



Knowledge on Cancer Alarms, Profession and Media preferences: A Study of the Newly Diagnosed Patients from Northeast India

Aroop Roy Burman

PhD Scholar, Department of Mass Communication, Assam University

&

Dr. Charvak, Associate Professor,

Department of Mass Communication, Assam University, Silchar

Abstract:

Cancer as a disease is specially characterized by its early silent and chronic phases. Due to deceptive painless presentation at the very onset, its early diagnosis is often missed. Few types of Cancers can be screened at the onset of the early symptoms. Examples of such Cancers are breast and uterine cervical cancer in female where Mammography and Pap smear are used respectively. Understanding certain alarming signs can ensure early diagnosis which in turn improves treatment results. But such knowledge can be propagated in the society only by proper health communication through an appropriate media.

This paper examines knowledge of cancer among the newly diagnosed cancer patients attending a Tertiary Cancer Centre of North East India located in the small hilly state of Tripura. The level of awareness of the patients, their profession and media usage were correlated for getting better directions for health communication. The study revealed that more intensive drive was needed to make the people properly aware about the alarming signs of cancer and about common screening tests. Use of television would serve as the most proper media in the studied population.

Keywords- Cancers, Media, alarming signs, Northeast India

Introduction:

In recent years, the incidence of Cancer is increasing day by day especially in lower income countries where around 82% of the World population resides. GLOBOCAN worldwide prediction about incidence and mortality of cancer reported by the International Agency for Research on Cancer (IARC) regarding 2012 is a confirmatory document regarding such increase. There is also a large variation regarding the site of cancer affection across the World (Torre LA, 2015).

Most of the cancers are diagnosed late as people present late with the disease (Farmer P, 2010). Additionally about two-third cancer mortality is found in lower or middle income countries. Also age adjusted mortality rate of some particular cancer is found to be increasing in some specific areas. Breast cancer is one of the prominent cancers in this regards. Survival rates also found to differ between higher income and other countries. Patients with cancer often delay seeking medical advice in developing countries. It can adversely influence the outcome of disease (Meechan G, 2002) (Malik IA, 2003)

Awareness, prevention and early detection have improved results of cancer treatment in many countries. Among many factors which obstruct such efforts financial constraint is one of the most prominent issues. Economical status is mostly dependent on profession. Again, though acceptable treatment for commonly occurring cancers is optimally available in most of the set ups, many people are not aware about cancer diagnosis and also consider cancer disease as a stigma. Such situation is adversely influencing cancer diagnosis and producing false fear about the disease. In many situations people by themselves can suspect cancers, but they mostly cannot do so as they don't know about the symptoms of cancers. Hence, knowing the status of Cancer Knowledge like Knowing common symptoms of cancers and effective Screening tests which are available for early detection of cancers are very useful to understand the necessity of Health communication in a particular community by using media appropriate for that community (Farmer P, 2010) (Boyle P, 2008)

It is observed in some studies that around 90% of uterine cervical cancer fatalities occurred in developing countries in 2012 and out of this in Asia only 144,400. In India, it was around 25% of all uterine cervical death. Uterine cervical cancers are also one of the principle causes of death in various parts of Africa and Melanesia among females. It is observed that uterine cervical cancer shows a large variation in incidence rate with respect to the geographical areas proving the huge difference of screening, early detection and awareness in various parts of the world. Papanicolaou Stain, commonly abbreviated as Pap Test remains the gold standard screening tool for uterine cervical cancer. Likewise, breast cancer in female is the cause of around 25% of altogether and responsible for about 15% deaths in female sufferers. International difference in incidences is due to variation in Risk factors as well as due to resources for early diagnosis and awareness etc. Mammography is the time honored investigation for detecting early breast cancers when the treatment prognosis remains very satisfactory (Torre LA, 2015).

Early stage cancers often show good treatment results. But diagnosing at an early stage is most of the time is difficult and at times may be challenging. Early diagnosis can be done by few techniques like subjecting a person for screening tests or attending to the Health worker if there is any symptom. Screening is the practice where patient is investigated for presence of an asymptomatic disease. Such type of diagnosis catches the disease at an early stage. But once certain cancer symptoms appear quick consultation also enables diagnosis

with rapidity. Such actions are also highly appreciable as many people may present with very minute symptoms which are mostly found only in very early stage of the disease. Early diagnosis asks for good knowledge about the warning signs of the disease and also awareness regarding screening tests, if available.

