

Dissemination of Health Related Issues through Mass Media: An Overview

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Abstract: *Mass media is a very effective and efficient source of information to general public on a wide array of subjects. Every day, a lots of health related issues are also disseminated through mass media which passes through various steps before it reaches the people. In modern era, the original source of dissemination of health related issues published in various journals. The present study has covered two blocks from Shimoga District Viz., Shimoga and Bhadravathi were related for the study. The primary data was collected with 200 respondent were related from two blocks by using simple random sampling method. This is purely a descriptive study. Mass media has an important role in influencing the behavior of people, by transferring the knowledge base created by health related research, as indicated in our study. The public health fraternity who is engaged in promoting healthy lifestyle among public at large should consider mass media as one of the tools that may encourage the propagation of healthy behavior and discourage health damaging behavior. In our study, 46% respondents reported that they read the article only if it was interesting. This shows that the message containing health related information should not be boring. It should be able to get attention of the people in the first place so that people for whom media is a source of entertainment may not feel put off. For being persuasive or for effectively convincing the people, DHRITMM should give clear messages which are in consonance with the prior general public knowledge so that it is acceptable to the people.*

I. Introduction

The first decade of the twenty-first century, all round face track progress is being witnessed in all fields of medical science and man has a vast array of technical and financial resources at his disposal. Accordingly, there is certainly a greater scope, potential as well as need for emphasis on health promotion and disease prevention than it was ever in any previous time in our history. This requires active participation of the community and health action by the people in the form of their compliance with the recommended health promotive/ preventive advice. Therefore, in present era, the concerned discipline of public health/preventive medicine is likely to get more attention. However, in postgraduate education and research related to public health, more importance is usually given to intricacies of epidemiology, statistical packages and related computer based sophisticated calculations. It is often forgotten that, epidemiology, at best, is a tool for community diagnosis. The action is, in fact, embedded in the concept of health promotion, e.g., health education, behavior change, policy making, environmental sanitation etc. And in today's world, health related actions need to be evidence based. Epidemiological research helps in creating the evidence, which is then fed to the general public through mass media.

Mass media is a very effective and efficient source of information to general public on a wide array of subjects. Every day, a lots of health related issues are also disseminated through mass media which passes through various steps before it reaches the people. In modern era, the original source of dissemination of health related issues published in various journals. Thereafter, TV, radio, internet, newspapers, magazines, journals and number of other modern mass media pick up these research finds from the journals and transmit the gist of the message to the general public in simple language. In this way, the media constitutes the linkage between the producers (of the research ideas and products, i.e., scientists or researchers) and the consumers (the general public). Apparently, the aim of all this chain of actions, related to health research, is to improve the quality of life of people by attempting to change our health behavior.

In fact, the role of human behavior comes into play at every stage of conducting health related research, communicating its result and initiating requisite actions.

Human behavior is the integral and most decisive intermediary variable affecting the fate/utility of any health related research. Actually, the idea of doing a health related research itself is substantially influenced by human behavior. Which aspect of the health is to be explored is decided by the behavior of the researcher. Even the decision to do a research is also influenced by behavior and profile of the researcher. Whether to do a research, how to do it etc., also depends on researcher's behavior. And once a health related research is done, the fate of its results also depends on the behavior of the concerned stakeholders. The researcher may not write a project report at all. If a report is written it may not be shared with others. The researcher may or may not have an inclination, motivation or patience to send his research work for publication. It may get published or get

rejected. It may be sent to a low profile journal or a high impact factor journal. This may again depend on researcher's behavior.

Irrespective of its publication, the HRR may or may not get communicated through the mass media. Even after publication of HRR some researchers just sit silently and do not publicize (communicate) it through media. This is again decided by the behavior/ personality of the researcher. If it gets communicated through the media, it may or may not be read/seen/heard by the public. It may just be of academic use to the other researchers only. Even if does get read/heard/seen by the administrators or the general public, the impact of the health related research will again depend on the compliance of the masses/ individual as well as of the administrators with the advice or recommendation given through dissemination of health related issues through mass media (DHRITMM). Again the compliance is a behavior related issue.

