

EXPLORING THE IMPACT OF SOCIO-ECONOMIC STATUS ON THE EFFECTS OF HEALTH COMMUNICATION

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Abstract

This study examines the proposition that socio-economic status (SES) has a substantial influence on health communication effects, and that rich people tend to adopt media-proposed behavior for quality health and better life more than the poor. The inquiry explored whether media messages regarding health are discriminated on the basis of socio-economic status, and categorized reasons likely responsible for this phenomenon. This study analyzed factors such as exposure to media, education, comprehension of messages, socio-religious beliefs, perceived utility of the innovations, and access to the required facilities proposed by the media that may affect the results of health communication. The study found that SES-related factors are the major determinants of health campaigns' effects in all cognitive, affective, and behavioral levels.

Key words

Socio-economic status, Health Communication, Media Exposure, Education, Socio-religious Beliefs, Health innovations.

Introduction

The health communication is usually conducted in the form of campaigns using communicated appeals and tries to influence the behaviors of the individuals about some socio-physical phenomena (Paisley, 1989). Medical costs are very high and beyond the means of many people, therefore, emphasis in recent years has been on prevention and healthcare. "However, information does not equal prevention, and even the most comprehensive public information campaigns have achieved rather limited success" (Atkin and Wallack, 1990, p. 13). Finnegan and Viswanath (1990) believe that various opportunities e.g., education, and medicine are provided and people utilize them for better life. But the problem is that several semantic, socio-religious, and economic forces dictate

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people's behaviors towards health issues, and demographics like locality, gender, education, age, religion, and socio-economic status (SES) are more crucial variables in the effects process. Guttman (2003) suggests that higher socio-economic groups are more likely to adopt the proposed behaviors.

The present study focuses on the influence of SES on health communication in the developing societies. Because everybody needs good health, either rich or poor, but it has been observed that in many cases, both segments are having very poor attitudes towards their health. Therefore, it investigates the assumption that SES itself has no direct role in health effects, but it is the composite of several characteristics that may determine the effects or it is directly responsible for producing characteristics that consequently influence the effects process at different levels.

Media and Health Promotion Efforts

Mass media are frequently used for health promotion activities in both the developed and underdeveloped societies because, "health literacy can affect anyone regardless of age, education or income level," (Pfizer, 2006: net). Relationship between media and public health is continuously evolving (Atkin and Arkin, 1990) and the media devote sufficient time and space to help audiences in promoting good health (Chandrakandan, et al., 2001). Therefore, media health campaigns can play a vital role in providing information and placing health on the public agenda (Wallack, 1990). These media campaigns are usually supplemented by interpersonal interactions conducted by health workers, doctors, and lady health visitors. In recent years, such activities are significantly increasing in the developing societies (Yousafzai, 2002).

Media like television, radio, signboards, wallpapers, slides and banners are extensively being used in providing healthcare information and preventive health cure to the masses around the world. Campaigns for the use of iodized salt, O.R.S. (orally rehydration salt), and inoculation of vaccine course, etc., and campaigns against smoking, drugs, AIDS, hepatitis C, and cardiovascular diseases are very common in developing societies like Pakistan, Iran, India, and Sri Lanka. In advanced societies, digital technologies like CD-ROM, internet and e-health are used to provide access to health care services, products, and capabilities (Maheu et al., 2001; McLendon, 2000). Although these health campaigns have been launched for many years, not enough attempts have been made to investigate the effectiveness of these persuasive appeals on the public, particularly in the developing societies. Giles (2003, pp. 80, 82) believes that media provide health messages, --- and "the stories of success are numerous but, at the same time, long-standing attitudes may be resistant to change."

Husselbee and Elliott (2002) hold that media have a significant impact on audience understanding of public issues. Due to poor population planning, the poor in the developing societies are facing many health problems like malnourishment, maltreatment, communicable diseases, and epidemics. Macionis (2000, p. 354) suggests that "people in low-income countries far worse off than those in rich nations." Several other studies also have found gaps at different effects levels (Farley et al, 1996; Viswanath et al., 1991). Wilder (2000) found SES as an influential factor to shape attitudes towards innovations and other health communication effects.

