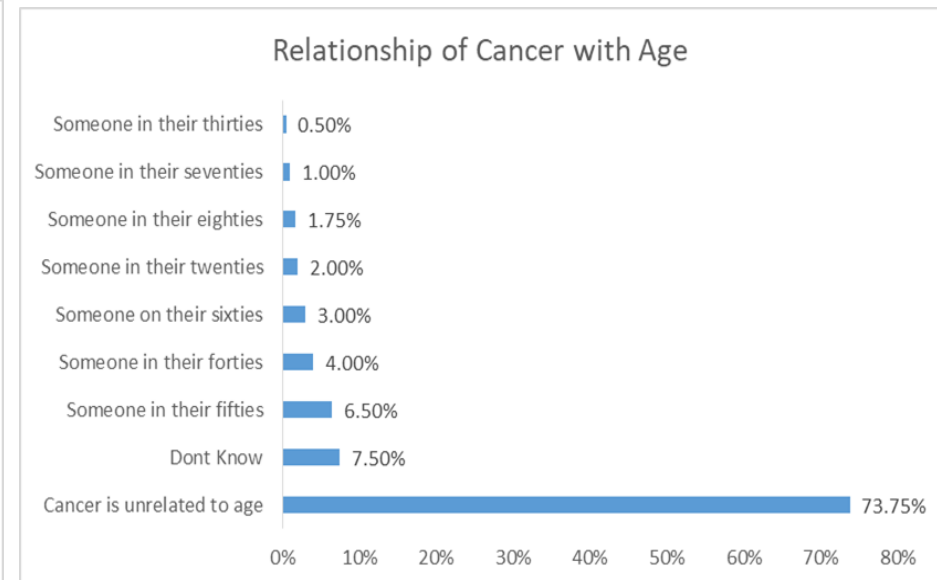
**41- Looking at the options on the card, who do you think is most likely to develop cancer?**

*Pre*



**Figure 4.82**

*Post*



**Figure 4.158**

Above graph shows that 20% more of the respondents realised post strategic media intervention that Cancer is not related to the Age.

## McNemar-Bowker Test

Reason to select the McNemar-Bowker Test:

- 1) Our objective is to see the impact of media intervention among the participants involve in the study. As the observations are recorded are paired therefore researcher had use McNemar- Bowker Test.
- 2) As researcher has the data in categories therefore we choose this test.
- 3) As the categories in the variables are more than two therefore researcher has choosen McNemar- Bowker Test.

Hypothesis for McNemar- Bowker Test:

**H<sub>0</sub> (Null Hypothesis):** there is no difference in the proportion of participants' response pre and post media intervention

**H<sub>1</sub> (Alternative Hypothesis):** there is the difference in the proportion of participants' response pre and post media intervention

Do you think persistent unexplained pain could be a sign of cancer?

Before	After			Total	P-Value (Level of significance=0.05)
	Don't know not sure	No, it could be	Yes, it could be		
<b>Don't know not sure</b>	56	19	26	101	<b>0.04407</b>
<b>No, it could be</b>	8	48	35	91	
<b>Yes, it could be</b>	14	34	160	208	
<b>Total</b>	78	101	221	400	

**Table 4.1- Persistent unexplained pain could be a sign of cancer**

From the above table it is clearly explain that P value is less than level of significance (0.05) therefore Null hypothesis cannot be accepted.

From the above table, P value shows that there is the difference in the post media intervention on the participants. Which indicates that participants think that persistent unexplained pain could be a sign of cancer.

**Do you think unexplained bleeding could be a sign of cancer?**

Before	After			Total	P-Value (Level of significance=0.05)
	Don't know not sure	No, it could be	Yes, it could be		
<b>Don't know not sure</b>	65	15	25	105	<b>0.03194</b>
<b>No, it could be</b>	6	52	35	93	
<b>Yes, it could be</b>	12	30	160	202	
<b>Total</b>	83	97	220	400	

**Table 4.2- unexplained bleeding could be a sign of cancer**

From the above table it is clearly explain that P value is less than level of significance (0.05) therefore Null hypothesis cannot be accepted.

From the above table, P value shows that there is the difference in the post media intervention on the participants. Which indicates that participants think that unexplained bleeding could be a sign of cancer.

**Do you think a persistent cough or hoarseness could be a sign of cancer?**

	After				
Before	Don't know not sure	No, it could be	Yes, it could be	Total	P-Value (Level of significance=0.05)
Don't know not sure	62	27	44	133	<b>0.00023</b>
No, it could be	14	36	46	96	
Yes, it could be	15	37	119	171	
Total	91	100	209	400	

**Table 4.3-** a persistent cough or hoarseness could be a sign of cancer

From the above table it is clearly explain that P value is less than level of significance (0.05) therefore Null hypothesis cannot be accepted.

From the above table, P value shows that there is the difference in the post media intervention on the participants. Which indicates that participants think that persistent cough or hoarseness could be a sign of cancer.

**Do you think a persistent change in bowel or bladder habits could be a sign of cancer?**

	After				
Before	Don't know not sure	No, it could be	Yes, it could be	Total	P-Value (Level of significance=0.05)
Don't know not sure	67	18	24	109	<b>0.00289</b>
No, it could be	8	47	42	97	
Yes, it could be	7	34	153	194	
Total	82	99	219	400	

**Table 4.4-** A persistent change in bowel or bladder habits could be a sign of cancer

From the above table it is clearly explain that P value is less than level of significance (0.05) therefore Null hypothesis cannot be accepted.

From the above table, P value shows that there is the difference in the post media intervention on the participants. Which indicates that participants think that persistent change in bowel or bladder habits could be a sign of cancer.

**Do you think a sore that does not heal could be a sign of cancer?**

	After				
Before	Don't know not sure	No, it could be	Yes, it could be	Total	P-Value (Level of significance=0.05)
Don't know not sure	51	8	28	87	<b>0.00875</b>
No, it could be	11	36	41	88	
Yes, it could be	8	39	178	225	
Total	70	83	247	400	

**Table 4.5-** A sore that does not heal could be a sign of cancer

From the above table it is clearly explain that P value is less than level of significance (0.05) therefore Null hypothesis cannot be accepted.

From the above table, P value shows that there is the difference in the post media intervention on the participants. Which indicates that participants think that a sore that does not heal could be a sign of cancer.

**Do you think unexplained weight loss could be a sign of cancer?**

	After				
Before	Don't know not sure	No, it could be	Yes, it could be	Total	P-Value (Level of significance=0.05)
Don't know not sure	65	2	16	83	<b>0.01632</b>
No, it could be	9	70	30	109	
Yes, it could be	5	32	171	208	
Total	79	104	217	400	

**Table 4.6-** unexplained weight loss could be a sign of cancer

From the above table it is clearly explain that P value is less than level of significance (0.05) therefore Null hypothesis cannot be accepted.

From the above table, P value shows that there is the difference in the post media intervention on the participants. Which indicates that participants think that unexplained weight loss could be a sign of cancer.

**I find it embarrassing talking to the doctor about my symptoms.**

After							
Before	Agree	Completely Agree	Completely Disagree	Disagree	Neither agree nor disagree	Total	P-Value (Level of significance=0.05)
Agree	19	6	1	12	7	45	<b>0.00141</b>
Completely Agree	3	47	3	6	9	68	
Completely Disagree	8	6	52	12	10	88	
Disagree	4	3	3	65	12	87	
Neither agree nor disagree	18	3	7	21	63	112	
Total	52	65	66	116	101	400	

**Table 4.7-** I find it embarrassing talking to the doctor about my symptoms

From the above table it is clearly explain that P value is less than level of significance (0.05) therefore Null hypothesis cannot be accepted.

From the above table, P value shows that there is the difference in the post media intervention on the participants. Which indicates that participants disagree with that they embarrassing talking to the doctor about their symptoms.

**Would be worried the doctor wouldn't take my symptom(s) seriously.**

Before	Agree	Completely Agree	Completely Disagree	Disagree	Neither agree nor disagree	Total	P-Value (Level of significance=0.05)
Agree	37	2	2	16	9	66	<b>0.00187</b>
Completely Agree	4	38	0	14	15	71	
Completely Disagree	1	2	28	8	6	45	
Disagree	6	1	1	71	15	94	
Neither agree nor disagree	13	9	5	22	75	124	
Total	61	52	36	131	120	400	

**Table 4.8-** Would be worried the doctor wouldn't take my symptom(s) seriously

From the above table it is clearly explain that P value is less than level of significance (0.05) therefore Null hypothesis cannot be accepted.

From the above table, P value shows that there is the difference in the post media intervention on the participants. Which indicates that participants disagree with that they embarrassing talking to the doctor about their symptoms.

**Do you think that smoking can increase a person's chance of developing cancer?**

	After				
Before	Don't know not sure	No, it could be	Yes, it could be	Total	P-Value (Level of significance=0.05)
Don't know not sure	33	7	34	74	<b>0.000003</b>
No, it could be	7	29	26	62	
Yes, it could be	6	9	249	264	
Total	46	45	309	400	

**Table 4.9-** Smoking can increase a person's chance of developing cancer

From the above table it is clearly explain that P value is less than level of significance (0.05) therefore Null hypothesis cannot be accepted.

From the above table, P value shows that there is the difference in the post media intervention on the participants. Which indicates that participants think that smoking can increase a person's chance of developing cancer.

**Do you think that drinking alcohol can increase a person's chance of developing cancer?**

	After				
Before	Don't know not sure	No, it could be	Yes, it could be	Total	P-Value (Level of significance=0.05)
Don't know not sure	45	7	38	90	<b>0.00000001</b>
No, it could be	4	42	38	84	
Yes, it could be	6	11	209	226	
Total	55	60	285	400	

**Table 4.10-** Drinking alcohol can increase a person's chance of developing cancer

From the above table it is clearly explain that P value is less than level of significance (0.05) therefore Null hypothesis cannot be accepted.

From the above table, P value shows that there is the difference in the post media intervention on the participants. Which indicates that participants think that drinking alcohol can increase a person's chance of developing cancer.

Do you think that exposure to another person's smoking can increase a person's chance of developing cancer?

Before	After			Total	P-Value (Level of significance=0.05)
	Don't know not sure	No, it could be	Yes, it could be		
Don't know not sure	53	20	33	106	<b>0.000004</b>
No, it could be	4	54	27	85	
Yes, it could be	7	28	174	209	
Total	64	102	234	400	

**Table 4.11- An exposure to another person's smoking can increase a person's chance of developing cancer**

From the above table it is clearly explain that P value is less than level of significance (0.05) therefore Null hypothesis cannot be accepted.

From the above table, P value shows that there is the difference in the post media intervention on the participants. Which indicates that participants think that exposure to another person's smoking can increase a person's chance of developing cancer.



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# **Chapter 5**

*Discussion, Conclusion,  
Recommendations and  
Limitations of the Study*



# *Chapter 5*

## *Discussion, Conclusion, Recommendations and limitations of the Study*

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### **5.1 Discussion:**

In this research study, the concept of Health Communication has been used and a five-point comprehensive attempt has been made to explore and find out the impact and relationship of strategic media interventions regarding cancer awareness. This particular research examines and discusses the awareness level and consumption pattern of targeted respondents, pre-and post-strategic media intervention regarding cancer awareness and its prevention, as well as, dispelling myth and misconceptions prevalent about cancer and cancer patients.

#### **5.1.1 Socio-cultural myths related to cancer among masses**

Intraspecific research revealed that stigma and myths about cancer still exist among masses because of low cancer-related knowledge. People believe that getting diagnosed with cancer is due to the person's bad deeds or Kama which has resulted in such kind of punishment and this fatal disease is an unavoidable death. Furthermore, cancer is seen as contagious spreading from person to person, increasing the physical distance between the affected and the society. The silencing factor of a diagnosis extends the prevalence of stigma through non-communication further. Patients don't discuss their disease in fear of being pushed to the edge of society thus, missing out on educating others from their first-hand experience.

Besides, it was found out that the stigma attached to the diagnosis negatively impacts the patient's emotional, social and financial condition. He fears death, pain, suffering and loss of control due to the assumed fatality and social isolation. This is largely due to the misinformation regarding transmission of the disease and it being understood as a higher judgment. Affected are seen as too weak to work, thus making it difficult for them to get back in the same field of work post disease or acquiring a new job.

The study also revealed gender-based biases. During the intervention program, the researcher came across a girl patient named Gulab who had contracted eye cancer. Her family had abandoned her with a statement that “If it were a boy they would have thought for getting medical treatment done, but for the girl, they would not consider it necessary.”

It can be argued based on the study that socio-cultural myths such as bad Karma and gender biases are majorly inhibiting the growth of education regarding cancer prevention. It is a fact that the brain is more receptive in digesting visuals, and so the researcher opted to develop an intervention program which helped in raising the level of awareness among the masses, especially women who had very low or no education background. This study helped raise the level of awareness among the people. It was observed that after the program better response to the questions related to cancer were recorded.

### **5.1.2 Information consumption pattern regarding cancer among masses**

Patients are continuously getting more involved in their own medical decisions and therefore need to be more educated about individual information, even if it is complex and specific like lung cancer. Henceforth, the need for large scale information accessibility for masses rises. Examining the information consumption pattern, it becomes evident that the internet is an essential and viable tool to support this accessibility, due to the presence of medical content online.