They may not accept the results and reject it as such or they may comply with the advice. This compliance may be complete as per the recommendations, or partial as per individual convenience. Also, it may be a short term (temporary) compliance or a lifelong change (permanent). It again depends on public behavior. What is of interest to public health professionals is that what factors influence these behaviors at every stage described above. To fully understand how health related decisions are made by people we must analyze the process by which people evaluate health information. Against this background present study was conducted with following objective.

Objective:

To determine the impact of DHRITMM on knowledge, attitude and behavior of general public.

II. Material And Methods

The present study has covered two blocks from Shimoga District Viz., Shimoga and Bhadravathi were related for the study. The primary data was collected with 200 respondent were related from two blocks by using simple random sampling method. This is purely a descriptive study. Four categories of participants Viz. University students, elderly people, nursing students and working women's (50 each) were interviewed regarding their exposure to DHRITMM and resultant change in behavior if any. For the first three categories of respondents the sampling method was convenience sampling and the fourth one was by simple random sampling.

III. Result

Overall, 200 respondents were interviewed. Majority (136; 68%) of the respondents told that they were interested in health related articles; 45(23%) respondents reported that they read entire health related articles, 90(45%) read only if the article was interesting, 13(6.5%) read only the headlines while 47(24%) altogether skipped DHRITMM.

Only 49 respondents gave a reply when they were asked about their exposure to DHRITMM in last week and the degree of faith they had on such messages; 7 graded such messages as marginally reliable, 26 as average and 16 graded theses as quite reliable.

More than half (117; 58.5%) of the respondents reported to have gained some knowledge from DHRITMM; 120(60%) respondents reported that they changed their behavior after coming across DHRITMM; 17(9%) changed addiction and smoking related behavior, 9(5%) changed sex behavior, 105(56%) changed diet related behavior, 68(34%) changed exercise and yoga related behavior, 34(17%) changed environment related behavior, 24(12%) changed beauty care related behavior, 42(12%) changed personal hygiene related behavior and 29(14.5%) changed meditation and spiritual health related behavior (Table 1). twenty (10%) people stopped using cold drinks & 10 (5%) changed their dietary habits after coming across diabetes related articles in media. Change in behavior of relatives after DHRITMM was reported in 48(24%) respondents.

Some (29; 14.5%) of the respondents said that they felt confused when they came across contrasting messages in media; 18(9%) respondents reported that they made further enquiries after coming across a health related issues from media; 69(34.5%) reported that they discussed DHRITMM with others. Verbatim responses of the FGD participants are being directly reported in the discussion section below.

IV. Discussion

Every day, health related information comes our way from many sources. Mass media is nowadays, the major source of such information. In the present era of information technology (IT) revolution, besides newspapers and magazines, we use a variety of IT equipments in our routine lives, viz., radio, television, computer, internet and mobile phones etc. Through these, we are exposed to myriad health messages intended to persuade us to engage in good health practices and to avoid risky ones. For example, we are regularly warned of the dangers of smoking cigarettes. We see television advertisements for various products to increase our dietary fiber and reduce our risk of cancer or heart disease. Billboard messages, at least in some of our major cities,

persuade us to practice safer sex. Our friends and loved ones argue that we should lose weight, exercise more or reduce our intake of saturated fats. We accept some health messages and ignore others.

Table 1
Change in behavior reported after exposure to DHRITMM

Domain of Health Behavior In which change was reported	Exposure Reported by n=No.(5)	Behavior Change Reported by n=No.(5)
Diet	145 (73)	105 (56.1)
Addiction and smoking	129 (64.8)	17 (9.1)
Exercise and yoga	131 (65.8)	68 (36.6)
Meditation and spiritual health	103 (31.5)	29 (15.5)
Personal hygiene	106 (53.3)	42 (22.5)
Beauty care	95 (47.7)	24 (12.8)
Environmental hygiene	107 (54.3)	34 (18.2)
Sex behavior	79 (39.3)	09 (4.8)

For mass media sources, however, such reporting of health related information is a part of their business. It is a part of the audiovisual package provided by them to capture the attention of the masses. Various channels of cable TV and various sections of news papers/ magazines target different segments of society and different facets of our lives and personality. Apart from the entertainment value of the media it is the type and quality of INFORMATION provided to the viewers/ readers, which builds up the image of a particular TV channel or of a group of publications. The media sells the newspaper or TV programs on the basis of its credibility i.e., how much faith people have on media.