Most of the patients diagnosed with cancer are those who presented with symptoms. Whereas screening is effective in few conditions like breast cancer and cervical cancer, there is scarcity of good screening tests for other common cancers. Traditionally x-ray of the breast is called Mammography that is employed for detecting asymptomatic breast cancer and Pap smear is used for detection of uterine cervical cancers as screening tool.

“Be Clear on Cancer” is an attempt where people are encouraged to remain aware about certain relevant symptoms of cancer and attend for diagnosis once they feel the symptoms. Such effort is very much acceptable at both high and low resource areas.

Now the debate is that at the time of appearance of symptoms whether disease status remains early or not. Studies which investigated such fact showed that patients who presented with symptoms which were already campaigned in the community were diagnosed with early stage of disease. Several studies showed that correlation between symptoms at presentation and stage of the disease often diagnose at an early stage and hence such actions are advocated by many. Another area of controversy is that which symptoms to be included in the campaign, what should be the media etc are to be used. Other important factors are like barriers of such promotion, socio-economic factors, health disparities etc (Neal RD, 2015) (Koo MM, 2019).

Knowing about cancer symptoms needs a good health communication which in turn needs use of appropriate media to reach the target population. Hence, measuring knowledge of a population about important symptoms or in other words knowing about alarming symptoms of cancer and also knowledge about important screening tests is a precondition of cancer control of that population.

To identify the population at a glance, noting down of profession can identify a particular population and can give an idea about socioeconomic status and educational qualification.

Media use assessment of a particular population can give a clear guidance about which media to be used for transmitting Health messages that will make the effort successful and early diagnosis and screening will be enhanced. Such success will bring improvement in treatment outcome and benefit the society at various levels.

Methodology of the present study

The Study attempts to find out the knowledge about symptoms and screening tests of cancer among newly diagnosed cancer patients who attended Cancer Hospital, to find out their profession along with choice of media among television, radio, Internet and Newspaper. It tries to find out the answers of such questions as what was the knowledge for cancer, what was the profession and what was media of choice among the newly diagnosed patients were attending the Cancer Hospital?

Present study is a cross sectional descriptive survey which was done in a Non-randomized way among the newly diagnosed cancer patients attending the Cancer Hospital. Patients' who were diagnosed long back, but might have forgotten the previous status of knowledge and/or addition of knowledge during the treatment period were not taken in the study. Also, some patients might be in an advanced stage of disease with poor physical and mental status preventing them to communicate properly and comfortably. So they were also excluded.

Knowledge about symptoms of cancer and two important and widely accepted screening tests were assessed by asking close ended questions among the newly diagnosed cancer patients attending a Cancer Hospital. A nine (9) point chart is prepared and asked to the patients whether they know them or not. A positive answer was awarded as one (1) mark. If the participant said "No" to any answer he was given zero (0). A total mark of nine (9) was considered as Excellent, 4-6 as Average and 3 or less than 3 was taken as Poor knowledge.

Their choice of media was assessed among Television, Radio, Internet and Newspaper. Profession was divided into Daily Labor or Farmer, Peon or Small scale business owner, Lower division clerk or Medium scale business owners and Higher Officers or Owner of Organizations.

Sample size was determined by using automatic sample calculator available in Internet. Average total number of new patients attending the hospital was found to be around two thousand (2000) and Confidence level was taken as 95% and Confidence interval of 5%. The sample size came out to be 322 which were rounded off as 330.

Interview was taken separately for each one and data recorded thus analyzed for obtaining result of the study.

Analysis of Results

It was seen that none of the patients could score “Average” or “Excellent” for knowledge about Cancer. All scored “Low” in this regard (Error! Reference source not found.).