Study shows a large number of internet users is interested in medical self-education via the internet. However, less than 25% of patients are currently sourcing the internet for health-related information. This is because of the differences regarding internet access in the context of user-specific data like income level and age, since low-income individuals cannot always afford the medium necessary for internet access. Old people with severe and chronic diseases are also unable to use the internet to obtain health-related information.

Moreover, the other 75 % of the general population who do not have access to the online material, rely on sources like social environment, public libraries, magazines, medical journals and local doctors, medical campaigns and other such platforms for research.

As some of the geographical areas do not have any kind of information delivery system, it becomes a challenge for people to gain any sort of knowledge on cancer or any other such disease. A way that can be used to deal with such a situation is using community radio services to spread awareness regarding such diseases. A community radio service was developed by the Ministry of Information and Broadcasting. Such services have helped spread of the health-related knowledge. The programs on the radio station, can be tuned on particular frequency, which runs from 10 am to 2 pm and focuses on spreading awareness amongst the masses.

As per Dr Vinod Jain, KGMU, "The community radio is being started by KGMU with an objective to reach out to the masses and to remove their doubts about health-related issues through an educational program". (ANI, 2020)

Additionally, the information available online holds a big issue due to its diversity in terms of quality, even if the target audience has knowledge and field-expertise. Quality standards have been introduced by certain organizations, but are not thoroughly followed by the informative sources. Besides, the consumers are not aware of the established standards and are not able to appropriately rate the sources regarding credibility. This situation shows the need for medical experts being integrated into the process of quality control regarding sources and their objective management.

### **5.1.3 Attitudinal changes after strategic media interventions among the targeted audience**

Research about media interventions to change the attitude of the audience has been made to understand how to strategically approach educating masses about cancer and its prevention. Past and present studies conducted regarding planned interventions among indoor tanners, who artificially sunbath because of appearance and social factors, perceived susceptibility to skin damage and dependence on ultraviolet light and show a variety of possible impacts on indoor tanning behaviour related to the approach of intervention chosen.

Past studies like Gibbons et al (2005) and Mahler et al (2003) worked with appearance dominant material like photos of ultraviolet skin damage as an intervention and were

able to decrease the amount of sunbathing time in general as well as the usage of artificial tanning beds in the intervention group compared to the control group within a follow-up measure time interval of fewer than four weeks, whereas others, for example, Jackson & Aiken et al (2006) and Jones & Leary et al (1994) used multi-component measures with image norms as the centre and a comparison of health-focused and appearance focused measures as strategic intervention, decreasing the intention to sunbath and tan while increasing sunlight protective behaviour in the intervention group with a time interval immediate follow up a measure or up to two weeks.

Present studies are using a broader, more complex and diversified approach to change the attitude of the intervention group. A study conducted by the American Cancer Society in 2008 provided healthy alternatives to artificial sunbathing with the same effect through a simple 24-page booklet based on strong decision-theoretical models, among others successfully decreasing and narrowing down positive attitudes regarding inner tanning and the impression of it being attractive and calming, while simultaneously raising awareness around the importance of finding alternative ways to tanning and appearance enhancement.

This study was successful in observing the attitudinal changes after the invention program. It was observed by the researcher that the audience views towards the cancer shifted from the dogmatic understanding to more logical understanding. After the program, the respondents were able to relate the cancer to uncontrolled replication of the cells resulting from poor nutrition and unhealthy lifestyle. The audience were found to be more cautious about their health and the nutrition they must take to avoid the probability of contracting cancer.

#### **5.1.4 The effectiveness of strategic media intervention for attitudinal changes concerning cancer, its prevention and cancer patients**

Upon further examining a moderate number of existing studies it becomes clear that, although initially reaching good productive results, their limitations in context to efficacy are shown fairly quickly. Studies are conducted in a small regulated frame, not answering the question on how to execute them on a larger scale and making them a credible as well as a viable source of information, thus decreasing their effectiveness.

Although interventions educate and spread awareness about cancer benefiting behaviour, they lack in presenting smart and healthy behavioural alternatives to people to induce a long-lasting effect. However, few studies incorporated exactly this thought and were able to drastically increase intervention group results from post-analysis compared to the ones who did not.

In this study researcher designed three strategic media intervention programs, the first goes by the name as “Know Cancer” which showed the symptoms of cancer and level of awareness among the masses. This particular documentary captures the oncologist (cancer specialists) having a conversation amongst themselves on do’s and don’ts of cancer. The second named as “Can Cure Cancer” showcases the treatment available for cancer in the Lucknow region and the third one “Can Break Cancer” touches the lives of three people who contracted cancer and survived with help from proper medical assistance and awareness.

These media interventions were then shown to the respondents, and as a result, a significant improvement was noticed amongst the respondents. It was observed by the researcher that people become more cautious and responsible regarding their health.

Certain knowledge such as cervical cancer vaccine which is available in the market and provides 99% protection against the onset of cervical cancer was not known by the respondent's pre-media intervention. It was also assumed by many of the respondents that breast cancer is restricted to females. However, post media intervention these hypotheses were rejected. Thus, the study was found to be effective on the ground that the intention of the researcher was to make people aware of the truth related to cancers and bust the mythological cocoon that was formed earlier.

**5.1.5 From this study the following points were derived:**

1. Cancer carries with itself a significant level of disgrace, fallacy and proscriptions. Yet there are opportunities to capitalize on the changing behaviour of the masses.
2. This study has brought forth the gap in the knowledge which people have about cancer. Their ideology for the doctrine of Karma tells us their level of

awareness. Thus, prohibiting them from learning about the prevention, detection, treatment and survival techniques.

3. Good communication leads to better understanding. The influencing factor here can be well-known personalities or celebrities who survived cancer. They can act as preachers, spreading knowledge over mass media channels.
4. The school system is a potential venue for cancer education and increasing cancer awareness among children may be a great investment.
5. While confronting cancer, people need information and emotional support for themselves and their families.
6. A significant amount of food low on vitamins and minerals plants the root of cancer. Programs and policies will help people in converting their knowledge into actions.

The global cancer community should capitalize upon positive shifts in attitudes about awareness of cancer and leverage these shifts to develop, and disseminate effective media campaigns and behavioural interventions to decrease the incidence of and morbidity and mortality associated with cancer.

## **5.2 Conclusion:**

- There are many people with poor cancer awareness, and substantial lacuna in the knowledge, information and awareness about cancer generates a negative attitude towards this disease.
- Communication integrates knowledge, information and awareness which motivate peoples to thriving for a healthy life. Cancer related messages need to be targeted and tailored to particular groups to prevent emergence of cancer related health inequalities.
- There exists gender biasness among masses with regard to cancer patients. Cancer related myths and taboos exist.
- Strategic Media Interventions have been impactful in creating awareness about cancer, carcinogenic agents, symptom's related to cancer, early diagnosis of cancer and cancer related treatment availability in Lucknow city.

- Health communication plays a central role by using various strategies and interventions to influence individual and community decisions that enhance good health practices attitudes. These strategies seek to change the social health climate to encourage healthy behaviours, create awareness, change attitudes and motivate individuals to adopt recommended health seeking behaviour.
- Cancer has the word CAN in it, cancer awareness raised by these strategic media interventions have the potential for a life-long impact on encouraging early cancer diagnosis and survival among masses.

### **5.3 Recommendations:**

- There should be more strategic media interventions based on different types of cancer.
- The interventions designed by the Researcher should be made public in order to maximise and benefit the masses.
- The Department of Health Communication should be established in order to develop people-centric public health awareness campaigns and programs.
- Medical universities should have Department of Health Communication in order to provide communication-based support to patients and their families.
- Cancer awareness cell should be formed at the university level, and cancer awareness competitions should be organized by the awareness cell.
- A chapter on cancer awareness should be included in the university level courses. This would help the students understand cancer and the catastrophe caused by it well.
- Breast cancer accounts for the most deaths in the world followed by cervical cancer among women. Therefore, at least two women groups should be formed in each village to be trained in cancer awareness and then be entrusted with the responsibility of spreading awareness in the village. For this, cancer awareness budget should also be included in the budget of Gram Panchayat.

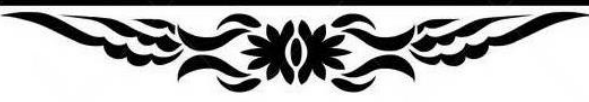
- In each and every government hospital Cancer awareness film should be screened.
- Cancer awareness Screening Programs should be organised at different levels.

#### **5.4 Limitations of the Study:**

- Strategic media interventions are based on cancer in general.
- The present study is One contact study.
- The Researcher did not receive a very encouraging response from some professionals involved in cancer treatment and diagnosis.
- Biased response was received from the respondents, occasionally.



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# **Appendix**



**Interview Schedule for masses on cancer awareness  
Babasaheb Bhimrao Ambedkar University**

**Department of Mass Communication and Journalism  
Introduction of Researcher and purpose of research**

Neelu Sharma is a research scholar in the Department of Mass Communication and Journalism Babasaheb Bhimrao Ambedkar University Lucknow. Prof Govind Ji Pandey is her research supervisor. Her research topic is 'Role and impact of media interventions in creating awareness about cancer among masses'.

Information gathered from this questionnaire will be strictly used for educational purpose only. Researcher will always be grateful to you for sparing your valuable time.

**Pre-Screening Interview Schedule**

**SECTION-1:**

**Demographic Profile of the Respondent**

1-Name :

2- Age :

18 to 25 ( ) 26 to 35 ( ) 36 to 45 ( ) 46 to 55 ( ) 56 to 65 ( ) 66 and above( )

3- Sex: Female ( ) Male ( ) Other ( )

4- Education : illetrate ( ) literate ( ) primary ( ) upper primary ( ) high school( ) intermediate ( ) Graduate( ) Post graduate ( ) PhD( )

5- Residence: Urban ( ) Rural ( ) Peri urban ( )

6- Occupation : Government Employee ( ) Private Employee ( ) Daily

wage Labour ( ) Farmer ( ) Student ( ) Housewife ( )  
Mechanic/Technician ( ) Business( ) Unemployed ( ) if any other,  
please specify ( )

7- Marital Status: Married( ) Unmarried ( ) Widow ( ) Divorced ( )

8- Caste: General( ) O.B.C. ( ) S.C./S.T. ( )

9- FAMILY MONTHLY INCOME : Upto 10,000 ( ), 10001 to 30,000 ( )  
, 30001 to 50,000( ), 50001 and Above ( )

10- RELIGION : HINDU ( ) MUSLIM ( ) CHRISTIAN ( ) SIKH ( )  
OTHER ( )

**SECTION 2: Questions based on strategic Media Intervention**

1 - Do You know anything about cancer?

1. Yes ( )
2. No ( )
3. Can't Say ( )

1 (a) - If Yes, Kindly tell what is cancer?

1. a deadly disease ( )
2. unregulated growth of body cells ( )
3. don't know ( )

2 - What are the causes of cancer?

1. don't know ( )
2. adulterated food ( )
3. genetic disorders ( )
4. exact causes are not defined ( )

3 - How many types of cancer are there?

1. One type ( )
2. 2-5 types ( )
3. 6-10 types( )
4. 11-15 types ( )
5. Many types ( )

4 - Do you agree that people who consume tobacco, alcohol and drugs only have cancer?

1. Completely agree ( )
2. Agree ( )
3. Neither agree nor disagree ( )
4. Disagree ( )
5. Completely disagree ( )

5 - Chemicals used in cleaning house and utensils can also cause cancer?

1. Completely agree ( )
2. Agree ( )
3. Neither agree nor disagree ( )
4. Disagree ( )
5. Completely disagree ( )

6 - Do you agree that consumption of food made in an oil which is heated and reheated again and again can cause cancer?

1. Completely agree ( )
2. Agree ( )
3. Neither agree nor disagree ( )
4. Disagree ( )
5. Completely disagree ( )

7 - Do you know about carcinogenic agents?

1. Yes ( )
2. No ( )
3. Can't Say ( )

7 (a) - If yes, kindly define?

.....

8 - Which is the most common cancer in women?

- 1- General Cancer( )
- 2- Breast Cancer ( )

3- Cervical Cancer ( )

4- Don't know ( )

5- If any other, please specify ( )

9 - Which is the most common cancer in men?

1- General Cancer ( )

2- Breast Cancer ( )

3- Lung Cancer ( )

4- Don't know ( )

5- If any other, please specify ( )

10 - Which cancer causes most deaths in women?

1. Don't know ( )

2. Cervical cancer ( )

3. Breast cancer ( )

4. General cancer ( )

5. If any other, please specify ( )

11- Do you know what is cervical cancer?

1. Yes ( )

2. No ( )

11 (a) - If yes, please define....

12 - Do you know that there is any vaccine which can prevent cervical cancer?

1. Yes ( )

2. No ( )

3. Can't Say ( )

12 (a) - If Yes, please name it.

.....

13 - Did you or someone you know have got themselves vaccinated?

1. Yes ( )

2. No ( )

14 - Does breast cancer only happen to women?

1. Yes ( )
2. No ( )
3. Can't Say ( )

15 - Do you know that breast cancer occurs in men?

1. Yes ( )
2. No ( )
3. Can't Say ( )

16 - Breast cancer can happen to both men and women?