However, the impact of DHRITMM on general public is variable. It depends on many factors, e.g., how many people get exposed to the DHRITMM, whether they find such messages interesting and how many believe the messages to be true. Even then, all may not change their behavior. In our study, 136 (68%) respondents reported that they were interested in DHRITMM. However, only 49(24.5%) reported that they had some faith on it.

Mass media are a leading source of health related information for general public as well for health professionals. Discussions on such information can influence public policy and health care decisions. 3-8 In our study, majority (~60%) of respondents reported to have gained various types of health related information from mass media. However, the reported change in their behavior after coming across DHRITMM was variable. Most common were diet related changes. This may be because of two reasons. Firstly, people may give more importance to their diet and are more conscious about it than other habits. Secondly, it may be easier for them to change their dietary habits than other behaviors. Similarly, as per our data, deep seated behavior seemed to be difficult to change e.g. sexual behavior or addiction.

One of the major unresolved questions in health-seeking behavior studies is – how far our knowledge/awareness about anything actually determines our related behavior. Change in knowledge is assumed to lead to behavior change. Hence, education of people about causes, symptoms and treatments of illnesses is recommended as the key strategy for effecting desired behavioral change in people. It is however, also widely recognized that improvement in knowledge of people, even with well designed IEC campaigns, may not automatically lead to improved health behavior.

Obviously, this is because, apart from knowledge, there are a range of other factors which affect our health-seeking behavior e.g. lack of health facilities, lack of drugs, lack of money to pay for preventive or treatment costs etc. In fact, role of significant others, the role of group norm and group dynamics in behavior change, role of perceived severity of the disease in question, perceived individual susceptibility and various facilitating/ inhibiting factors, all affect our health behavior. DHRITMM only represents transmission of knowledge about a health issues which may help in raising the critical consciousness level of the public at large. So, DHRITMM is just one of the factors affecting our behavior change.

Human behavior is an important determinant of what happens to our health. There has been a lot of discussion on this issue as evidenced by a multitude of behavior change theories i.e. Health Belief Model, Health Action Model and Theory of Reasoned Action etc. There is a need to reemphasize the importance of behavior in public health related strategies. A general impression is that this aspect is usually being ignored and these days a massive onslaught of public health strategies of different kinds are being launched at a rapid pace without so much of giving a thought to the important missing link i.e. behavioral component (which may explain failure of many of such programs).

Differential responses to DHRITMM in our study can be explained by the value hierarchy. People may give more value to the joy they derive from smoking or other such addictions as compared to the expected (promised) health benefits of “quitting”. Similarly, women may give more importance to “looking good” than to changing their beauty care related behavior e.g. not giving up the use of a fairness cream which might have been reported to contain carcinogen agents. Only 13% respondents reported to have changed beauty care related

behavior after coming across DHRITMM in our study. This is because beauty maybe of more important value in their life.

In fact, the value placed by an individual on health is an excellent predictor of both his/ her intentions and health behaviors. We, in public health discipline, might expect that everyone would value health very highly. But this is not a case. Other values, such as excitement and freedom, may take precedence. A person who enjoys riding a bicycle without a helmet feeling the wind and feeling carefree, might value this supposedly dangerous practice more than health. Similarly, people may give more importance to joy of the casual sex they have, on the spur of the moment, rather than going by the diktat of safe sex advice by the health educators. Research in general population has shown that although, on an average, health is the highest ranked of eighteen values, between 20 and 40 percent of respondents do not rank health among their five highest values.