Table 1 Knowledge about Cancer

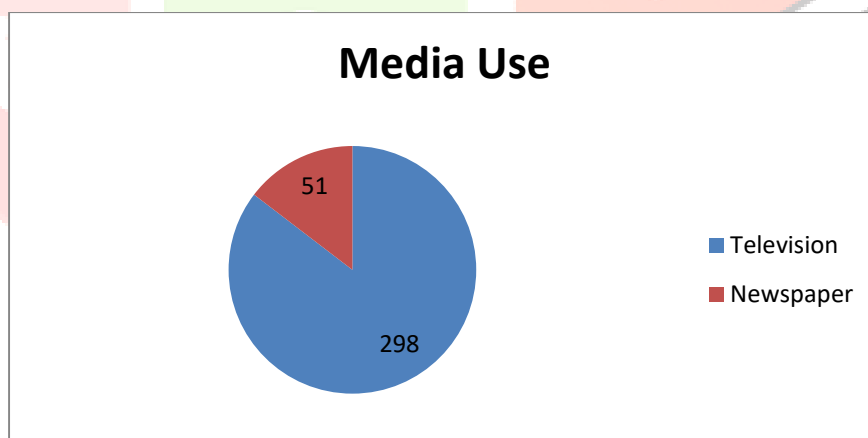
Knowing about cancer symptoms	Knowing 0-3 symptoms (Low)	Knowing 4-6 symptoms (Medium)	Knowing 7-9 symptoms (High)
Total	330	0	0
Percentage	100%	0	0

About choice of Media it was seen that most of the people use Television sometimes or other as preferred media (90.3%). Only 15.4% people told that they also used Newspaper (Table 2 Use of Media).

Table 2 Use of Media

Media Use assessment	Television	Newspaper	Internet	Radio
Total persons using media	298 (90.3%)	51(15.4%)	0	0

Figure 1 Media use

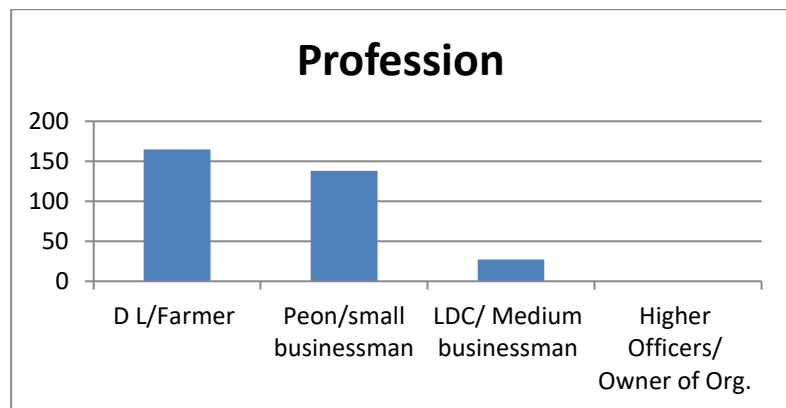


Regarding the Profession of the population, it was seen that 50% of them were Daily Labours and 48.8% were Peon or Small businessman (Table 3 Profession of the Sample patients)

Table 3 Profession of the Sample patients

Profession	Daily labour(DL)/Farmer	Peon/small businessman	LDC/ Medium businessman	Higher Officers/ Owner of Org.
Total Number	165	138	27	0
Percentage	50%	41.8%	8.1%	0

Figure 2 Profession of the sample



Screening for cancer and Diagnostic tests could not become fully acceptable as in practice it was found that there were multiple related barriers. Various problems those were seen to affect the screening and early detection were lack of time to pay attention for such activities, monetary issues and remoteness from the health institution, scarcity of time and funds. Additionally, burden of communicable diseases were more attention drawing powerful issue than the non-communicable disease problem. Hence, in areas where both were existent, naturally the earlier one was getting more importance.

In other language, more prominent symptoms obviously would get priority than symptoms with less distress like painless swelling of cancer. Cancer screening tests were also found to be dependent on various social, cultural and community related factors. Anyway, these should be used judiciously to fulfill the target of cancer detection. For greater success in screening and early detection health education and health communication were described as essential component among the health workers and community (Lee H, 2019) (Lee H K. S., 2015).

Alarm symptoms which often occur much earlier than the diagnosis of disease were investigated to know whether they really help in determining positive predictive value. Four symptoms were taken. They were haematuria, haemoptysis, dysphagia, or rectal bleeding. An association with these symptoms and future diagnosis were investigated. It was found that all gave indication to an increased chance of cancer diagnosis. The rates were variable and also no detail description of the alarm symptoms could be evaluated. Each alarm symptom and diagnosis pair was identified and followed up retrospectively up to five years. It was observed that diagnosis of cancer was made more in earlier periods. Anyway, after five years chances of cancer

diagnosis associated with a particular alarm symptom faded away. Haematuria was assessed for urinary tract cancers other than cancer prostate and other reproductive tract cancers, haemotysis was evaluated for respiratory tract cancers and rectal bleeding was looked for colorectal cancers. For dysphagia oesophageal cancers were evaluated. The positive predictive value of such alarming symptoms was found to be associated with cancer diagnosis. Over next three years, the proportion of patients who presented with haematuria cancers of the urinary tract was 58.7% in men and in women 51.2%. Similarly, alarm symptom and cancer diagnosis for haemotysis with respiratory tract cancers were in men 22.2% and in women 13.6%, dysphagia-oesophageal cancer in men and in women were 58.3% 53.8% respectively. Rectal bleeding was correlated with rectal cancers (Jones R, 2007).

