

IMPACT OF MEDIA HEALTH CAMPAIGN FOR PRIMARY HEALTH CARE AMONG MOTHERS IN KARACHI

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ABSTRACT

Objectives: To evaluate the knowledge, attitude and practice of media-based primary health care (i.e. Expanded Programme of Immunization, National Polio Day, oral rehydration therapy, breast feeding, contraceptive practices, modes of spread of hepatitis B, C, and HIV) among mothers with children under five years of age in an urban and a rural area of Karachi and changes in the same after community-based health education

Study design: Descriptive study

Subjects and Methods: The study was conducted in two phases. In the first phase 600 mothers with children under five years of age were selected at random (300 urban and 300 rural) for the evaluation of knowledge, attitude and practice of media-based primary health care i.e. Expanded Programme of Immunization, National Polio Day, oral rehydration therapy, breast feeding, contraceptive practices and modes of spread of Hepatitis B, C and HIV. In the second phase, health education on the same components of primary health care was given by lady health workers of the area to the same community for one month. Data of 200 mothers (100 urban and 100 rural) was re-evaluated after three months, to find out if there was any change, in the same. All the three areas were given scores and grade.

Results: In this study, 58% were Sindhi speaking. The mean age of mothers was 29 years. Majority (91% urban and 45% rural mothers) had access to one or more media channels. The knowledge of media-based primary health care was poor (score=10.09) among all mothers but attitude (score=8.07) and practice (score=11.09) was good for the same in more than 70% mothers in both communities. In the second phase of the study, it was found that the knowledge of primary health care had not improved but attitude and practice was good as observed earlier in both communities.

Conclusion: Despite the national media based health education of Primary Health Care for decades, knowledge of primary health care was poor among mothers (urban and rural) but attitude and practice was good. Age and exposure to one or more media channels was found statistically significant for good attitude and practice of media based Primary Health Care in urban mothers whereas education of the mothers and exposure to one or more media channels was statistically significant for good knowledge, attitude and practice for the same in rural mothers. After health education, there was no improvement in knowledge of Primary Health Care among all mothers but attitude and practice was good in the majority of mothers in both communities as observed earlier.

Keywords: Media, Knowledge, Attitude, Practices, Primary Health Care, Health campaign, Health education.

INTRODUCTION

Mass media is public communication intended to reach at large audience¹. It provides a continuous flow of information including health information. Although health

communities recognize the power of media for its dissemination, unfortunately all health messages are not easily understood². Media produces short, intermediate and long-term effects on audience. Short term includes exposing audience to health concepts creating awareness, alter outdated or in-correct knowledge, intermediate terms include changes in attitudes, behavior and perception

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whereas long-term include maintenance of behavior change³. Knowledge, attitude and practices surveys are conducted to assess health-seeking behavior of large communities⁴. Knowledge is assessed to find out community's knowledge of biomedical concepts⁵. Attitude is a feeling to act in a particular way towards a given object⁶. Practice is the measure adopted for preventive purpose⁷.

Impact of media health campaign simply means potential effects due to media delivered health messages on the health of population and distribution of those effects within the population⁸. This study was designed to assess knowledge, attitude and practice of media-based primary health care i.e. Expanded Programme of Immunization (EPI), National Polio Day, oral rehydration therapy, breast feeding, contraceptive practices and modes of spread of hepatitis B, C and HIV, among mothers with children under five years of age in one urban and one rural area of Karachi, to find out the improvement in the same after community based health education.

SUBJECTS AND METHODS

It was a descriptive community based study conducted at Karachi. Variables included location of the community (urban/rural), age, education, socio-economic status and mother tongue of the respondent (mother) besides availability and type of media channels. The dependent variables included Knowledge, Attitude and Practice (KAP) of media-based primary health care (PHC) regarding EPI, National Polio day, Oral Rehydration Therapy (ORT), breast feeding (BF), contraceptive practices and modes of spread of hepatitis B, C and HIV. Mothers who were not permanent residents or did not have children under five years of age were excluded.

This study was conducted in two phases. For the first phase, keeping the anticipated population proportion of 20% and 95% confidence level with absolute precision (15% - 25%) of 5% points, a total sample of 600 mothers i.e. 300 each from urban and rural area was calculated⁹. In the second phase, health education (HE) for the same components of PHC was given by Lady Health Workers (LHWs) of the respective area to the same community for one month. Data of 200 mothers, 100 each from an urban and a rural community, was collected after three months for re-evaluation of KAP using same performa.