People's Motivation

On the other hand, Ettema and Kline (1977) expressed the belief that 'interest or motivation' of the audiences is more important than their SES and plays a vital role in making decision regarding the proposed behaviors. They found that the ability to perceive the importance of information was more important and it has no serious implications in communication effects. According to them, needs of the individuals generate interest in the information being communicated and enhance the perceived utility of the innovations being proposed. People will take the initiative to seek information to increase their awareness and acquire new skill required for the adoption of innovations. They are motivated by information provided to them, and in this way, favorable attitudes are secured towards attitudinal object/s.

The review of the above literature provides enough arguments that SES has some significant roles in health communication effects, and that the rich class as compared to the poor is more inclined towards the proposed innovations and have adopted behaviors desired for better health. The poor segment is least interested in adopting such innovations despite its greater need for them, particularly the small family norm.

People's Behavior

But on the one hand, it has also been generally observed in the developing societies, that many people with higher income are having very poor attitudes towards their health. They are least interested in health issues and behave in extremely unhealthy manners. They have no knowledge about the innovations and behaviors proposed by the media for a prosperous and healthy life. They used to have early marriages and more children. They regard more children as the means to meet their social and economic needs, and perceive greater number of children, especially male kids, as a source of raising their

social prestige. They also believe that birth control is against the teachings of Islam. They do not inoculate vaccine course or use iodized salt and O.R.S. to protect their children from fatal diseases. As a whole, they seem resistant to the changes desired for quality health, despite belonging to a higher income group. On the other hand, it is also a common observation that some people with low income are highly inclined towards desired changes in health behaviors and faster in adopting the proposed health innovations. Therefore, to correlate these unhealthy attitudes with income seems illogical and opposite to the proposition that only income decides the difference in health-related matters. This situation indicates that this is not the income-- low or high-- but some other variables that are more likely to influence health behaviors. To explore this phenomenon some variables that seem potentially influential in the effects process of health communication need to be reviewed.

The Degree of Exposure

Several studies propose that repeated exposure to media generates greater impact and leads to a more positive evaluation of the behavior being advocated (Chaffee and Wilson, 1977; McGuire, 1989; Zuberi, 1992). Repetition of a single message can increase motivation and enhance the effects of a campaign (Johnson, and Witte, 2003). Moreland and Beach (1992) as well as Baron et al. (1998) asserted that higher degree of exposure to the innovations through media enhances a person's liking of the innovative methods proposed by the media. It also strengthens the knowledge-attitude-behavior relationships.

Understanding the Messages -- Texts and Images

Understanding the messages--texts and images--is another important variable. It provides information about what should be done, how and by whom (Salmon and Atkin, 2003). As a significant step in communication effects it is designed to change the attitudes of the audiences towards some particular socio-physical phenomena. But some people may not be able to understand these appeals in some communication messages. Due to self-censorship policy of the media on some socio-religious taboos, existing in the developing societies, the messages of some health campaigns are difficult to understand. Some of the messages regarding family planning are difficult to understand even for educated audiences. Similarly, words and images used in communication appeals against AIDS launched by AIDS Control Programme in Pakistan are not understandable. The model advises the audiences to follow Islamic injunctions, avoid unnatural acts, and be loyal to your wives to avoid AIDS, making the audiences wonder how these advices relate to the prevention of AIDS. Even the Western media face this problem in some subjects like abortion, birth control,

gay marriage, etc. and "there is a tendency to be very cautious in treating aspects that are considered very sensitive to certain segments of viewers" (Atkin and Arkin, 1990, p. 37). It becomes very difficult for the media "to describe exactly how gay men transmit AIDS" (Meyer, 1990, p. 53). This situation creates a communication barrier affecting campaigns at awareness level.