1. Yes ( )
2. No ( )
3. Can't Say ( )

17 - Do you regularly do Self Examination of your breast?

1. Yes ( )
2. No ( )

18 - Where do you get cancer and health related information from?

1. Radio ( )
2. Newspaper ( )
3. Television ( )
4. Non Governmental Organisations ( )
5. From Doctors ( )
6. From Street Plays( )
7. Village- Cahupal ( )
8. If other, please specify...

19 - What is your attitude / behavior towards cancer patients?

1. Sympathetic ( )
2. You run away from them ( )
3. Hatred ( )
4. Same like as with common people ( )

20 - What kind of stigmas and taboos exist in society in regard to cancer?

1. Can be treated by faith healers and occultists ( )
2. Gets cured by visiting temples and dargahs ( )
3. Can be cured by the consumption of herbs ( )
4. It happens due to the deeds of previous birth ( )
5. If any other, please specify ( )

21 - Do you think that cancer is a disease of untouchability?

1. Yes ( )
2. No ( )
3. Can't Say ( )

22 - How is your behaviour towards men who are cancer patients?

1. Not good ( )
2. Sympathetic ( )
3. Does not leave any impact on you ( )
4. Similar like with common people ( )

23 - How is your behaviour towards women who are cancer patients?

1. Sympathetic ( )
2. Helpful ( )
3. You want to run away from her ( )
4. Does not leave any impact on you ( )
5. Similar like with common people ( )

24 - How reliable the information about cancer from the media seems to be?

1. Its reliable ( )
2. Not reliable ( )
3. Its not completely true ( )

25 - Which medium do you trust the most for cancer related information?

1. Newspaper ( )
2. Television ( )

- 3. Social Media ( )
- 4. Information from Doctors ( )

26 - Do you get your medical examination done every year?

- 1. Yes ( )
- 2. No ( )

27 - Do you think that prevention from Cancer is possible?

- 1. Yes ( )
- 2. No ( )
- 3. Can't Say ( )

28 - Do you think that cancer is within the limits of prevention?

- 1. Yes ( )
- 2. No ( )
- 3. Can't Say ( )

### **SECTION-3 The Cancer Awareness Measure (CAM)**

1- Can you think of another warning sign or symptom?

- (1) Yes ( )
- (2) No ( )

2 - Cancer has many warning signs and symptoms. Write the name of the one you believe to be a symptom?

- (1)-
- (2)-
- (3)-
- (4)-
- (5)-

3 - Do you think an unexplained lump or swelling could be a sign of cancer?

- (1) Yes it could

(2) No it could not

(3) Don't know/not sure

4 - Do you think persistent unexplained pain could be a sign of cancer?

(1) Yes it could

(2) No it could not

(3) Don't know/not sure

5 - Do you think unexplained bleeding could be a sign of cancer?

(1) Yes it could

(2) No it could not

(3) Don't know/not sure

6 - Do you think a persistent cough or hoarseness could be a sign of cancer?

(1) Yes it could

(2) No it could not

(3) Don't know/not sure

7 - Do you think a persistent change in bowel or bladder habits could be a sign of cancer?

(1) Yes it could

(2) No it could not

(3) Don't know/not sure

8 - Do you think persistent difficulty swallowing could be a sign of cancer?

(1) Yes it could

(2) No it could not

(3) Don't know/not sure

9 - Do you think a change in appearance of a mole could be a sign of cancer?

(1) Yes it could

(2) No it could not

(3) Don't know/not sure

10 - Do you think a sore that does not heal could be a sign of cancer?

(1) Yes it could

(2) No it could not

(3) Don't know/not sure

11- Do you think unexplained weight loss could be a sign of cancer?

(1) Yes it could

(2) No it could not

(3) Don't know/not sure

12 - I find it embarrassing talking to the doctor about my symptoms.

(1) Completely agree ( )

(2) Agree ( )

(3) Neither agree nor disagree ( )

(4) Disagree ( )

(5) Completely disagree ( )

13 - I would be worried about wasting the doctor's time.

(6) Completely agree ( )

(7) Agree ( )

(8) Neither agree nor disagree ( )

(9) Disagree ( )

(10) Completely disagree ( )

14 - My doctor is difficult to talk to.

(1) Completely agree ( )

(2) Agree ( )

(3) Neither agree nor disagree ( )

(4) Disagree ( )

(5) Completely disagree ( )

15 - I find it difficult to get an appointment with a particular doctor.

(1) Completely agree ( )

- (2) Agree ( )
- (3) Neither agree nor disagree ( )
- (4) Disagree ( )
- (5) Completely disagree ( )

16 - I find it difficult to get an appointment with a doctor at a convenient time.

- (1) Completely agree ( )
- (2) Agree ( )
- (3) Neither agree nor disagree ( )
- (4) Disagree ( )
- (5) Completely disagree ( )

17 - I would be too busy to make time to go to the doctor.

- (1) Completely agree ( )
- (2) Agree ( )
- (3) Neither agree nor disagree ( )
- (4) Disagree ( )
- (5) Completely disagree ( )

18 - I have too many other things to worry about.

- (1) Completely agree ( )
- (2) Agree ( )
- (3) Neither agree nor disagree ( )
- (4) Disagree ( )
- (5) Completely disagree ( )

19 - I would be worried about what they might find wrong with me.

- (1) Completely agree ( )
- (2) Agree ( )
- (3) Neither agree nor disagree ( )
- (4) Disagree ( )
- (5) Completely disagree ( )

20 - I would be worried about what tests they might want to do.

- (1) Completely agree ( )
- (2) Agree ( )
- (3) Neither agree nor disagree ( )
- (4) Disagree ( )
- (5) Completely disagree ( )

21- I wouldn't feel confident talking about my symptom(s) with the doctor.

- (1) Completely agree ( )
- (2) Agree ( )
- (3) Neither agree nor disagree ( )
- (4) Disagree ( )
- (5) Completely disagree ( )

22 - I've had a bad experience at the doctor's in the past.

- (1) Completely agree ( )
- (2) Agree ( )
- (3) Neither agree nor disagree ( )
- (4) Disagree ( )
- (5) Completely disagree ( )

23 - I would be worried the doctor wouldn't take my symptom(s) seriously.

- (1) Completely agree ( )
- (2) Agree ( )
- (3) Neither agree nor disagree ( )
- (4) Disagree ( )
- (5) Completely disagree ( )

24 - I don't want to be seen as somebody who makes a fuss

- (1) Completely agree ( )

- (2) Agree ( )
- (3) Neither agree nor disagree ( )
- (4) Disagree ( )
- (5) Completely disagree ( )

25 - I don't like having to talk to the GP receptionist about my symptom(s)

- (1) Completely agree ( )
- (2) Agree ( )
- (3) Neither agree nor disagree ( )
- (4) Disagree ( )
- (5) Completely disagree ( )

26 - Is there anything else that would put you off going to the doctor?

- (1) Yes ( )
- (2) No ( )
- (3) If Yes please specify.....

27 - What things do you think affect a person's chance of developing cancer? Please name as many as you can think of.

-  
-  
-

28 - Can you think of anything else that could affect a person's chance of developing cancer?

- (1) Yes ( )
- (2) No ( )

29 - Do you think that smoking can increase a person's chance of developing cancer?

- (1) Yes it could
- (2) No it could not
- (3) Don't know/not sure

30 - Do you think that not eating many fruits or vegetables can increase a person's chance of developing cancer?

- (1) Yes it could
- (2) No it could not
- (3) Don't know/not sure

31- Do you think that being overweight can increase a person's chance of developing cancer?

- (1) Yes it could
- (2) No it could not
- (3) Don't know/not sure

32 - Do you think that having a close relative with cancer can increase a person's chance of developing cancer?

- (1) Yes it could
- (2) No it could not
- (3) Don't know/not sure

33 - Do you think that drinking alcohol can increase a person's chance of developing cancer?

- (1) Yes it could
- (2) No it could not
- (3) Don't know/not sure

34 - Do you think that not doing much physical activity can increase a person's chance of developing cancer?

- (1) Yes it could
- (2) No it could not
- (3) Don't know/not sure

35 - Do you think that getting sunburnt can increase a person's chance of developing cancer?

- (1) Yes it could
- (2) No it could not

(3) Don't know/not sure

36 - Do you think that eating too much red or processed meat can increase a person's chance of developing cancer?

(1) Yes it could

(2) No it could not

(3) Don't know/not sure

37 - Do you think that exposure to another person's smoking can increase a person's chance of developing cancer?

(1) Yes it could

(2) No it could not

(3) Don't know/not sure

38 - Do you think that being older can increase a person's chance of developing cancer?

(1) Yes it could

(2) No it could not

(3) Don't know/not sure

39 - Do you think that infection with HPV (human papillomavirus) can increase a person's chance of developing cancer?

(1) Yes it could

(2) No it could not

(3) Don't know/not sure

40 - Do you think that not eating enough fibre can increase a person's chance of developing cancer?

(1) Yes it could

(2) No it could not

(3) Don't know/not sure

41 - Looking at the options on the card, who do you think is most likely to develop cancer?

(1) Someone in their twenties

- (2) Someone in their thirties
- (3) Someone in their forties
- (4) Someone in their fifties
- (5) Someone on their sixties
- (6) Someone in their seventies
- (7) Someone in their eighties
- (8) Cancer is unrelated to age
- (9) Don't know

42 - As far as you're aware, is there any cancer screening programme?

- (1) Yes ( )
- (2) No( )
- (3) Don't Know ( )

42 (a) - If yes At what age are people invited for cancer screening?

.....

43 - Have you, or any of your friends or family, had cancer?

Code all that apply.

- (1) You
- (2) Your partner
- (3) Close family member
- (4) Other family member
- (5) Close friend
- (6) Other friend
- (7) None of these
- (8) Prefer not to say

**Interview Schedule for masses on cancer awareness  
Babasaheb Bhimrao Ambedkar University**

**Department of Mass Communication and Journalism  
Introduction of Researcher and purpose of research**

Neelu Sharma is a research scholar in the Department of Mass Communication and Journalism Babasaheb Bhimrao Ambedkar University Lucknow. Prof Govind Ji Pandey is her research supervisor. Her research topic is ‘Role and impact of media interventions in creating awareness about cancer among masses’.

Information gathered from this questionnaire will be strictly used for educational purpose only. Researcher will always be grateful to you for sparing your valuable time.

**Post-Screening Interview Schedule**

**SECTION-1:**

**Demographic Profile of the Respondent**

1-Name :

2- Age :

18 to 25 ( ) 26 to 35 ( ) 36 to 45 ( ) 46 to 55 ( ) 56 to 65 ( ) 66 and above( )

3- Sex: Female ( ) Male ( ) Other ( )

4- Education : illetrate ( ) literate ( ) primary ( ) upper primary ( ) high school( ) intermediate ( ) Graduate( ) Post graduate ( ) PhD( )

5- Residence: Urban ( ) Rural ( ) Peri urban ( )

6- Occupation : Government Employee ( ) Private Employee ( ) Daily

wage Labour ( ) Farmer ( ) Student ( ) Housewife ( )  
Mechanic/Technician ( ) Business( ) Unemployed ( ) if any other,  
please specify ( )

7- Marital Status: Married( ) Unmarried ( ) Widow ( ) Divorced ( )

8- Caste: General( ) O.B.C. ( ) S.C./S.T. ( )

9- FAMILY MONTHLY INCOME : Upto 10,000 ( ), 10001 to 30,000 ( )  
, 30001 to 50,000( ), 50001 and Above ( )

10- RELIGION : HINDU ( ) MUSLIM ( ) CHRISTIAN ( ) SIKH ( )  
OTHER ( )

**SECTION 2: Questions based on strategic Media Intervention**

1 - Do You know anything about cancer?

- 4. Yes ( )
- 5. No ( )
- 6. Can't Say ( )

1 (a) - If Yes, Kindly tell what is cancer?

- 4. a deadly disease ( )
- 5. unregulated growth of body cells ( )
- 6. don't know ( )

2 - What are the causes of cancer?

- 5. don't know ( )
- 6. adulterated food ( )
- 7. genetic disorders ( )
- 8. exact causes are not defined ( )

3 - How many types of cancer are there?

- 6. One type ( )
- 7. 2-5 types ( )
- 8. 6-10 types( )
- 9. 11-15 types ( )
- 10.Many types ( )

4 - Do you agree that people who consume tobacco, alcohol and drugs only have cancer?

- 6. Completely agree ( )
- 7. Agree ( )
- 8. Neither agree nor disagree ( )
- 9. Disagree ( )
- 10. Completely disagree ( )

5 - Chemicals used in cleaning house and utensils can also cause cancer?

- 6. Completely agree ( )
- 7. Agree ( )
- 8. Neither agree nor disagree ( )
- 9. Disagree ( )
- 10. Completely disagree ( )

6 - Do you agree that consumption of food made in an oil which is heated and reheated again and again can cause cancer?

- 6. Completely agree ( )
- 7. Agree ( )
- 8. Neither agree nor disagree ( )
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7 - Do you know about carcinogenic agents?

- 4. Yes ( )
- 5. No ( )
- 6. Can't Say ( )

7 (a) - If yes, kindly define?

.....

8 - Which is the most common cancer in women?

- 1- General Cancer( )
- 2- Breast Cancer ( )

3- Cervical Cancer ( )

4- Don't know ( )

5- If any other, please specify ( )

9 - Which is the most common cancer in men?