The study was conducted in one urban area (Gizri) and

one rural area (Kathore, Dumba Goth). For the selection of households/mothers and to maintain random sampling procedure, a random table was used. In the first stage, list of households, permanent resident of the area/mothers with children under five of age was prepared from the list provided by LHWs of the respective area. Sampling procedure was completed before going into the field. Three hundred households out of 665 in urban area and 300 households out of 532 in rural area were selected at random. Households with joint families but separate kitchens were counted as separate families. For the second phase of the study 200 mothers, 100 each from urban and rural area were selected at random from the same community using the same procedure.

A questionnaire with both the open and close-ended questions was designed for the collection of data. Lady health workers who were employees of National Programme of Family Planning and Basic Health accompanied the Principal Investigator for data collection. The Principal Investigator interviewed the mothers. Questions of background variables were not included in the scoring system and were given codes only. For Knowledge (K) maximum score was 50, for Attitude (A) maximum score was 12 and for Practice (P) maximum score was 16. The possible minimum score for KAP was 0. A score of 60% and above was graded as good, score of 40% to 59% was graded as fair and score of 39% and less was graded as poor. The study was approved by Ethical Review Committee of the funding agency (Pakistan Science Foundation). A written and/or verbal consent was taken from the respondent in their own language.

Data were analyzed on computer package SPSS version 10. Chi-square test at 0.05 alpha level was used as a test of significance to find out association of media based KAP and variables studied.

RESULTS

For the evaluation of media based KAP of PHC, data of 600 mothers (300 each from urban (Gizri) and 300 from rural (Kathore, Dumba Goth) area were collected,. Two hundred and sixty one performa of urban and 270 rural mothers data was analyzed on SPSS version 10. Incomplete performas of 39 urban and 30 rural mothers were discarded.

The spoken language of 58% mothers was Sindhi, of 22% was Urdu and 20% used other languages. Mean age of the surveyed mothers was 29 years. Forty three percent

of urban and 36% of rural mothers were illiterate. The socio-economic status of the majority of the mothers were middle income group 281 (86%). Majority (91% urban and 45%) rural mothers were exposed to one or more media channels (television, radio, newspapers). Majority of the mothers (71% urban and 42% rural) had access to television.

Mean knowledge of media based PHC among urban mothers scored was 10.49 and majority i.e. 250 (96%) had poor knowledge of PHC. Mean attitude of PHC scored was 8.07 and 80 % had good attitude. Similarly mean practice of PHC was scored 11.09 and 86% had good practice of PHC. Comparatively among rural mother, mean knowledge of media based PHC was 12.22 and majority i.e. 97 % had poor knowledge of PHC. Mean attitude scored 8.87 and 76 % had good attitude. Similarly mean practice was scored 11.12 and 80 % had good practice of PHC.

It was also found that mean knowledge for the spread of Hepatitis B and C, and HIV scored 4.25 among urban and 4.32 among rural mothers.

Further, 43% urban and 26% rural mothers had ever used any birth control methods. Although 84% urban and 79% rural mothers had registered themselves for ante-natal check-ups, only 72% mother delivered in hospitals and maternity homes. Eighty seven percent urban and 99% rural mothers stated that they purchase their own disposable syringes for injection purposes.

Among urban mothers, attitude of PHC was statistically significant with age of mothers (Chi-square 8.140, p= 0.004) and practice of PHC with exposure to one or more media channels (Chi-square 3.988, p= 0.046). Among rural mothers knowledge of PHC was statistically significant with education of mother (Chi-square 8.126, p= 0.016) and of attitude and practice with exposure to one or more media channels (Chi-square 4.341, p-value 0.036) and (Chi-square 14.086, p< 0.001) respectively.

After health education by LHWs, data of 200 mothers (100 each from the same urban and rural community) was recollected but it did not show any improvement in knowledge whereas attitude and practice of community-based PHC was good in the majority of the mothers as found earlier. Post-health-education data showed that, only 3% urban mothers had good knowledge whereas 97% showed good attitude and 88% good practice of PHC. In rural mothers 2 % had good knowledge, 61% showed good attitude and 84% good practice for the same respectively.

DISCUSSION

In this study, the proportion of different ethnic groups in one urban and one rural area of Karachi was similar to that found in general population of the city¹⁰. The literacy rate of adult female and socio-economic status of the mothers was comparable to the findings of National Census 1998¹¹. Despite media based health campaign for many years, knowledge of PHC was poor among all mothers (both urban and rural). This finding is consistent with the results of Indian National Family Health Survey (NFHS)1992-93 which interviewed 90,000 Indian women and found that only 43% mothers had knowledge of oral rehydration therapy despite the Indian Government health education programme running for decades¹².