Only 5% of our respondents reported to have changed sex behavior after exposure to DHRITMM. Even exposure to sex behavior related articles was least. Maximum exposure was for news related to diet and exercise related behavior. Many people do not want to read (or to admit having read it!) about the intimate aspects of their behavior. Moreover, the changes in behaviors related to diet, addiction, hygiene & beauty care are linked with buying or changing a product, e.g., changing a particular brand of oil, avoid use of fats, changing a lipstick brand or soap. On the other hand, exercise, spiritual health, environment & sex related behaviors are associated with their habits and not with a product.

Variable compliance to DHRITMM was explained by one respondent as “If the research message is about harmful effect of something, then there is 10% compliance. But if it is about some benefit then we comply according to our choice”. Similarly, one participant said, “If some alternative behavior is available to adopt then change of habit is easy”.

It should also be realized that it is not like that people change their behavior as soon as they come across DHRITMM. People do discriminate; they do take time, they do evaluate the quality of DHRITMM. This is reflected in following responses observed in our study.

One respondent said “Credibility of different sources differs – some TV channels are taken seriously-others are not”.

One respondent commented on the quality of DHRITMM. “Whatever information comes to us through media is quite selective. We read much filtered information”. This comment indicates that the readers have faith in media and that they believe that it does responsible reporting.

Another one was skeptical about such information. “It may have not used proper methodology. We don’t know how valid is it?” this indicates that the respondent was hinting at the possible dubious quality of the research on which the news report was based.

The danger of incomplete and immature reporting was reflected by a statement “We can’t read everything. And incomplete information can be dangerous”. Thus, people realize that DHRITMM is not the whole story. They want to know more. This comment may partly explain the gap between knowledge & practice, i.e., why awareness does not always result in compliance. Similarly, one respondent reported, “Often news reports keep it open ended and inconclusive-to keep themselves safe. But, such an attitude may confuse the public. They may not be able to make up their minds”.

Profile of the readers can also affect the impact of the media as indicated by a respondent, “Medicos can properly evaluate a health message – lay people cannot”. Education level of people was also reported to have a role in modifying the impact of DHRITMM. “If I am educated then I would question the message”.

Some respondents gave a hint of biased reporting, “DHRITMM is often market oriented”.

“Media shows only those stories which help the sale of some products”.

“Government controlled media does more responsible reporting. Private one is profit oriented”. This indicated that the readers may not completely believe the DHRITMM.

One respondent opined, “First, research information is communicated – then the products get picked up in market. Side effects come in to picture later”. This comment indicates that people realize that DHRITMM may boost the initial sale of a product. In the long run, the issue of late side effects may surface.

One of the respondents said “Media reports have impact only when we have interest in these: I have no interest in HRR articles. How many of us want to see health issues on TV. I change the channel when such news/reports are shown. We use media for entertainment”.

All the same, quite significant beneficial impact of DHRITMM was observed in our study.

An example of successful transmission of such DHRITMM was told by a participant “I had gained extra weight. I managed to reduce 5-6 Kg within 2-3 months. I did yoga after learning it through TV shows”. It needs to be emphasized here, that, in India, yoga, spiritually & religious discourses have rather taken the TV by storm in recent years. In fact, currently, many channels are telecasting, morning & evening sessions on yoga. There are many stories of benefits of such sessions.

One of the female respondents remarked, “I read somewhere that lipstick contained lead in it & you won’t believe, I gave up using lipstick”.

Another one commented, "It is difficult to change habits. But acquired habits can be changed easily. Our health related habits are mostly acquired ones. So these can be changed".

Comments of a respondent indicated that people realized that behavior change is a slow process which requires patience, "Change is gradual & stepwise".

DHRITMM has impact in villages also as per the comments of a respondent, "Now a days villagers are also aware. TV affects their lives also".

Besides yoga, various other successful examples of health impact of media were told by our respondents.