1- General Cancer ( )

2- Breast Cancer ( )

3- Lung Cancer ( )

4- Don't know ( )

5- If any other, please specify ( )

10 - Which cancer causes most deaths in women?

6. Don't know ( )

7. Cervical cancer ( )

8. Breast cancer ( )

9. General cancer ( )

10.If any other, please specify ( )

11- Do you know what is cervical cancer?

3. Yes ( )

4. No ( )

11 (a) - If yes, please define....

12 - Do you know that there is any vaccine which can prevent cervical cancer?

4. Yes ( )

5. No ( )

6. Can't Say ( )

12 (a) - If Yes, please name it.

.....

13 - Did you or someone you know have got themselves vaccinated?

3. Yes ( )

4. No ( )

14 - Does breast cancer only happen to women?

- 4. Yes ( )
- 5. No ( )
- 6. Can't Say ( )

15 - Do you know that breast cancer occurs in men?

- 4. Yes ( )
- 5. No ( )
- 6. Can't Say ( )

16 - Breast cancer can happen to both men and women?

- 4. Yes ( )
- 5. No ( )
- 6. Can't Say ( )

17 - Do you regularly do Self Examination of your breast?

- 3. Yes ( )
- 4. No ( )

18 - Where do you get cancer and health related information from?

- 9. Radio ( )
- 10. Newspaper ( )
- 11. Television ( )
- 12. Non Governmental Organisations ( )
- 13. From Doctors ( )
- 14. From Street Plays ( )
- 15. Village- Cahupal ( )
- 16. If other, please specify...

20 - What is your attitude / behavior towards cancer patients?

- 5. Sympathetic ( )
- 6. You run away from them ( )
- 7. Hatred ( )
- 8. Same like as with common people ( )

20 - What kind of stigmas and taboos exist in society in regard to cancer?

- 6. Can be treated by faith healers and occultists ( )
- 7. Gets cured by visiting temples and dargahs ( )
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- 10. If any other, please specify ( )

21 - Do you think that cancer is a disease of untouchability?

- 4. Yes ( )
- 5. No ( )
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22 - How is your behaviour towards men who are cancer patients?

- 5. Not good ( )
- 6. Sympathetic ( )
- 7. Does not leave any impact on you ( )
- 8. Similar like with common people ( )

23 - How is your behaviour towards women who are cancer patients?

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- 7. Helpful ( )
- 8. You want to run away from her ( )
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- 4. Its reliable ( )
- 5. Not reliable ( )
- 6. Its not completely true ( )

25 - Which medium do you trust the most for cancer related information?

- 5. Newspaper ( )
- 6. Television ( )

7. Social Media ( )

8. Information from Doctors ( )

26 - Do you get your medical examination done every year?

3. Yes ( )

4. No ( )

27 - Do you think that prevention from Cancer is possible?

4. Yes ( )

5. No ( )

6. Can't Say ( )

28 - Do you think that cancer is within the limits of prevention?

4. Yes ( )

5. No ( )

6. Can't Say ( )

### **SECTION-3 The Cancer Awareness Measure (CAM)**

2- Can you think of another warning sign or symptom?

(3) Yes ( )

(4) No ( )

2 - Cancer has many warning signs and symptoms. Write the name of the one you believe to be a symptom?

(6)-

(7)-

(8)-

(9)-

(10) -

3 - Do you think an unexplained lump or swelling could be a sign of cancer?

(1) Yes it could

(2) No it could not

(3) Don't know/not sure

4 - Do you think persistent unexplained pain could be a sign of cancer?

(1) Yes it could

(2) No it could not

(3) Don't know/not sure

5 - Do you think unexplained bleeding could be a sign of cancer?

(1) Yes it could

(2) No it could not

(3) Don't know/not sure

6 - Do you think a persistent cough or hoarseness could be a sign of cancer?

(1) Yes it could

(2) No it could not

(3) Don't know/not sure

7 - Do you think a persistent change in bowel or bladder habits could be a sign of cancer?

(1) Yes it could

(2) No it could not

(3) Don't know/not sure

8 - Do you think persistent difficulty swallowing could be a sign of cancer?

(1) Yes it could

(2) No it could not

(3) Don't know/not sure

9 - Do you think a change in appearance of a mole could be a sign of cancer?

(1) Yes it could

(2) No it could not

(3) Don't know/not sure

10 - Do you think a sore that does not heal could be a sign of cancer?

(1) Yes it could

(2) No it could not

(3) Don't know/not sure

11- Do you think unexplained weight loss could be a sign of cancer?

(1) Yes it could

(2) No it could not

(3) Don't know/not sure

12 - I find it embarrassing talking to the doctor about my symptoms.

(11) Completely agree ( )

(12) Agree ( )

(13) Neither agree nor disagree ( )

(14) Disagree ( )

(15) Completely disagree ( )

13 - I would be worried about wasting the doctor's time.

(16) Completely agree ( )

(17) Agree ( )

(18) Neither agree nor disagree ( )

(19) Disagree ( )

(20) Completely disagree ( )

14 - My doctor is difficult to talk to.

(6) Completely agree ( )

(7) Agree ( )

(8) Neither agree nor disagree ( )

(9) Disagree ( )

(10) Completely disagree ( )

15 - I find it difficult to get an appointment with a particular doctor.

(6) Completely agree ( )

- (7) Agree ( )
- (8) Neither agree nor disagree ( )
- (9) Disagree ( )
- (10) Completely disagree ( )

16 - I find it difficult to get an appointment with a doctor at a convenient time.

- (6) Completely agree ( )
- (7) Agree ( )
- (8) Neither agree nor disagree ( )
- (9) Disagree ( )
- (10) Completely disagree ( )

17 - I would be too busy to make time to go to the doctor.

- (6) Completely agree ( )
- (7) Agree ( )
- (8) Neither agree nor disagree ( )
- (9) Disagree ( )
- (10) Completely disagree ( )

18 - I have too many other things to worry about.

- (6) Completely agree ( )
- (7) Agree ( )
- (8) Neither agree nor disagree ( )
- (9) Disagree ( )
- (10) Completely disagree ( )

20 - I would be worried about what they might find wrong with me.

- (6) Completely agree ( )
- (7) Agree ( )
- (8) Neither agree nor disagree ( )
- (9) Disagree ( )
- (10) Completely disagree ( )

20 - I would be worried about what tests they might want to do.

- (6) Completely agree ( )
- (7) Agree ( )
- (8) Neither agree nor disagree ( )
- (9) Disagree ( )
- (10) Completely disagree ( )

21- I wouldn't feel confident talking about my symptom(s) with the doctor.

- (6) Completely agree ( )
- (7) Agree ( )
- (8) Neither agree nor disagree ( )
- (9) Disagree ( )
- (10) Completely disagree ( )

22 - I've had a bad experience at the doctor's in the past.

- (6) Completely agree ( )
- (7) Agree ( )
- (8) Neither agree nor disagree ( )
- (9) Disagree ( )
- (10) Completely disagree ( )

23 - I would be worried the doctor wouldn't take my symptom(s) seriously.

- (6) Completely agree ( )
- (7) Agree ( )
- (8) Neither agree nor disagree ( )
- (9) Disagree ( )
- (10) Completely disagree ( )

24 - I don't want to be seen as somebody who makes a fuss

- (6) Completely agree ( )

- (7) Agree ( )
- (8) Neither agree nor disagree ( )
- (9) Disagree ( )
- (10) Completely disagree ( )

25 - I don't like having to talk to the GP receptionist about my symptom(s)

- (6) Completely agree ( )
- (7) Agree ( )
- (8) Neither agree nor disagree ( )
- (9) Disagree ( )
- (10) Completely disagree ( )

26 - Is there anything else that would put you off going to the doctor?

- (4) Yes ( )
- (5) No ( )
- (6) If Yes please specify.....

27 - What things do you think affect a person's chance of developing cancer? Please name as many as you can think of.

-  
-  
-

28 - Can you think of anything else that could affect a person's chance of developing cancer?

- (3) Yes ( )
- (4) No ( )

29 - Do you think that smoking can increase a person's chance of developing cancer?

- (1) Yes it could
- (2) No it could not
- (3) Don't know/not sure

30 - Do you think that not eating many fruits or vegetables can increase a person's chance of developing cancer?

- (1) Yes it could
- (2) No it could not
- (3) Don't know/not sure

31- Do you think that being overweight can increase a person's chance of developing cancer?

- (1) Yes it could
- (2) No it could not
- (3) Don't know/not sure

32 - Do you think that having a close relative with cancer can increase a person's chance of developing cancer?

- (1) Yes it could
- (2) No it could not
- (3) Don't know/not sure

33 - Do you think that drinking alcohol can increase a person's chance of developing cancer?

- (1) Yes it could
- (2) No it could not
- (3) Don't know/not sure

34 - Do you think that not doing much physical activity can increase a person's chance of developing cancer?

- (1) Yes it could
- (2) No it could not
- (3) Don't know/not sure

35 - Do you think that getting sunburnt can increase a person's chance of developing cancer?

- (1) Yes it could
- (2) No it could not

(3) Don't know/not sure

36 - Do you think that eating too much red or processed meat can increase a person's chance of developing cancer?

(1) Yes it could

(2) No it could not

(3) Don't know/not sure

37 - Do you think that exposure to another person's smoking can increase a person's chance of developing cancer?

(1) Yes it could

(2) No it could not

(3) Don't know/not sure

38 - Do you think that being older can increase a person's chance of developing cancer?

(1) Yes it could

(2) No it could not

(3) Don't know/not sure

39 - Do you think that infection with HPV (human papillomavirus) can increase a person's chance of developing cancer?

(1) Yes it could

(2) No it could not

(3) Don't know/not sure

40 - Do you think that not eating enough fibre can increase a person's chance of developing cancer?

(1) Yes it could

(2) No it could not

(3) Don't know/not sure

41 - Looking at the options on the card, who do you think is most likely to develop cancer?

(1) Someone in their twenties

- (2) Someone in their thirties
- (3) Someone in their forties
- (4) Someone in their fifties
- (5) Someone on their sixties
- (6) Someone in their seventies
- (7) Someone in their eighties
- (8) Cancer is unrelated to age
- (9) Don't know

43 - As far as you're aware, is there any cancer screening programme?

- (4) Yes ( )
- (5) No( )
- (6) Don't Know ( )

42 (a) - If yes At what age are people invited for cancer screening?

.....

43 - Have you, or any of your friends or family, had cancer?

Code all that apply.

- (1) You
- (2) Your partner
- (3) Close family member
- (4) Other family member
- (5) Close friend
- (6) Other friend
- (7) None of these
- (8) Prefer not to say

**Interview Schedule for masses on cancer awareness (फिल्म के जरिये कैंसर के प्रति जागरूकता )**

**Babasaheb Bhimrao Ambedkar University**

**Department of Mass Communication and Journalism**  
**शोधकर्ता का परिचय तथा उद्देश्य**

शोधकर्ता नीलू शर्मा बाबा साहब भीमराव आंबेडकर केन्द्रीय विश्वविद्यालय के जनसंचार एवं पत्रकारिता विभाग से पीएचडी में अध्ययनरत है। यह सर्वे शोधकर्ता द्वारा पीएचडी के शीर्षक-Role and impact of media interventions in creating awareness about cancer among masses ( कैंसर के प्रति जागरूकता में मीडिया का हस्तक्षेप, उसकी भूमिका और प्रभाव)के लिए प्रो. गोविंद जी पांडेय के निर्देशन में किया जा रहा है। इस प्रश्नावली के माध्यम से उत्तरदाताओं द्वारा दी गयी जानकारी का इस्तेमाल सिर्फ शोध कार्य में किया जाएगा तथा पूर्णतः गोपनीय रखा जाएगा। यह व्यापक समाज के स्वास्थ्य के हितों से जुड़ा मुद्दा है। मेरा किसी भी निजी संस्था अथवा कंपनी से कोई संबंध नहीं है। मेरे सवालों का जवाब देने के लिए अगर समय निकालेंगे तो मैं आभारी रहूंगी. सादर

**Pre-Screening Interview Schedule**

SECTION-1: उत्तरदाता का व्यक्तिगत परिचय

1- नाम:

2- उम्र 18 से 25 ( ) 26 से 35 ( ) 36 से 45 ( ) 46 से 55 ( ) 56 से 65 ( ) 66 और

उससे अधिक ( )

3- लिंग: स्त्री ( ) पुरुष ( ) अन्य ( )

4- शिक्षा : निरक्षर ( ) साक्षर ( ) प्राथमिक ( ) माध्यमिक ( ) हाई स्कूल ( ) इंटरमीडिएट ( ) स्नातक ( ) परास्नातक ( ) पीएचडी ( )

5- आवास: शहरी क्षेत्र ( ) ग्रामीण क्षेत्र ( ) अर्ध शहरी ( )

6- पेशा : सरकारी नौकरी ( ) गैर सरकारी नौकरी ( ) दिहाड़ी मजदूर ( ) किसान ( ) विद्यार्थी

( ) गृहणी ( ) मैकेनिक टेक्सिसिअन ( ) व्यवसाय ( ) बेरोज़गार ( ) यदि अन्य तो कृपया

वर्णन करे ( )

7- वैवाहिक स्थिति: विवाहित( ) अविवाहित ( ) विधवा ( ) तलाकशुदा ( )

8- जाति: सामान्य( ) ओ बी सी ( ) अनुसूचित जाति/ अनुसूचित जन- जाति

9- परिवार की मासिक आय: Upto 10,000 ( ), 10001 to 30,000 ( ), 30001 to

50,000( ), 50001 and Above ( )

10- धर्म : हिन्दू ( ) मुस्लिम ( ) ईसाई ( ) सिख ( )

SECTION2: Questions based on strategic Media Intervention  
फिल्म की जागरूकता पर आधारित सवाल

1 - क्या आप कैंसर के बारे में जानते है ?