In this study, mothers exposed to more than one media channels showed good attitude and practice of primary health care but knowledge was poor for the same. In South Africa there are three major programmes utilizing national mass media for the prevention of HIV/ AIDS. They have tried different models for the effectiveness of programmes and are still striving for better utilization of mass media channels for improving its effectiveness¹³. Similarly it has been found, that even if well designed media health campaign programmes are implemented it produces

Table I: KAP of Primary Health Care in urban and rural mothers-Media vs. Community based

	Urban		Rural	
	Media Based n=261	After Health Education n=100	Media Based n=270	After Health Education n=100
Knowledge				
Good	1(0.4%)	3(3%)	nil	2(2%)
Fair	10(3.8%)	12(12%)	8(2.96%)	1(1%)
Poor	250(95.8%)	85(85%)	262(97.04%)	97(97%)
Attitude				
Good	208(79.7%)	97(97%)	204(75.55%)	61(61%)
Fair	47(18%)	3(3%)	38(14.07%)	21(21%)
Poor	6(2.3%)	nil	28(10.38%)	18(18%)
Practice				
Good	224(85.8%)	88(88%)	217(80.37%)	84(84%)
Fair	37(14.2%)	12(12%)	53(19.63%)	16(16%)
Poor	nil	nil	nil	nil

small to moderate effects on health knowledge, belief and attitude besides behavior changes¹⁴.

In this study majority of mothers had good attitude and practice of breast feeding, consistent with the finding of a study conducted in Jordan to examine the impact of mass media breast feeding campaign which also showed positive attitude¹⁵. Mothers having access to multiple media channels especially television showed good attitude and practice. This is similar to a study conducted on mental health programme which evaluated that not only suitable messages are required but it should also be aired on media channels that cater to a larger audience¹⁶.

In the second phase of the study, education on primary health care was given by LHWs to the same community but post health education data collected on 33 % mothers from the same community did not show any improvement in knowledge. The attitude and practice of primary health care was good in majority of mothers as observed earlier. One possible reason for no improvement in knowledge of mothers may also be short implementation and evaluation period. In a Behavior Change Communication programme(BCC) conducted in Uganda to improve knowledge and practice of breast feeding improvement was very short lived i.e. for six months only and the reason found for such short lived impact in BCC programme was also the same¹⁷.

In this study the majority of the mothers were illiterate, of different communities with different mother tongues and different understanding levels. This could also be the reason for poor knowledge of media /community based health campaign. In a study conducted in Bhutan, impact differed in different communities when they were approached through the same messages¹⁸. In a media-based health education programme conducted in Cali, Columbia to increase case finding and removal of prejudice against tuberculosis patient's, improvement was noticed but the committee recommended that strategies should be such designed which are audience counter productive and should produce sustainable effects¹⁹. It was found in the present study that despite efforts for decades, knowledge of primary health care had not improved. Research is needed to evaluate the reasons for poor effectiveness of health campaign. Kaiser Family Foundation and South Africa Broadcasting Corporation conducted a survey on 4000 youths aged 15-24 in 2006 to evaluate media role for preventing HIV epidemic, and found that more research was needed to find out the reach

of media messages as well as the type of messages that can bring changes among those addressed²⁰.

In this study, the percentage of ethnic groups, their socio-economic status and adult female literacy rate are similar to that in general population of this city. Therefore study results could be generalized. Alpha test applied for internal validity showed more than 80% reliability which also means that study is internally valid.

KAP surveys are conducted for health seeking behavior and provide large data, but have a number of limitations also. Firstly, it does not provide clear explanation for people's behavior. It has been assumed that there is direct relationship between knowledge and action. By changing knowledge behavior is automatically changed but knowledge is only one element which determines health seeking behavior. Similarly to conclude attitude directly is problematic because people responds in terms of what they think is the correct answers, question asked for practice of preventive measures hardly permit actual practices. Secondly these surveys are useful for developing hypothesis only and based on these, further studies should be designed for evaluating correct responses and for developing correct models of health campaign.

It is, therefore, recommended that reaching through one message is not a useful model as needs, priorities and intelligence levels of all respondents are not similar. An effective media campaign should be designed keeping in mind the clearly defined audience and objectives, channels and vehicles (Government and NGOs) most appropriate and finally properly implemented for good evaluation results. Periodic evaluation is essential for improving the effectiveness of programme and for decision making.

CONCLUSION

Despite media health campaign for decades, the study found poor knowledge of primary health care among mothers with children under five years of age (urban and rural) but attitude and practice for the same was good in the majority of the mothers in both communities. Age of mothers and exposure to one or more media channels were found statistically significant for good attitude and practice of primary health care in urban mothers where as education of mothers was statistically significant for knowledge and exposure to one or more media channels for attitude and practice of primary health care in rural mothers.

After health education there was no improvement in knowledge of Primary Health Care among all mothers but attitude and practice was good in majority of mothers in both communities as it was found earlier.

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