1. "Biggest loser" programme had an impact on obese people's behavior".
2. "Tare Jamin par" movie affected many people. People became aware-NGOs came forward to help dyslexic children. Attitude towards such children has changed".
3. "Coke-Pepsi use rate was critically affected by their pesticide contamination news".
4. "Baba Ramdevhas affected people's behavior a lot through TV. People put on TV in morning watch him & do yoga. They also rub nails for black hair".
5. "My mother has started doing exercise after watching TV".
6. "I read something in Readers' Digest – I told my mother about it and she changed her behavior".
7. "People have shifted from vanaspati to refined oil".
8. "Girls have started using Fair & Lovely cream".
9. "Somewhere I had read that mobile kept in vibrating mode in upper pocket of shirt reduces life by causing damage to heart. After reading this, I started keeping mobile in my lower pocket. So my behavior was altered after reaching such information in media".

Literature is also replete with successful examples of beneficial impact of mass media on health related behavior change. Print media, such as magazines or comics, have been used in an American information campaign in order to prevent high risk groups such as prostitutes or injecting drug users from acquiring HIV, with some positive results. Television commercials, an information series broadcast as part of the evening news, and an information booklet were used to try to make American women with little education to think about stopping smoking. Of these, the information booklets seemed to be particularly effective in moving the women towards stopping smoking. It has been shown that a mass media campaign promoting vaccinations in the Philippines alone could change health behavior. Both awareness of and use of folic acid increased in the Netherlands after a mass media campaign for the peri-conceptual use of folic acid, which started in 1995. It has been found, furthermore, that a soap opera on television was effective in persuading people to take bone-marrow tests, in order to find suitable bone-marrow donors for people suffering from leukaemia. Most relevant here are the finds of the early Yale University research program on attitude change. This research determined several important characteristics of messages that persuade successfully.

A community-based health promotion initiative implemented in the state of Uttar Pradesh in North India succeeded in measurably improving knowledge, interpersonal communication, and practices related to HIV/AIDS and STIs among rural audiences with low or no access to mass media. The results indicated that at endline, the exposed respondents reported significantly higher levels of knowledge and interpersonal communication regarding HIV/AIDS and STIs in comparison to the reports from the same set of respondents at baseline and also as compared to the respondents not exposed at endline. The findings suggested that community-based media initiatives are a strong vehicle in promoting changes in knowledge and producing positive behavioral outcomes especially by reaching out to underserved communities that have relatively fewer alternative sources of information on sensitive sexual health issues.

However, the complexity of behavior change has still other dimensions which may affect the compliance with the recommendations. One of such dimension is the inherent skeptical nature of people. They tend to verify the information, transmitted to them. They want to be on sure footing before agreeing to change.

Conflict of interests (commissioned or engineered reports) related to DHRITMM was expressed by a participant "Sometimes even when we start using any new product, there is no promised impact on health, I have become skeptical of all such information. It might be their own biased research to sell their product. So it puts a doubt on the credibility of such research".

Some of the participants told "When audience receives contradictory messages through mass media, it compromises the credibility of the information e.g. Cola war (Pesticides)".

One respondent went to the extent of claiming-"Everybody doubts health related research reported in media".

"Fraud in research is often reported. There are conflicting reports. Contradictory data is also quite frequently transmitted".

Often a business angle is suspected by people in all the news published in newspapers. For corporate sector, the readers/ viewers are the consumers. For businessmen, health is also a commodity to be sold as a

product. This concept has gained momentum, particularly in last 20 years. In many countries, gradually, health is becoming a political agenda. People have also become health conscious. The corporate sector has exploited it to hilt. Hence the public is being bombarded regularly by DHRITMM with an aim to sell a health product. Any improvement in health may just be a bye product of this information onslaught by the market.

The business/market angle of DHRITMM is exemplified by the advertisements which target children have good impact on parents as one of the respondents opined “Media often targets the parents through kids for HRRIDTMM e.g. if a son asks father to put the tap off while shaving he never does it again”.