1. हां ( )
2. नहीं ( )
3. कह नहीं सकते ( )

1a- यदि हाँ तो कृपया बताये कि कैंसर क्या है?

1. जानलेवा बीमारी है ( )
2. शरीर की कोशिशों का अनियंत्रित बढ़ना है ( )
3. पता नहीं है ( )

2-कैंसर के कारण क्या हैं ?

1. पता नहीं ( )
2. खानपान में गड़बड़ी ( )
3. अनुवांशिक कारण ( )
4. ठोस कारणों का पता नहीं हैं ( )

3-कैंसर कितने प्रकार का होता है?

1. 1 प्रकार का होता है ( )
2. 2-5 प्रकार का होता है ( )
3. 6-10 प्रकार का होता है ( )
4. 11-15 प्रकार का होता है ( )
5. कई प्रकार का होता है ( )

4-क्या आपको लगता है जो लोग गुटका शराब एवं मादक पदार्थों का सेवन करते हैं, सिर्फ उन्हें ही कैंसर होता है?

1. पूर्णतः सहमत ( )
2. सहमत ( )
3. न सहमत, न असहमत ( )
4. असहमत ( )
5. पूर्णतः असहमत ( )

5-घर तथा बर्तन की सफाई में इस्तेमाल होने वाले केमिकल्स से भी क्या कैंसर हो सकता है?

1. पूर्णतः सहमत ( )
2. सहमत ( )
3. न सहमत, न असहमत ( )
4. असहमत ( )
5. पूर्णतः असहमत ( )

6- क्या एक ही घी, तेल में बार-बार बनी खाद्य सामग्री के सेवन से कैंसर हो सकता है ?

1. पूर्णतः सहमत ( )
2. सहमत ( )
3. न सहमत, न असहमत ( )
4. असहमत ( )
5. पूर्णतः असहमत ( )

7-क्या आपको कैंसर कारक तत्वों की जानकारी है

1. हां ( )
2. नहीं ( )
3. कह नहीं सकते ( )

7 (a)- यदि हाँ तो कृपया उसका विवरण दीजिए:

.....

8-महिलाओं में सबसे अधिक पाये जाने वाले कैंसर कौन से है ?

1. सामान्य कैंसर ( )
2. ब्रेस्ट कैंसर ( )
3. सरवाइकल कैंसर ( )
4. पता नहीं ( )
5. यदि अन्य तो कृपया विवरण लिखें ( )

9- पुरुषों में पाये जाने वाले प्रमुख कैंसर कौन से हैं ?

1. सामान्य कैंसर ( )

2. ब्रेस्ट कैंसर ( )
3. फेफड़ों का कैंसर ( )
4. पता नहीं ( )
5. यदि अन्य तो कृपया विवरण लिखें ( )

10- किस तरह के कैंसर से महिलाओं की सबसे अधिक मौत होती है ?

1. पता नहीं ( )
2. सरवाइकल कैंसर ( )
3. ब्रेस्ट कैंसर ( )
4. सामान्य कैंसर ( )
5. यदि अन्य तो कृपया विवरण लिखें ( )

11-आपको पता है कि सरवाइकल कैंसर क्या है

1. हां ( )
2. नहीं ( )

11 (ए) - यदि हां तो कृपया विवरण लिखें

12 - सरवाइकल कैंसर से बचाव की वैक्सीन उपलब्ध है?

1. हां ( )
2. नहीं ( )
3. कह नहीं सकते ( )

12 (ए) - यदि हां तो वैक्सीन के नाम का उल्लेख करें-

.....

13-क्या आपने या आपके जानने वाले ने यह वैक्सीन लगवायी है ?

1. हां ( )
2. नहीं ( )

14- क्या ब्रेस्ट कैंसर सिर्फ महिलाओं को होता है

1. हां ( )
2. नहीं ( )
3. कह नहीं सकते ( )

15- क्या आप जानते हैं कि पुरुषों में ब्रेस्ट कैंसर होता है?

1. हां ( )

2. नहीं ( )
3. कह नहीं सकते ( )

16-ब्रेस्ट कैंसर महिला एवं पुरुष दोनों को हो सकता है?

1. हां ( )
2. नहीं ( )
3. कह नहीं सकते ( )

17-क्या आप नियमित रूप से ब्रेस्ट का परीक्षण (Self Examination) करते हैं

1. हां ( )
2. नहीं ( )

18- कैंसर/ स्वास्थ्य संबंधी जानकारी आपको कहाँ से मिलती है?

1. रेडियो ( )
2. समाचार पत्र ( )
3. टीवी ( )
4. स्वयंसेवी संस्थाओं ( )
5. डॉक्टरों से ( )
6. नुक्कड़ नाटकों से ( )
7. गांव-चौपाल से ( )
8. यदि कोई और तो कृपया विवरण करें

19-कैंसर पीड़ितों के प्रति आपका नजरिया/ व्यवहार कैसा होता है ?

1. सहानुभूति वाला ( )
2. कैंसर रोगियों से बचने वाला ( )
3. घृणा वाला होता है ( )
4. सामान्य लोगो की तरह ( )

20-कैंसर को लेकर समाज में क्या-क्या धारणायें हैं ?

1. तंत्र-मंत्र से ठीक हो जाता है ( )
2. मंदिर दरगाहों पर जाने से ठीक होता है ( )
3. जड़ी-बूटियों के उपयोग से ठीक हो जाता ( )
4. यह पूर्व जन्म के कर्म के चलते होता है ( )
5. यदि कोई और तो कृपया विवरण करें ( )

21- क्या आपको लगता है कि कैंसर छुआ-छूत की बीमारी है

1. हां ( )

2. नहीं ( )
3. कह नहीं सकते ( )

22-कैंसर पीड़ित पुरुषों के प्रति आपका व्यवहार कैसा होता

1. अच्छा नहीं होता ( )
2. सहानुभूति पूर्वक होता है ( )
3. मन पर कोई प्रभाव नहीं छोड़ता है ( )
4. सामान्य लोगो की तरह ( )

23- कैंसर पीड़ित महिलाओं के प्रति आपका व्यवहार कैसा होता

1. दया का भाव पैदा होता है ( )
2. मदद करने का भाव आता है ( )
3. उससे दूर रहने का भाव जन्म लेता ( )
4. कोई फर्क नहीं पड़ता है ( )
5. सामान्य लोगो की तरह ( )

24-मीडिया से मिली कैंसर की जानकारी कितनी विश्वनीय प्रतीत होती है

1. विश्वनीय होती है ( )
2. नहीं होती है ( )
3. पूरी तरह सत्य नहीं होती है ( )

25-कैंसर की खबरों में सबसे ज्यादा किस माध्यम पर भरोसा करते हैं

1. अखबार ( )
2. टीवी ( )
3. सोशल मीडिया ( )
4. डाक्टरों से मिली जानकारी ( )

26-क्या आप प्रत्येक वर्ष शरीर की मेडिकल जांच कराते हैं

1. हां ( )
2. नहीं ( )

27- क्या आप को लगता है कि कैंसर से बचाव संभव है ?

1. हां ( )
2. नहीं ( )
3. कह नहीं सकते ( )

28-क्या आपको लगता है कि कैंसर बचाव की हद में होता है

1. हां ( )

2. नहीं ( )
3. कह नहीं सकते ( )

**SECTION-3 The Cancer Awareness Measures (CAM)**

1-क्या आप कैंसर के चेतावनी संकेत या लक्षण के बारे में सोच सकते हैं ?

1. हां ( )
2. नहीं ( )

2-कैंसर के कई चेतावनी संकेत और लक्षण हैं। जिसे आप लक्षण मानते हैं तो उसके नाम लिखें ?

- 1.
- 2.
- 3.
- 4.
- 5.

3-क्या आपको लगता है कि छोटी सी गांठ या सूजन कैंसर का संकेत हो सकता है?

1. हाँ यह हो सकता है ( )
2. नहीं, यह नहीं हो सकता ( )
3. पता नहीं / निश्चित नहीं है ( )

4-क्या आपको लगता है कि लगातार शरीर के अलग-अलग हिस्से में महसूस होने वाला दर्द कैंसर का संकेत हो सकता है?

1. हाँ यह हो सकता है ( )
2. नहीं, यह नहीं हो सकता ( )
3. पता नहीं / निश्चित नहीं है ( )

5-क्या आपको लगता है कि शरीर के किसी हिस्से से रक्तस्राव (Bleeding) कैंसर का संकेत हो सकता है?

1. हाँ यह हो सकता है ( )
2. नहीं, यह नहीं हो सकता ( )
3. पता नहीं / निश्चित नहीं है ( )

6-क्या आपको लगता है कि लगातार खांसी या उबकाई कैंसर के लक्षण हो सकते हैं?

1. हाँ यह हो सकता है ( )
2. नहीं, यह नहीं हो सकता ( )
3. पता नहीं / निश्चित नहीं है ( )

7-क्या आपको लगता है कि आंत्र या मूत्राशय की आदतों में लगातार बदलाव कैंसर का संकेत हो सकता है?

1. हाँ यह हो सकता है ( )
2. नहीं, यह नहीं हो सकता ( )
3. पता नहीं / निश्चित नहीं है ( )

8-क्या आपको लगता है कि लगातार खाद्य सामग्री अथवा तरल पदार्थ निगलने में कठिनाई कैंसर का संकेत हो सकता है?

1. हाँ यह हो सकता है ( )
2. नहीं, यह नहीं हो सकता ( )
3. पता नहीं / निश्चित नहीं है ( )

9-क्या आपको लगता है कि तिल के दिखने में बदलाव कैंसर का संकेत हो सकता है?

1. हाँ यह हो सकता है ( )
2. नहीं, यह नहीं हो सकता ( )
3. पता नहीं / निश्चित नहीं है ( )

10-क्या आपको लगता है कि ठीक नहीं होने वाले घाव कैंसर का संकेत हो सकता है?

1. हाँ यह हो सकता है ( )
2. नहीं, यह नहीं हो सकता ( )
3. पता नहीं / निश्चित नहीं है ( )

11-क्या आपको लगता है कि तेजी से वजन कम होना कैंसर का संकेत हो सकता है ?

1. हाँ यह हो सकता है ( )

2. नहीं, यह नहीं हो सकता ( )
3. पता नहीं / निश्चित नहीं है ( )

12-क्या आपको अपने लक्षणों के बारे में डॉक्टर से बात करना शर्मनाक लगता है?

1. पूर्णतः सहमत ( )
2. सहमत ( )
3. न सहमत, न असहमत ( )
4. असहमत ( )
5. पूर्णतः असहमत ( )

13-मुझे डॉक्टर का समय बर्बाद करने की चिंता होगी?

1. पूर्णतः सहमत ( )
2. सहमत ( )
3. न सहमत, न असहमत ( )
4. असहमत ( )
5. पूर्णतः असहमत ( )

14-मुझे अपने डॉक्टर से बात करना मुश्किल लगता है-

1. पूर्णतः सहमत ( )
2. सहमत ( )
3. न सहमत, न असहमत ( )
4. असहमत ( )
5. पूर्णतः असहमत ( )

15- किसी निर्धारित समय पर मुलाकात करना का समय मिलने में कठिनाई होती है-

1. पूर्णतः सहमत ( )
2. सहमत ( )
3. न सहमत, न असहमत ( )
4. असहमत ( )
5. पूर्णतः असहमत ( )

16-सुविधाजनक समय पर एक डॉक्टर के साथ एक नियुक्ति प्राप्त करना मुश्किल लगता है-

1. पूर्णतः सहमत ( )
2. सहमत ( )
3. न सहमत, न असहमत ( )
4. असहमत ( )
5. पूर्णतः असहमत ( )

17-व्यस्तता के चलते मेरे पास डॉक्टर के पास जाने के लिए समय नहीं है?

1. पूर्णतः सहमत ( )
2. सहमत ( )
3. न सहमत, न असहमत ( )
4. असहमत ( )
5. पूर्णतः असहमत ( )

18-मेरे पास चिंता करने के लिए बहुत सी अन्य चीजें हैं ?

1. पूर्णतः सहमत ( )
2. सहमत ( )
3. न सहमत, न असहमत ( )
4. असहमत ( )
5. पूर्णतः असहमत ( )

19-मुझे इस बात की चिंता होगी कि उन्हें मुझ में क्या गलत नज़र आ जाये?

1. पूर्णतः सहमत ( )
2. सहमत ( )
3. न सहमत, न असहमत ( )
4. असहमत ( )
5. पूर्णतः असहमत ( )

20-मुझे इस बात की चिंता होगी कि डॉक्टर कौन से परीक्षण करने को कह दे ?