Perceived Utility of the Proposed Innovations

In the developing societies most of the people believe in orthodoxism, traditionalism, and superstitions (Zuberi, 1997) and the ideas introduced by media for good health tend to have no or less utility for them. They believe in homemade or traditional ways of treatment, such as smoke of particular plants to remove the evils from house and kill the injurious bacteria; soup of particular birds and chicken against cough; and milk of donkey during onslaught of diarrhea. These ways of treatment often become barriers in health communication (Yousafzai, 2001).

Access to the Required Facilities

Bernhardt and Cameron (2003) noted that access to health information and required facilities are major problems affecting health literacy and a serious barrier in the diffusion of innovations in the underdeveloped societies. The practice level is highly affected due to unavailability of the required facilities to the potential adopters. This structural barrier (unavailability) adversely affects the success of the health information campaigns at adoption level (Yousafzai, and Khan, 2005).

Socio-religious beliefs

Socio-religious beliefs provide guiding principles for the followers in health and illness, and people evaluate health issues in their own socio-religious perspectives. Cohen (2004, p. 232) holds, "socioeconomic pressures in favor of male children kept fertility rates high" in Pakistan where birth control is considered against religious teachings. This situation has worsened reproductive health. Wilder (2000) argues that religious beliefs influence attitudes towards many health issues. Several other studies have concluded that socio-religious beliefs have very serious implications for the effects in health communication (Petty and Priester, 1994). Now, it is crucial to understand how health, and illness are affected by interaction with the mass-mediated messages (Kline, 2003).

Education

Strong relationship between education and acquiring knowledge from the media is profound and message discrimination is expected in the process of communication due to differences in formal education. It was found that the better educated person acquires more information about more topics than the less educated (Gaziano, 1983; Freimuth, 1990; Rogers, 1976; Tichenor et al. 1970).

In sum, past literature shows a strong relationship between these variables and communication effects. These variables are more likely to influence health-related information effects in different ways, no matter what the socioeconomic status of the person would be. However, it is assumed that they are usually manifested on the people with low income group. After evaluating the influence of these variables in different communication effects, this study is designed to examine the relationships between these variables and SES. So, the following hypotheses were tested through a survey research.

Those with low SES tend to be:

- Less exposed to the information media;
- Low in understanding the health-related messages;
- Low in the perceived utility towards the proposed innovations;
- Low in access to the proposed innovations;
- Higher in socio-religious beliefs;
- Low in formal education.

Methodology

To test the above hypotheses, the study examined the impact of health communication campaigns on the urban and rural residents in District Dera Ismail Khan (Pakistan), who are quite divided in terms of their income and education. Married people were chosen because the campaigns under study are relevant to the health of children and their mothers, and the innovations introduced in these campaigns are of primary concern to the married people. They are the potential decision maker for the adoption of innovations and behaviors proposed and responsible for the health of their spouse and children.

Stratified method for specification of the demographic characteristics was adopted while convenience method was used for collection of data from the target population. A total of 300 respondents of balanced males and females from both urban and rural localities were selected. One hundred and fifty respondents

were selected from the urban and rural areas respectively. Proper city was selected to represent the urban area as it has a population of all income brackets. Rural area was selected from the same district. Seventy-five respondents were selected from each segment within the age ranging from 18 to 35 years, the potential age range of child-bearing (UNICEF, 1997) Monthly income was divided into four subgroups and then collapsed into "upto 7000" and "more than 7000" categories. Degree of exposure was measured by the amount of time the respondents spent on watching Pakistan Television in two categories-- 'up to 6 hours' and 'more than 6 hours'-- per week. Education level was divided into two categories: "from no education to secondary school" and "more than secondary school".