Another female respondent told “I had seen on TV that by drinking Horlicks you will become tall, more intelligent & there is rapid growth. So I was forced by my daughter to buy Horlicks on these grounds”.

Research is also done by companies/ government/agencies “Companies do their research according to their interest & needs. They modify it accordingly. Their reports are mainly manipulative. These companies do research only for promotion of their products”.

Confusion created by the ambiguity in DHRITMM was also exemplified through the response from a student “There was a research 1-2 years back that overuse of mobile phone can cause brain tumor. There is contradiction between researches conducted by Japan & Michigan State University on the same issue. After that I stopped using cell phone for awhile, but after some time again I started using cell phone. I was really confused what to do? Which research should I believe? There is ambiguity in the message given. Then I decided let any research reports be published, I will do whatever I like & whatever suits me”.

The need to regulate & control DHRITMM was also expressed by a respondent who said “There should be some law governing what type of information can be communicated through media”.

Other respondents opined “Do newspapers checkout the research before publishing related information?” Another one opined “People may not have capacity to filter information – So media should report responsibly”. “There should be a legislation to regulate media reporting”. “Anyhow, despite all, it’s clear that media increases awareness. We can’t deny it”. The grip and the impact of mass media on our lives is reflected by the following comments of one of the respondents, “DHRITMM is usually passed on to others by the readers and thus such diffusion through sharing multiplies the impact”. “Whatever information we come across in media, we share that with our children & family members”. Yet another MPH student opined “Even if there is negligible effect of the DHRITMM, the overall impact of on large population as a whole will be enormous”. “You disseminate useful DHRITMM to your family members, neighbours & likewise thus the information reaches to majority”. “DHRITMM multiplies when we gossip and it becomes a topic of discussion. So gossip becomes a channel of diffusion of information;

One of the respondents told “Word of mouth medium has more impact than media alone”. “Media is the starting point. Word of mouth then picks it up”. “Word of mouth messages spread like wild fire-(jungle fire)”. “Media initiates the change in behavior of some people. Then people pick it up by seeing each others behavior”. These comments indicate that we should not underestimate the potential of media in affecting our behavior.

We also to understand the process of behavior change. It may not be linear (Awareness behavior). Rather quite often, our behavior gets affected by the group to which we belong. The prevailing norms of the group (the society) guide us to regulate our behavior. And norm creation is a mass phenomenon. Behavior change also involved mutual discussion, observing each other & evaluating the perceived outcome of any intended change in behavior or norm. in this regard, the mass media and its capacity of multiplying the information dissemination plays an important role. In fact, DHRITMM becomes an anchoring point of personal as well as public gossip/ discussion on health related issues.

One respondent said, “People actually change their behavior to allay anxiety. By doing so, people lower their anxiety level”. This comment indicates that the respondent was aware that the process of behavior change involved a conflict resolution. DHRITMM leads to anxiety because of the realization that the behavior of the individual may not conform to the recommended one. These comments indicate that DHRITMM is likely to have an impact on our behavior.

“DHRITMM have more effect than books... since media messages also carry opinion of others... books don’t do that”.

“We may see/read many things.... But should adopt/ follow these intelligently”.

“Even poor people copy it”.

V. Conclusion

There was a definite impact of DHRITMM on general public. Diet related change were maximum. People also took to exercise after media exposure on health related issues. Change in smoking; drinking, addiction, sex and HIV related behavior were also reported.

Mass media has an important role in influencing the behavior of people, by transferring the knowledge base created by health related research, as indicated in our study. The public health fraternity who is engaged in

promoting healthy lifestyle among public at large should consider mass media as one of the tools that may encourage the propagation of healthy behavior and discourage health damaging behavior.

In our study, 46% respondents reported that they read the article only if it was interesting. This shows that the message containing health related information should not be boring. It should be able to get attention of the people in the first place so that people for whom media is a source of entertainment may not feel put off. For being persuasive or for effectively convincing the people, DHRITMM should give clear messages which are in consonance with the prior general public knowledge so that it is acceptable to the people.

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