1. पूर्णतः सहमत ( )
2. सहमत ( )
3. न सहमत, न असहमत ( )
4. असहमत ( )
5. पूर्णतः असहमत ( )

21-मुझे डॉक्टर के साथ मेरे लक्षण के बारे में बात करने में विश्वास नहीं होगा ?

1. पूर्णतः सहमत ( )
2. सहमत ( )
3. न सहमत, न असहमत ( )
4. असहमत ( )
5. पूर्णतः असहमत ( )

22-मुझे अतीत में डॉक्टर के बुरे अनुभव का सामना करना पड़ा है ?

1. पूर्णतः सहमत ( )
2. सहमत ( )
3. न सहमत, न असहमत ( )

4. असहमत ( )
5. पूर्णतः असहमत ( )
- पूर्णतः असहमत ( )

23-मुझे चिंता होगी कि डॉक्टर मेरे लक्षण को गंभीरता से नहीं लेंगे ?

1. पूर्णतः सहमत ( )
2. सहमत ( )
3. न सहमत, न असहमत ( )
4. असहमत ( )
5. पूर्णतः असहमत ( )

24-मैं खुद को किसी ऐसे व्यक्ति के रूप में नहीं देखा जाना चाहता हूँ जो उपद्रव करता है

1. पूर्णतः सहमत ( )
2. सहमत ( )
3. न सहमत, न असहमत ( )
4. असहमत ( )
5. पूर्णतः असहमत ( )

25- मैं अपने लक्षण के बारे में सामान्य चिकित्सक के रिसेप्टनिस्ट से बात करना पसंद नहीं करता

1. पूर्णतः सहमत ( )
2. सहमत ( )
3. न सहमत, न असहमत ( )
4. असहमत ( )
5. पूर्णतः असहमत ( )

26-क्या कुछ और है जो आपको डॉक्टर के पास जाने से रोक देगा?

1. हाँ ( )
2. नहीं ( )

27-आपको क्या लगता है कि किसी व्यक्ति को किस चीज से कैंसर विकसित होने की संभावना है? जैसा आप सोच सकते हैं कृपया नाम दें।

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-  
-

28-क्या आप किसी और चीज के बारे में सोच सकते हैं जो किसी व्यक्ति में कैंसर के विकास की संभावना को प्रभावित कर सकती है

1. हाँ ( )
2. नहीं ( )

29-क्या आपको लगता है कि धूम्रपान से किसी व्यक्ति को कैंसर होने की संभावना बढ़ सकती है?

1. हाँ यह हो सकता है ( )
2. नहीं, यह नहीं हो सका ( )
3. पता नहीं / निश्चित नहीं है ( )

30-क्या आपको लगता है कि कई फल या सब्जियां नहीं खाने से व्यक्ति के कैंसर होने की संभावना बढ़ सकती है?

1. हाँ यह हो सकता है ( )
2. नहीं, यह नहीं हो सका ( )
3. पता नहीं / निश्चित नहीं है ( )

31-क्या आपको लगता है कि अधिक वजन होने से व्यक्ति के कैंसर होने की संभावना बढ़ सकती है?

1. हाँ यह हो सकता है ( )
2. नहीं, यह नहीं हो सका ( )
3. पता नहीं / निश्चित नहीं है ( )

32-क्या आपको लगता है कि कैंसर पीड़ित के करीबी रिश्तेदार होने से किसी व्यक्ति में कैंसर होने की संभावना बढ़ सकती है?

1. हाँ हाँ यह हो सकता है ( )
2. नहीं, यह नहीं हो सका ( )
3. पता नहीं / निश्चित नहीं है ( )

33-क्या आपको लगता है कि शराब पीने से किसी व्यक्ति को कैंसर होने की संभावना बढ़ सकती है?

1. हाँ यह हो सकता है ( )
2. नहीं, यह नहीं हो सका ( )
3. पता नहीं / निश्चित नहीं है ( )

34-क्या आपको लगता है कि ज्यादा शारीरिक गतिविधि नहीं करने से व्यक्ति में कैंसर होने की संभावना बढ़ सकती है?

1. हाँ यह हो सकता है ( )

2. नहीं, यह नहीं हो सका ( )
3. पता नहीं / निश्चित नहीं है ( )

35-क्या आपको लगता है कि सनबर्न से किसी व्यक्ति में कैंसर होने की संभावना बढ़ सकती है?

1. हाँ यह हो सकता है ( )
2. नहीं, यह नहीं हो सका ( )
3. पता नहीं / निश्चित नहीं है ( )

36-क्या आपको लगता है कि प्रोसेस्ड मांस खाने से किसी व्यक्ति के कैंसर होने की संभावना बढ़ सकती है?

1. हाँ यह हो सकता है ( )
2. नहीं, यह नहीं हो सका ( )
3. पता नहीं / निश्चित नहीं है ( )

37-क्या आपको लगता है कि किसी अन्य व्यक्ति के धूम्रपान(Passive smoking) के संपर्क में आने से व्यक्ति के कैंसर होने की संभावना बढ़ सकती है?

1. हाँ यह हो सकता है ( )
2. नहीं, यह नहीं हो सका ( )
3. पता नहीं / निश्चित नहीं है ( )

38- क्या आपको लगता है की उम्र बढ़ने से किसी व्यक्ति में कैंसर के विकास की संभावना बढ़ सकती है?

1. हाँ यह हो सकता है ( )
2. नहीं, यह नहीं हो सका ( )
3. पता नहीं / निश्चित नहीं है ( )

39-क्या आपको लगता है कि एचपीवी (मानव पैपिलोमावायरस) के संक्रमण से व्यक्ति के कैंसर के विकास की संभावना बढ़ सकती है?

1. हाँ यह हो सकता है ( )
2. नहीं, यह नहीं हो सका ( )

3. पता नहीं / निश्चित नहीं है ( )

40-पर्याप्त फाइबर नहीं खाने से व्यक्ति के कैंसर होने की संभावना बढ़ सकती है?

1. हाँ यह हो सकता है ( )

2. नहीं, यह नहीं हो सका ( )

3. पता नहीं / निश्चित नहीं है ( )

41-विकल्पों को देखते हुए, आपको क्या लगता है की कौनसी उम्र में कैंसर होने की संभावना सबसे अधिक होती है?

1. बीसवे साल में ( )

2. तीसवें में ( )

3. चालीसवें में ( )

4. पचासवे साल में ( )

5. साठ साल में ( )

6. सत्तर साल में ( )

7. अस्सी साल में ( )

8. कैंसर का उम्र से कोई संबंध नहीं है ( )

9. पता नहीं ( )

42-जहाँ तक आप जानते हैं कि कोई कैंसर स्क्रीनिंग प्रोग्राम (Cancer Screening Programme) चलाया जा रहा है है?

1. हाँ ( )

2. नहीं ( )

3. पता नहीं ( )

42 (a)-यदि हाँ, तो कैंसर की स्क्रीनिंग के लिए लोगों को किस उम्र में बुलाया जाता है?

.....

43-क्या आपको या आपके किसी दोस्त या परिवार के किसी सदस्य को कैंसर हुआ है?

1. आपको ( )

2. आपके दोस्त ( )

3. परिवार के करीबी सदस्य ( )

4. परिवार के अन्य सदस्य ( )

5. करीबी दोस्त ( )

6. दूसरा दोस्त ( )

7. इनमें से कोई नहीं ( )

8. चुप रहना पसंद करेंगे ( )

**Interview Schedule for masses on cancer awareness (फिल्म के जरिये कैंसर के प्रति जागरूकता )**

**Babasaheb Bhimrao Ambedkar University**

**Department of Mass Communication and Journalism**

**शोधकर्ता का परिचय तथा उद्देश्य**

शोधकर्ता नीलू शर्मा बाबा साहब भीमराव आंबेडकर केन्द्रीय विश्वविद्यालय के जनसंचार एवं पत्रकारिता विभाग से पीएचडी में अध्ययनरत है। यह सर्वे शोधकर्ता द्वारा पीएचडी के शीर्षक-Role and impact of media interventions in creating awareness about cancer among masses ( कैंसर के प्रति जागरूकता में मीडिया का हस्तक्षेप, उसकी भूमिका और प्रभाव)के लिए प्रो. गोविंद जी पांडेय के निर्देशन में किया जा रहा है। इस प्रश्नावली के माध्यम से उत्तरदाताओं द्वारा दी गयी जानकारी का इस्तेमाल सिर्फ शोध कार्य में किया जाएगा तथा पूर्णतः गोपनीय रखा जाएगा। यह व्यापक समाज के स्वास्थ्य के हितों से जुड़ा मुद्दा है। मेरा किसी भी निजी संस्था अथवा कंपनी से कोई संबंध नहीं है। मेरे सवालों का जवाब देने के लिए अगर समय निकालेंगे तो मैं आभारी रहूंगी. सादर

**Post-Screening Interview Schedule**

SECTION-1: उत्तरदाता का व्यक्तिगत परिचय

1- नाम:

2- उम्र 18 से 25 ( ) 26 से 35 ( ) 36 से 45 ( ) 46 से 55 ( ) 56 से 65 ( ) 66 और

उससे अधिक ( )

3- लिंग: स्त्री ( ) पुरुष ( ) अन्य ( )

4- शिक्षा : निरक्षर ( ) साक्षर ( ) प्राथमिक ( ) माध्यमिक ( ) हाई स्कूल ( ) इंटरमीडिएट ( ) स्नातक ( ) परास्नातक ( ) पीएचडी ( )

5- आवास: शहरी क्षेत्र ( ) ग्रामीण क्षेत्र ( ) अर्ध शहरी ( )

6- पेशा : सरकारी नौकरी ( ) गैर सरकारी नौकरी ( ) दिहाड़ी मजदूर ( ) किसान ( ) विद्यार्थी

( ) गृहणी ( ) मैकेनिक टेक्सिसिअन ( ) व्यवसाय ( ) बेरोज़गार ( ) यदि अन्य तो कृपया

वर्णन करे ( )

7- वैवाहिक स्थिति: विवाहित ( ) अविवाहित ( ) विधवा ( ) तलाकशुदा ( )

8- जाति: सामान्य ( ) ओ बी सी ( ) अनुसूचित जाति/ अनुसूचित जन- जाति

9- परिवार की मासिक आय: Upto 10,000 ( ), 10001 to 30,000 ( ), 30001 to 50,000 ( ), 50001 and Above ( )

10- धर्म : हिन्दू ( ) मुस्लिम ( ) ईसाई ( ) सिख ( )

SECTION2: Questions based on strategic Media Intervention  
फिल्म की जागरूकता पर आधारित सवाल

1 - क्या आप कैंसर के बारे में जानते है ?

4. हां ( )
5. नहीं ( )
6. कह नहीं सकते ( )

1a- यदि हाँ तो कृपया बताये कि कैंसर क्या है?

4. जानलेवा बीमारी है ( )
5. शरीर की कोशिशों का अनियंत्रित बढ़ना है ( )
6. पता नहीं है ( )

2-कैंसर के कारण क्या हैं ?

5. पता नहीं ( )
6. खानपान में गड़बड़ी ( )
7. अनुवांशिक कारण ( )
8. ठोस कारणों का पता नहीं हैं ( )

3-कैंसर कितने प्रकार का होता है?

6. 1 प्रकार का होता है ( )
7. 2-5 प्रकार का होता है ( )
8. 6-10 प्रकार का होता है ( )
9. 11-15 प्रकार का होता है ( )
10. कई प्रकार का होता है ( )

4-क्या आपको लगता है जो लोग गुटका शराब एवं मादक पदार्थों का सेवन करते हैं, सिर्फ उन्हें ही कैंसर होता है?

6. पूर्णतः सहमत ( )
7. सहमत ( )
8. न सहमत, न असहमत ( )
9. असहमत ( )
10. पूर्णतः असहमत ( )

5-घर तथा बर्तन की सफाई में इस्तेमाल होने वाले केमिकल्स से भी क्या कैंसर हो सकता है?

6. पूर्णतः सहमत ( )
7. सहमत ( )
8. न सहमत, न असहमत ( )
9. असहमत ( )
10. पूर्णतः असहमत ( )

6- क्या एक ही घी, तेल में बार-बार बनी खाद्य सामग्री के सेवन से कैंसर हो सकता है ?

6. पूर्णतः सहमत ( )
7. सहमत ( )
8. न सहमत, न असहमत ( )
9. असहमत ( )
10. पूर्णतः असहमत ( )

7-क्या आपको कैंसर कारक तत्वों की जानकारी है

4. हां ( )
5. नहीं ( )
6. कह नहीं सकते ( )

7 (a)- यदि हाँ तो कृपया उसका विवरण दीजिए:

.....

8-महिलाओं में सबसे अधिक पाये जाने वाले कैंसर कौन से है ?

6. सामान्य कैंसर ( )
7. ब्रेस्ट कैंसर ( )
8. सरवाइकल कैंसर ( )
9. पता नहीं ( )
10. यदि अन्य तो कृपया विवरण लिखें ( )

9- पुरुषों में पाये जाने वाले प्रमुख कैंसर कौन से हैं ?