Four¹ health communication campaigns launched by the Ministry of Health through television were selected to measure their effects on cognitive, affective, and behavioral levels. Specifically, the respondents were asked how much they understand the messages about vaccine course, iodized salt, O.R.S. and family planning. They were also asked about whether they believe these recommended measures would be effective in preventing diseases and improving health, and if they have adopted these measures.

Findings

The finding shows that respondents with high income tend to watch more television.

Table - 1
Income levels and exposure to television

	Overall %	low %	high %
Upto 6 hours	25.70	27.20	24.00
More than 6 hours	45.70	34.90	60.50
Do not watch TV	28.60	37.90	15.50
	100	100	100

Low and high stand for low income, high income

In terms of understanding of the messages, the high income respondents also tended to fair better than those belong to the low income. A greater

¹ i. vaccine course is proposed against six fatal diseases in children; ii. iodized salt is advocated against throat disease, mental and physical weaknesses; iii. O.R.S. is suggested during the onslaught of diarrhea and vomiting; iv. family planning advocates small family norm.

proportion of the high income respondents feel they can fully understand the messages regarding innovations.

Table – 2
Income levels and understanding of messages

	V. course		Iodized salt		O.R.S.		Family planning	
	low %	high %	low %	high %	low %	high %	low %	high %
Understand fully	28.40	47.30	32.50	55.80	40.80	65.10	62.70	84.50
Understand little	33.10	37.20	27.80	30.20	20.70	18.60	00.00	00.00
Don't watch TV	38.50	15.50	39.70	14.00	38.50	16.30	37.30	15.50
	100	100	100	100	100	100	100	100

Low and high stand for low income, high income

More respondents belonging to high income group have favorable attitude towards the proposed innovations especially about the inoculation of vaccine course.

Table – 3
Income levels and perceptions about utility (effectiveness) of the innovations

	V. course		Iodizes salt		O.R.S.		Family planning	
	low %	high %	low %	high %	low %	high %	low %	high %
Yes	56.80	86.00	35.50	58.90	77.50	89.90	51.50	76.80
No	04.10	01.60	07.70	11.60	02.40	00.80	07.10	05.40
Missing cases	39.10	12.40	56.80	29.50	20.10	09.30	41.40	17.80
	100	100	100	100	100	100	100	100

Low and high stand for low income, high income. Missing cases include those who don't watch television.

Income level affects the respondents' access to the innovations and facilities required for adopting the behaviors proposed in all the selected campaigns except iodized salt.

Table – 4
Income levels and unavailability of the proposed innovations/facilities.

	V. course		Iodized salt		O.R.S.		Family planning	
	low %	high %	low %	high %	low %	high %	low %	high %
Yes	45.60	30.30	45.00	45.70	14.80	10.90	25.4	14.70

No	07.70	11.60	22.50	22.50	06.50	07.80	40.30	37.20
Missing cases	46.70	58.10	32.50	31.80	78.70	81.30	34.30	48.10
	100	100	100	100	100	100	100	100

Missing cases also include those who have adopted the proposed practice. Low and high stand for low income, high income.

Result indicates that more respondents with low income avoided the use of proposed salt because they believe that its use causes infertility in the users. More respondents with low income also believe that birth control is against the teachings of Islam.

Table - 5
Income levels and socio-religious, and psychological barriers

	Iodized salt is a part of family planning			Family planning is against religion		
	Overall %	low %	high %	overall %	low %	high %
Yes	28.00	31.40	23.30	44.70	53.80	31.80
No	31.00	26.60	37.20	15.30	13.10	18.60
Not decided	41.00	42.00	39.50	40.00	33.10	49.60
	100	100	100	100	100	100

Low and high stand for low income, high income.

The finding shows that more respondents with high education have adopted the innovative methods proposed by the media.

Table - 6
Education and practice of the proposed innovations and behaviors

	V. course		Iodized salt		O.R.S.		Family planning	
	Low %	high %	low %	high %	low %	high %	low %	high %
Yes	41.00	62.00	12.80	53.70	72.40	87.30	17.90	55.60
No	55.80	38.00	75.00	44.20	24.40	12.00	79.50	43.70
Missing	03.20	00.00	12.20	02.10	03.20	00.70	02.60	00.70
	100	100	100	100	100	100	100	100

Low and high stand for low education, high education.