Breast cancer was described as one of the most important cancers among the female, both in terms incidence and mortality. Also survival in breast cancer was found to be low in low and middle income countries. This was described due to the inadequate diagnostic and treatment facilities and also advanced stage at presentation. Such factors were seen to influence the survival in breast cancer. The overall delay in treatment, delay in attending the first health care provider, to find out the delay in this respect etc were examined in this study among the hospital attended patients and it was found that improve screening facilities and opportunistic screening facilities, proper knowledge about breast cancer beyond the myth, taboo and fear, warm gender bias free screening areas and most importantly use of multiple channels to communicate regarding various pertinent issues were suggested (Kumar A, 2019).

It is clear from the results of present study that there is clear deficiency among the participants of the study about knowledge regarding cancer symptoms and common screening tests. Hence, identification of cancer and early detection of the disease would be a difficult job for them. It is obvious that recognition of early symptoms of cancer or alarming signs of cancer is a precondition for starting of investigation and treatment in proper time. Further if the people are not aware about the symptoms of cancer they will not attend screening procedures or will not take advantage of diagnostic facilities even if those are arranged near their vicinity. Any outreach activity done for diagnostic and screening purpose will not be successful if people are not aware about early symptoms of cancer. Also people cannot remain vigilant if they do not know early symptoms of cancer or common screening tests. Hence, knowing about the status of Cancer Knowledge is important to formulate proper Health communication and making availability of screening and diagnostic facilities for the target population.

Media is one of the most important factors for transmission of any message. Other than the quality of the message, media may be considered as the most potent factor for a successful outcome of any Health messages. Rightly chosen media can give a great momentum to the process of transmission, decoding and understanding the message. Hence, it is very important to know about choice of media of the audience or target population so that appropriate media can be used for propagation of an important message. In the present study it was found

that they use television as a media. Use of television is not a new event. Rather in many societies television is the most liked media due to its unique property of attractive audio visual transmission. Due to the audiovisual property, television may be listen or seen and listen. Hence, Health communication made in the Television will reach to the larger portion of the people who participated in the study. In this study, only few of samples were using Newspaper also (15.4%). Mass media was described as a flexible instrument that could be employed as desired for getting health information and there was also good chance of propagation of messages through it to mitigate public detriment due to health issues. In fact, media was actively involved in the process of developing a strategic interventional technique related to dissemination of health communication. Analysis of the media suggested that 65% of the Indian population were using one or other media like television, Newspaper, Print, Radio, Cinema or Internet etc. among these, television was used most (56%) which were followed by other media like Newspaper, Radio etc. Internet was found to be an upcoming media for the society (N.Naveen, 2015).

The profession, in a sentence denotes many things about a person. As for example, the educational qualification and gross income of a person in a particular society is available as latent information inside the "Profession". In a particular Profession usually people of equivalent qualification and similar earning are found. Hence, knowing about profession of a person can be used as an indicator of socioeconomic status. In the present study, it was seen that most of the people of the sample were Daily labor or Farmer or peon or small business persons. The data in this population showed that they use Television more than Newspaper and was not using Internet or Radio. From the profession here also we get an idea about their Educational qualification and Earning.

Conclusions

The profession of our sample patients of the study indicated that they were from comparatively Socio-economically weaker class. They were deficient of knowledge about Cancer symptoms and common Screening tests. They use Television than Newspaper and do not use Internet or Radio.

Hence, the choice of media to propagate health communication in this population will be television and to some extent newspaper. Information regarding profession indicates that they are not so sound financially and so also educational status. These two factors also may be related to the lower knowledge status about cancers. Poor recognition about warning signs of cancer may lead to higher stage at diagnosis and in turn it will influence the treatment outcome negatively also.

Now, further studies may be done to know whether the low understanding about cancers is correlated with socioeconomic status by taking samples from other different type of populations.

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