6. सामान्य कैंसर ( )
7. ब्रेस्ट कैंसर ( )
8. फेफड़ों का कैंसर ( )

9. पता नहीं ( )
10. यदि अन्य तो कृपया विवरण लिखें ( )
- 10- किस तरह के कैंसर से महिलाओं की सबसे अधिक मौत होती है ?
6. पता नहीं ( )
7. सरवाइकल कैंसर ( )
8. ब्रेस्ट कैंसर ( )
9. सामान्य कैंसर ( )
10. यदि अन्य तो कृपया विवरण लिखें ( )
- 11-आपको पता है कि सरवाइकल कैंसर क्या है
3. हां ( )
4. नहीं ( )
- 11 (ए) - यदि हां तो कृपया विवरण लिखें
- 12 - सरवाइकल कैंसर से बचाव की वैक्सीन उपलब्ध है?
4. हां ( )
5. नहीं ( )
6. कह नहीं सकते ( )
- 12 (ए) - यदि हां तो वैक्सीन के नाम का उल्लेख करें-
- .....
- 13-क्या आपने या आपके जानने वाले ने यह वैक्सीन लगवायी है ?
3. हां ( )
4. नहीं ( )
- 14- क्या ब्रेस्ट कैंसर सिर्फ महिलाओं को होता है
4. हां ( )
5. नहीं ( )
6. कह नहीं सकते ( )
- 15- क्या आप जानते हैं कि पुरुषों में ब्रेस्ट कैंसर होता है?
4. हां ( )
5. नहीं ( )
6. कह नहीं सकते ( )

16-ब्रेस्ट कैंसर महिला एवं पुरुष दोनों को हो सकता है?

4. हां ( )
5. नहीं ( )
6. कह नहीं सकते ( )

17-क्या आप नियमित रूप से ब्रेस्ट का परीक्षण (Self Examination) करते हैं

3. हां ( )
4. नहीं ( )

18- कैंसर/ स्वास्थ्य संबंधी जानकारी आपको कहाँ से मिलती है?

9. रेडियो ( )
10. समाचार पत्र ( )
11. टीवी ( )
12. स्वयंसेवी संस्थाओं ( )
13. डॉक्टरों से ( )
14. नुक्कड़ नाटकों से ( )
15. गांव-चौपाल से ( )
16. यदि कोई और तो कृपया विवरण करें

19-कैंसर पीड़ितों के प्रति आपका नजरिया/ व्यवहार कैसा होता है ?

5. सहानुभूति वाला ( )
6. कैंसर रोगियों से बचने वाला ( )
7. घृणा वाला होता है ( )
8. सामान्य लोगो की तरह ( )

20-कैंसर को लेकर समाज में क्या-क्या धारणायें हैं ?

6. तंत्र-मंत्र से ठीक हो जाता है ( )
7. मंदिर दरगाहों पर जाने से ठीक होता है ( )
8. जड़ी-बूटियों के उपयोग से ठीक हो जाता ( )
9. यह पूर्व जन्म के कर्म के चलते होता है ( )
10. यदि कोई और तो कृपया विवरण करें ( )

21- क्या आपको लगता है कि कैंसर छुआ-छूत की बीमारी है

4. हां ( )
5. नहीं ( )
6. कह नहीं सकते ( )

22-कैंसर पीड़ित पुरुषों के प्रति आपका व्यवहार कैसा होता

5. अच्छा नहीं होता ( )
6. सहानुभूति पूर्वक होता है ( )
7. मन पर कोई प्रभाव नहीं छोड़ता है ( )
8. सामान्य लोगो की तरह ( )

23- कैंसर पीड़ित महिलाओं के प्रति आपका व्यवहार कैसा होता

6. दया का भाव पैदा होता है ( )
7. मदद करने का भाव आता है ( )
8. उससे दूर रहने का भाव जन्म लेता ( )
9. कोई फर्क नहीं पड़ता है ( )
10. सामान्य लोगो की तरह ( )

24-मीडिया से मिली कैंसर की जानकारी कितनी विश्वनीय प्रतीत होती है

4. विश्वनीय होती है ( )
5. नहीं होती है ( )
6. पूरी तरह सत्य नहीं होती है ( )

25-कैंसर की खबरों में सबसे ज्यादा किस माध्यम पर भरोसा करते हैं

5. अखबार ( )
6. टीवी ( )
7. सोशल मीडिया ( )
8. डाक्टरों से मिली जानकारी ( )

26-क्या आप प्रत्येक वर्ष शरीर की मेडिकल जांच कराते हैं

3. हां ( )
4. नहीं ( )

27- क्या आप को लगता है कि कैंसर से बचाव संभव है ?

4. हां ( )
5. नहीं ( )
6. कह नहीं सकते ( )

28-क्या आपको लगता है कि कैंसर बचाव की हद में होता है

4. हां ( )
5. नहीं ( )
6. कह नहीं सकते ( )

SECTION-3 The Cancer Awareness Measures (CAM)

1-क्या आप कैंसर के चेतावनी संकेत या लक्षण के बारे में सोच सकते हैं ?

- 3. हां ( )
- 4. नहीं ( )

2-कैंसर के कई चेतावनी संकेत और लक्षण हैं। जिसे आप लक्षण मानते हैं तो उसके नाम लिखें ?

- 6.
- 7.
- 8.
- 9.
- 10.

3-क्या आपको लगता है कि छोटी सी गांठ या सूजन कैंसर का संकेत हो सकता है?

- 4. हाँ यह हो सकता है ( )
- 5. नहीं, यह नहीं हो सकता ( )
- 6. पता नहीं / निश्चित नहीं है ( )

4-क्या आपको लगता है कि लगातार शरीर के अलग-अलग हिस्से में महसूस होने वाला दर्द कैंसर का संकेत हो सकता है?

- 4. हाँ यह हो सकता है ( )
- 5. नहीं, यह नहीं हो सकता ( )
- 6. पता नहीं / निश्चित नहीं है ( )

5-क्या आपको लगता है कि शरीर के किसी हिस्से से रक्तस्राव (Bleeding) कैंसर का संकेत हो सकता है?

- 4. हाँ यह हो सकता है ( )
- 5. नहीं, यह नहीं हो सकता ( )
- 6. पता नहीं / निश्चित नहीं है ( )

6-क्या आपको लगता है कि लगातार खांसी या उबकाई कैंसर के लक्षण हो सकते हैं?

4. हाँ यह हो सकता है ( )

5. नहीं, यह नहीं हो सकता ( )

6. पता नहीं / निश्चित नहीं है ( )

7-क्या आपको लगता है कि आंत्र या मूत्राशय की आदतों में लगातार बदलाव कैंसर का संकेत हो सकता है?

4. हाँ यह हो सकता है ( )

5. नहीं, यह नहीं हो सकता ( )

6. पता नहीं / निश्चित नहीं है ( )

8-क्या आपको लगता है कि लगातार खाद्य सामग्री अथवा तरल पदार्थ निगलने में कठिनाई कैंसर का संकेत हो सकता है?

4. हाँ यह हो सकता है ( )

5. नहीं, यह नहीं हो सकता ( )

6. पता नहीं / निश्चित नहीं है ( )

9-क्या आपको लगता है कि तिल के दिखने में बदलाव कैंसर का संकेत हो सकता है?

4. हाँ यह हो सकता है ( )

5. नहीं, यह नहीं हो सकता ( )

6. पता नहीं / निश्चित नहीं है ( )

10-क्या आपको लगता है कि ठीक नहीं होने वाले घाव कैंसर का संकेत हो सकता है?

4. हाँ यह हो सकता है ( )

5. नहीं, यह नहीं हो सकता ( )

6. पता नहीं / निश्चित नहीं है ( )

11-क्या आपको लगता है कि तेजी से वजन कम होना कैंसर का संकेत हो सकता है ?

4. हाँ यह हो सकता है ( )

5. नहीं, यह नहीं हो सकता ( )

6. पता नहीं / निश्चित नहीं है ( )

12-क्या आपको अपने लक्षणों के बारे में डॉक्टर से बात करना शर्मनाक लगता है?

6. पूर्णतः सहमत ( )
7. सहमत ( )
8. न सहमत, न असहमत ( )
9. असहमत ( )
10. पूर्णतः असहमत ( )

13-मुझे डॉक्टर का समय बर्बाद करने की चिंता होगी?

6. पूर्णतः सहमत ( )
7. सहमत ( )
8. न सहमत, न असहमत ( )
9. असहमत ( )
10. पूर्णतः असहमत ( )

14-मुझे अपने डॉक्टर से बात करना मुश्किल लगता है-

6. पूर्णतः सहमत ( )
7. सहमत ( )
8. न सहमत, न असहमत ( )
9. असहमत ( )
10. पूर्णतः असहमत ( )

15- किसी निर्धारित समय पर मुलाकात करना का समय मिलने में कठिनाई होती है-

6. पूर्णतः सहमत ( )
7. सहमत ( )
8. न सहमत, न असहमत ( )
9. असहमत ( )
10. पूर्णतः असहमत ( )

16-सुविधाजनक समय पर एक डॉक्टर के साथ एक नियुक्ति प्राप्त करना मुश्किल लगता है-

6. पूर्णतः सहमत ( )
7. सहमत ( )
8. न सहमत, न असहमत ( )
9. असहमत ( )
10. पूर्णतः असहमत ( )

17-व्यस्तता के चलते मेरे पास डॉक्टर के पास जाने के लिए समय नहीं है?

6. पूर्णतः सहमत ( )
7. सहमत ( )
8. न सहमत, न असहमत ( )
9. असहमत ( )
10. पूर्णतः असहमत ( )

18-मेरे पास चिंता करने के लिए बहुत सी अन्य चीजें हैं ?

6. पूर्णतः सहमत ( )
7. सहमत ( )
8. न सहमत, न असहमत ( )
9. असहमत ( )
10. पूर्णतः असहमत ( )

19-मुझे इस बात की चिंता होगी कि उन्हें मुझ में क्या गलत नज़र आ जाये?

6. पूर्णतः सहमत ( )
7. सहमत ( )
8. न सहमत, न असहमत ( )
9. असहमत ( )
10. पूर्णतः असहमत ( )

20-मुझे इस बात की चिंता होगी कि डॉक्टर कौन से परीक्षण करने को कह दे ?

6. पूर्णतः सहमत ( )
7. सहमत ( )
8. न सहमत, न असहमत ( )
9. असहमत ( )
10. पूर्णतः असहमत ( )

21-मुझे डॉक्टर के साथ मेरे लक्षण के बारे में बात करने में विश्वास नहीं होगा ?

6. पूर्णतः सहमत ( )
7. सहमत ( )
8. न सहमत, न असहमत ( )
9. असहमत ( )
10. पूर्णतः असहमत ( )

22-मुझे अतीत में डॉक्टर के बुरे अनुभव का सामना करना पड़ा है ?

6. पूर्णतः सहमत ( )
7. सहमत ( )
8. न सहमत, न असहमत ( )
9. असहमत ( )

10. पूर्णतः असहमत ( )  
पूर्णतः असहमत ( )
- 23-मुझे चिंता होगी कि डॉक्टर मेरे लक्षण को गंभीरता से नहीं लेंगे ?
6. पूर्णतः सहमत ( )  
7. सहमत ( )  
8. न सहमत, न असहमत ( )  
9. असहमत ( )  
10. पूर्णतः असहमत ( )
- 24-मैं खुद को किसी ऐसे व्यक्ति के रूप में नहीं देखा जाना चाहता हूँ जो उपद्रव करता है
6. पूर्णतः सहमत ( )  
7. सहमत ( )  
8. न सहमत, न असहमत ( )  
9. असहमत ( )  
10. पूर्णतः असहमत ( )
- 25- मैं अपने लक्षण के बारे में सामान्य चिकित्सक के रिसेप्टनिस्ट से बात करना पसंद नहीं करता
6. पूर्णतः सहमत ( )  
7. सहमत ( )  
8. न सहमत, न असहमत ( )  
9. असहमत ( )  
10. पूर्णतः असहमत ( )
- 26-क्या कुछ और है जो आपको डॉक्टर के पास जाने से रोक देगा?
3. हाँ ( )  
4. नहीं ( )
- 27-आपको क्या लगता है कि किसी व्यक्ति को किस चीज से कैंसर विकसित होने की संभावना है?  
जैसा आप सोच सकते हैं कृपया नाम दें।  
-  
-  
-
- 28-क्या आप किसी और चीज के बारे में सोच सकते हैं जो किसी व्यक्ति में कैंसर के विकास की संभावना को प्रभावित कर सकती है
3. हाँ ( )  
4. नहीं ( )
- 29-क्या आपको लगता है कि धूम्रपान से किसी व्यक्ति को कैंसर होने की संभावना बढ़ सकती है?
4. हाँ यह हो सकता है ( )

5. नहीं, यह नहीं हो सका ( )
6. पता नहीं / निश्चित नहीं है ( )

30-क्या आपको लगता है कि कई फल या सब्जियां नहीं खाने से व्यक्ति के कैंसर होने की संभावना बढ़ सकती है?

4. हाँ यह हो सकता है ( )
5. नहीं, यह नहीं हो सका ( )
6. पता नहीं / निश्चित नहीं है ( )

31-क्या आपको लगता है कि अधिक वजन होने से व्यक्ति के कैंसर होने की संभावना बढ़ सकती है?