Discussion and Conclusion

The findings lend support to the propositions that people with low income are less exposed to the information media, low in understanding of the mediated health-related messages, low in the perceived utility of the innovative methods, low in access to the proposed facilities, higher in socio-religious beliefs, as well as low in formal education. These variables are likely to affect the impact on health communication. Some other studies also suggest that the influence of these variables differs among different SES in the health-related campaigns (Conra and McIntush, 2003; GALLUP, 1999; Kreps, 2003).

The overall trends indicate that SES may have indirect but multidimensional effects on a person's knowledge, attitudes, and behavior regarding recommended health measures as indicated by the previous as well as the current study. It may lead to a vicious cycle, in which one type of characteristic is responsible for generating another. On the other hand, the lack of awareness of or favorable attitudes towards the proposed behaviors may explain the non-adoption of the proposed behaviors. Such a situation reinforces superstitions already existing in the less-developed societies where socio-religious beliefs are likely to shape values, norms, tradition and taboos, resulting in huge barriers in promoting health literacy and reducing the perceived utility of the innovations. The urban-rural configuration of these societies makes the matter worst and two-third of Pakistan's population is living in the rural areas has no easy access to these innovations (Economic Survey, 2006:189).

This poor segment is continuously suffering from the problems mentioned above and some of these problems influence all the three integrated components involved in the process of diffusion of innovations. So, the success of a health campaign is impeded (awareness to practice) and the desired goals may not be achieved properly as expected before launching the campaigns. The logic behind this phenomenon is that the poor have no or very limited resources to own information media that affect the degree of exposure and awareness of the proposed innovations due to low education. Because of the low literacy prevailing in developing nations and particularly rural population, majority of the potential adopters are not able to acquire the skills required for the adoption of the innovations. In this situation, a health campaign may not be able to secure favorable attitudes towards the innovation. If there is any attitudinal change, it may not be turned into practice because of the strong structural barriers (unavailability of the innovations), particularly in the rural area. These barriers undermine almost all health campaigns at the practice level and the desired goals for improving health are unlikely to be achieved.

In sum, we conclude that although SES—low or high—may not be directly responsible for variations in health communication effects, it nevertheless may affect the exposure to media, understanding of the message and its utility, access to these facilities, level of education, and socio-religious beliefs, which in turn determine the outcome of the health communication campaigns. As a result, SES differences will push the poor into a more disadvantaged position as far as health is concerned. Due to this vicious cycle, the poor are unlikely to benefit from the health campaigns without institutional support. As Webster (1994) argued, the poor are dependent on the government for improvement as they lack adequate knowledge, skills and appropriate attitudes towards progress. Therefore, the policy option would be to reduce the income gaps between the rich and the poor (Najman, 1993) and positive change in health will come from improvements in economic conditions and social justice across the society (Wallack, 1990).

Moreover, attitudinal and behavioral change needs more sophisticated measures and approaches. *Education* is a better predictor to secure the desired changes in attitudes, but literacy is extremely poor in all the developing societies. So, the state institutions must concentrate on providing formal schooling to the poor. Information-rich environment is crucial to promote health literacy and degree of *exposure* that could enhance *understanding level* and consequently the *perceived utility* of the innovative behaviors. *Access* must be facilitated through appropriate distribution of the innovations, and their availability in the rural areas is to be taken on priority basis. Guttman (2003:664) suggests that health communication interventions must “ensure that the less privileged are provided not only with information of recommended practices but also with resources to carry out the practices.” Religious institutions like mosques and madaris (religious schools) are to be taken into confidence to work for the removal of *erroneous beliefs* about some controversial subjects like birth control, and iodized salt.

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