4. हाँ यह हो सकता है ( )
5. नहीं, यह नहीं हो सका ( )
6. पता नहीं / निश्चित नहीं है ( )

32-क्या आपको लगता है कि कैंसर पीड़ित के करीबी रिश्तेदार होने से किसी व्यक्ति में कैंसर होने की संभावना बढ़ सकती है?

4. हाँ हाँ यह हो सकता है ( )
5. नहीं, यह नहीं हो सका ( )
6. पता नहीं / निश्चित नहीं है ( )

33-क्या आपको लगता है कि शराब पीने से किसी व्यक्ति को कैंसर होने की संभावना बढ़ सकती है?

4. हाँ यह हो सकता है ( )
5. नहीं, यह नहीं हो सका ( )
6. पता नहीं / निश्चित नहीं है ( )

34-क्या आपको लगता है कि ज्यादा शारीरिक गतिविधि नहीं करने से व्यक्ति में कैंसर होने की संभावना बढ़ सकती है?

4. हाँ यह हो सकता है ( )

5. नहीं, यह नहीं हो सका ( )
6. पता नहीं / निश्चित नहीं है ( )

35-क्या आपको लगता है कि सनबर्न से किसी व्यक्ति में कैंसर होने की संभावना बढ़ सकती है?

4. हाँ यह हो सकता है ( )
5. नहीं, यह नहीं हो सका ( )
6. पता नहीं / निश्चित नहीं है ( )

36-क्या आपको लगता है कि प्रोसेस्ड मांस खाने से किसी व्यक्ति के कैंसर होने की संभावना बढ़ सकती है?

4. हाँ यह हो सकता है ( )
5. नहीं, यह नहीं हो सका ( )
6. पता नहीं / निश्चित नहीं है ( )

37-क्या आपको लगता है कि किसी अन्य व्यक्ति के धूम्रपान(Passive smoking) के संपर्क में आने से व्यक्ति के कैंसर होने की संभावना बढ़ सकती है?

4. हाँ यह हो सकता है ( )
5. नहीं, यह नहीं हो सका ( )
6. पता नहीं / निश्चित नहीं है ( )

38- क्या आपको लगता है की उम्र बढ़ने से किसी व्यक्ति में कैंसर के विकास की संभावना बढ़ सकती है?

4. हाँ यह हो सकता है ( )
5. नहीं, यह नहीं हो सका ( )
6. पता नहीं / निश्चित नहीं है ( )

39-क्या आपको लगता है कि एचपीवी (मानव पैपिलोमावायरस) के संक्रमण से व्यक्ति के कैंसर के विकास की संभावना बढ़ सकती है?

4. हाँ यह हो सकता है ( )
5. नहीं, यह नहीं हो सका ( )
6. पता नहीं / निश्चित नहीं है ( )

40-पर्याप्त फाइबर नहीं खाने से व्यक्ति के कैंसर होने की संभावना बढ़ सकती है?

4. हाँ यह हो सकता है ( )
5. नहीं, यह नहीं हो सका ( )
6. पता नहीं / निश्चित नहीं है ( )

41-विकल्पों को देखते हुए, आपको क्या लगता है की कौनसी उम्र में कैंसर होने की संभावना सबसे अधिक होती है?

10. बीसवे साल में ( )
11. तीसवें में ( )
12. चालीसवें में ( )
13. पचासवे साल में ( )
14. साठ साल में ( )
15. सत्तर साल में ( )
16. अस्सी साल में ( )
17. कैंसर का उम्र से कोई संबंध नहीं है ( )
18. पता नहीं ( )

42-जहाँ तक आप जानते हैं कि कोई कैंसर स्क्रीनिंग प्रोग्राम (Cancer Screening Programme) चलाया जा रहा है है?

4. हाँ ( )
5. नहीं ( )
6. पता नहीं ( )

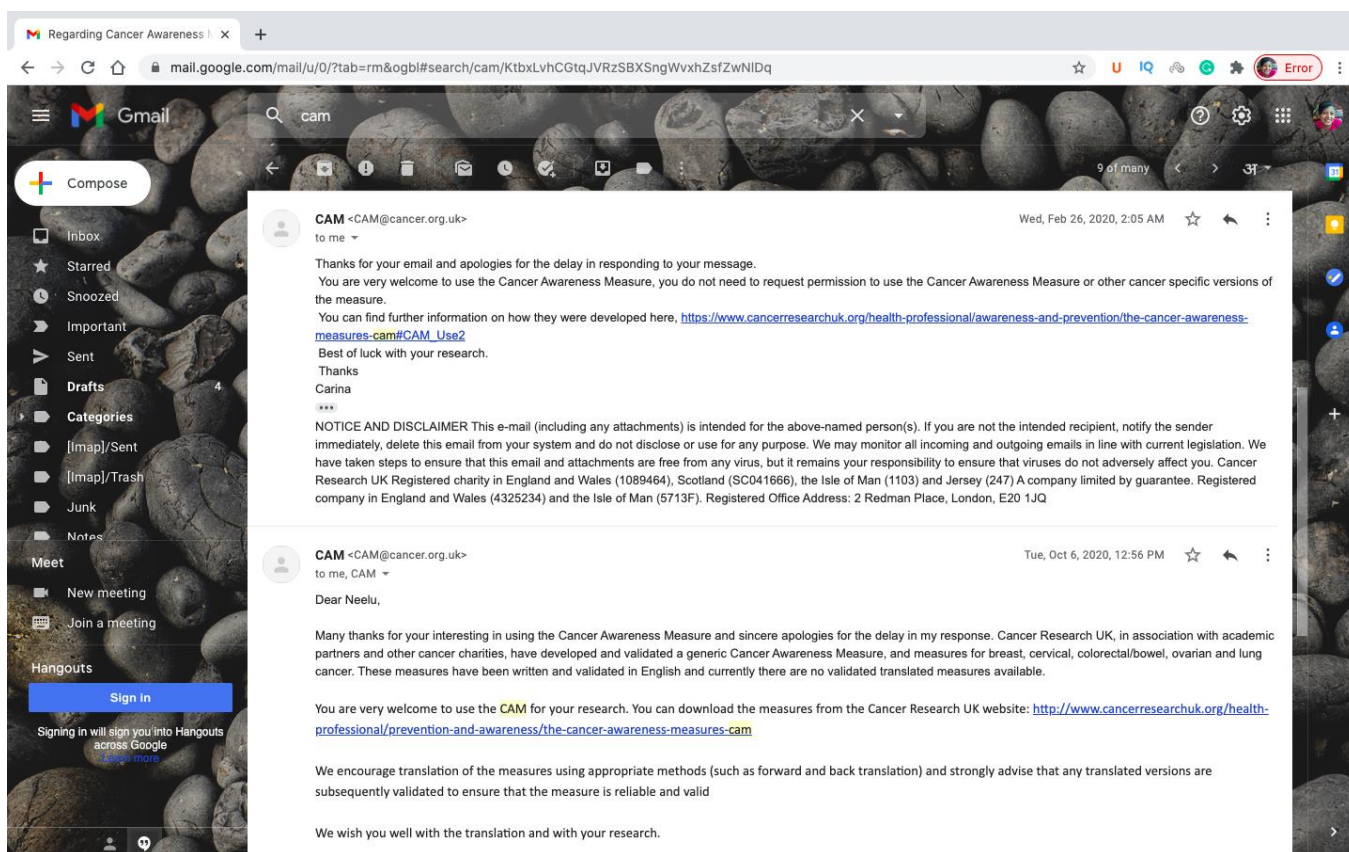
42 (a)-यदि हाँ, तो कैंसर की स्क्रीनिंग के लिए लोगों को किस उम्र में बुलाया जाता है?

.....

43-क्या आपको या आपके किसी दोस्त या परिवार के किसी सदस्य को कैंसर हुआ है?

9. आपको ( )
10. आपके दोस्त ( )
11. परिवार के करीबी सदस्य ( )
12. परिवार के अन्य सदस्य ( )
13. करीबी दोस्त ( )
14. दूसरा दोस्त ( )
15. इनमें से कोई नहीं ( )
16. चुप रहना पसंद करेंगे ( )

## Permission to use CAM-Cancer Awareness Measure



Letter of Appreciation and seeking permission to use the strategic media interventions from RSPL LIMITED- Ghari Detergent



RSPL LIMITED

May 21, 2020

To,  
Prof Govind Ji Pandey,  
Head- Department of Mass Communication & Journalism,  
Babasaheb Bhimrao Ambedkar University,  
Lucknow

Respected Sir,

***Subject: Letter of Appreciation and Seeking Permission to get Film Link.***

This is to appreciate Ms. Neelu Sharma- Research Scholar- DMCJ- BBAU for making an amazing documentary film (Can Break Cancer) on cancer survivor to motivate masses in order to fight Cancer as her film depicts the struggle and journey from being a cancer patient to a cancer survivor. As she is doing her research under your supervision, I congratulate you for bringing such a sensitive issue in research domain and motivating Cancer patients to fight this deadly disease.

Further, I request you sir to kindly share the link of the film Can Break Cancer with us (Ghari Detergent), as we want to use this film for Cancer Awareness, this film will be used strictly for Non-Commercial purpose.

Thanking you.

Thanking you,  
**For RSPL Limited**

**S. K. Bajpai**  
**President-Corporate**

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**Corporate Office :** Plot No. 124, Sector - 44, Gurugram - 122003 (Haryana)  
Phone : +91-124-2544180 to 80, 7518204740-41, 7233808503-504  
**Regd. Office :** 119-121(Part), Block P & T, Fazal Ganj, Kalpi Road, Kanpur-208012 (U.P.)  
Phone : 0512-2221201 to 295 • Fax No. : 0512-2221225-30 • E-mail : info@gharidetergent.com

Official Section of the documentary- CAN BREAK CANCER in 10<sup>th</sup>  
NATIONAL SCIENCE FILM FESTIVAL OF INDIA-2020

**ONLINE**

**Official Selection**

**10<sup>th</sup> NATIONAL SCIENCE  
FILM FESTIVAL  
OF INDIA**

**24 - 27 NOVEMBER 2020**

	<b>Title of Film:</b> Can Break Cancer <b>Duration:</b> 00:16:54 <b>Language:</b> Hindi <b>Director:</b> Neelu Sharma	
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**TRIPURA STATE COUNCIL  
FOR SCIENCE & TECHNOLOGY**  
Vigyan Prajukti Paribesh Bhavan, PI Complex,  
Gorkhabasti Agartala - 799006, Tripura

**VIGYAN PRASAR**  
A-50, Institutional Area, Sector 62  
Noida - 201309, Uttar Pradesh


**For more details, please visit:**  
[www.vigyanprasar.gov.in](http://www.vigyanprasar.gov.in)

Facebook Page: <https://www.facebook.com/vigyanprasar/>

YouTube Page: <https://www.youtube.com/user/VigyanPrasar1>

Letter from Health Minister of Uttar Pradesh for public screening of documentaries in government hospitals of Uttar Pradesh

**जय प्रताप सिंह**  
मंत्री  
चिकित्सा एवं स्वास्थ्य, परिवार कल्याण  
तथा मातृ एवं शिशु कल्याण विभाग।



कक्ष सं० 89-90, मुख्य भवन,  
4, एन.डी.एम.आर. विक्रमादित्य मार्ग,  
विधान भवन, लखनऊ  
दूरभाष (कार्या.) : 0522-2235675  
(सी.एच.) : 0522-2213608

दिनांक : .....

सं० 1060 /VIP/मंत्री/वि.प.शिक.सं./2020  
दिनांक 07/09/2020

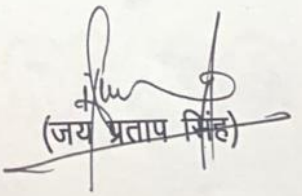
प्रो० गोविंद जी पाण्डेय,  
विभागाध्यक्ष,  
पत्रकारिता एवं जनसंचार विभाग,  
बाबा साहब भीमराव अम्बेडकर केन्द्रीय वि०वि०,  
उत्तर प्रदेश, लखनऊ।

पत्रकारिता एवं जन संचार विभाग की शोध छात्रा नीलू शर्मा की कैंसर के प्रति जागरूकता पर बनी फिल्म (कनो कैंसर, कैन क्योर कैंसर, कैन ब्रेक कैंसर) शानदार है। यह कैंसर के प्रति जागरूकता फैलाने में कारगर है। मैं वि०वि० प्रशासन, पत्रकारिता विभाग को साधुवाद देता हूँ कि उन्होंने जनहित से जुड़ा मुद्दा शोध के लिए चुना। विभाग से अपेक्षा है कि यह फिल्म स्वास्थ्य विभाग को उपलब्ध करा देते ताकि कैंसर पीड़ितों में जागरूकता के लिए अस्पतालों में उसका प्रदर्शन किया जा सके।

मैं इन फिल्मों के लोकार्पण के साथ शोध छात्रा नीलू शर्मा के उच्च शिक्षा के क्षेत्र में प्रेरणादायक कार्य की सराहना करने के साथ ही उनके उज्ज्वल भविष्य की कामना करता हूँ।

(जय प्रताप सिंह)

प्रतिलिपि:- शोध छात्रा नीलू शर्मा को आवश्यक कार्यवाही हेतु प्रेषित।

  
(जय प्रताप सिंह)

CAN BREAK CANCER awarded as “Best of the Festival” at the INTERNATIONAL SCIENCE FILM FESTIVAL OF INDIA 2020

