

Original Research Article

## Polio Education among Illiterate Muslims

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Received: 23/07/2015

Revised: 12/08/2015

Accepted: 17/08/2015

### ABSTRACT

Success of education depends upon the success in maintenance of good health. Children, being the future resources of the civilization, their health need to be protected with outmost priority. There are many diseases for which prevention by vaccination at the early age is the only way. Polio is such a fatal disease. Preventive care against any childhood disease depends upon the knowledge and attitude of the adults/parents towards that disease. Knowledge and attitude is again govern/influence by the gender, habitation and economic condition of the parents. Muslims are generally backward in terms of their socio-economic and educational status. Three hundred (300) illiterate Muslim people from the community dominated Malda district, West Bengal were interviewed by face-to-face method with a self-made questionnaire consisting of 52 and 31 items on knowledge and attitude respectively about polio disease. The significant differences in knowledge about polio of the illiterate Muslims were exists in respect of gender and economic condition but in case of dwelling place significant difference was not found.

Female members and urban dwellers possess higher quantum of knowledge. Whereas, dwelling place has some influence on attitude towards polio, but gender and economic condition has no impact on attitude towards polio.

**Keywords:** Polio, knowledge, attitude, illiterate Muslims, economic status.

### INTRODUCTION

All the resources and means of sustenance for every living being, including human are there in the nature. But these means are not always in readily usable form. We are to acquire the requisite knowledge in order to avail our means of sustenance in the usable form, from the nature. So, acquisition of knowledge is linked to our very survival. Only acquisition of knowledge does not work, it needs proper application. Application of knowledge by human being is guided by his/her attitude. Knowledge and

its product attitude-formation need a healthy body, at the least. So, we are rightly concerned about child's health. In fact, health education starts when the baby is in mother's womb. Whereas, education for knowledge, etc. starts few years later from the baby's birth. No knowledge, skill, etc. will be meaningful, if one's health is not sound.

The natural immunity level of human babies remains at much lower level than that of the adult. So, extra care should be taken in order to protect our children from various

childhood diseases. Generally it is said that prevention is better than cure. Polio is such a disease, where prevention, i.e., vaccination is the only way out to protect the children against it [Anonymous, 2013(Feb.)]. Being communicable, the disease spreads much faster. Polio virus attacks the nervous system of the victim, which in many cases leads to paralysis or even death [Encyclopedia.com]).

World Health Organization had started a global Pulse Polio Programme in 1988 with the aim to eradicate the polio disease altogether. Our Government of India has undertaken the programme since 1995. Polio remained prevalently among the Muslim communities. Muslim dominated Nigeria and Pakistan are still polio endemic [Anonymous, 2015(March)]. In India, till the last reports on polio virus infection were received mainly from the Muslim community [Anonymous, 2011(Feb.,12) and Anonymous, 2011(Feb15)]. Although, officially India is polio free, but history of the disease says that it can raise its ugly face at any time [Iqbal, 2013(Sept.,15)]. Muslim community world-wide opposes polio vaccination programme [Sengupta, 2011(March,21)]. Mainly the illiterate masses are behind this strong opposition [Anonymous, 2013(April,11); Buncombe, 2013(Sept.,04) and Roy, 2002(Oct.,03)]. Suspicion and misconceptions are there among the people about the Government's motive regarding polio vaccination [Das, 2011(Jan.,13)]. It is the knowledge and attitude of the community people which guides them to take such fatal decision, at the cost of their children's life. Being highly communicable, the virus does not remain confined only among the Muslim community, it infects others also. So, there is strong need to know the knowledge and attitude levels of the Muslim community regarding polio disease. In India, majority of the polio infection cases among the Muslim

community are from the illiterate masses. As per 2011 Census report, only 67.6% Muslims are literate; much below the national average. This makes the need to focus the study on the illiterate Muslims. Moreover, matters related to childcare and child health rests mainly upon mother or elder female members of the family (Raren, 2002), but males' decision also bears much weight-age.

Among the different district of West Bengal, Malda district is Muslim dominated (52.05% Muslim). The percentage of literacy in Malda district and National average is 63 and 74.04 respectively as per Census, 2011. In this circumstance, the present study was undertaken to find out the role of knowledge and attitude towards polio among illiterate Muslims of Malda district in relation to gender, habitation and economic status.

## **MATERIALS AND METHODS**

**Sample:** The population for this study was the illiterate Muslim community of Harischandrapur-II development block and English Bazar & Old Malda municipalities. A total of 300 samples were taken, which was divided into 150 illiterate Muslim male and 150 illiterate Muslim female from rural and urban areas of Malda district, West Bengal. These samples were picked up from BPL (148) and APL (152) economic categories. Purposive random sampling method was applied for data collection in January 2014. The break-up of the sample was given below (Figure 1).

**Tools used:** A self-made knowledge and attitude scale regarding polio disease was applied for collection of data in this survey. The initial form of the scale consisted of 65 items on knowledge and 37 items on attitude covering eight dimensions of polio diseases viz. education, superstition, prevention, information, location, social-interaction, transmission and recovery. The scale was in

three point Likert type rating with the alternate responses – Agree (A), Don't Know (DK) and Disagree (D). It contained

sufficient numbers of favourable and unfavourable items.

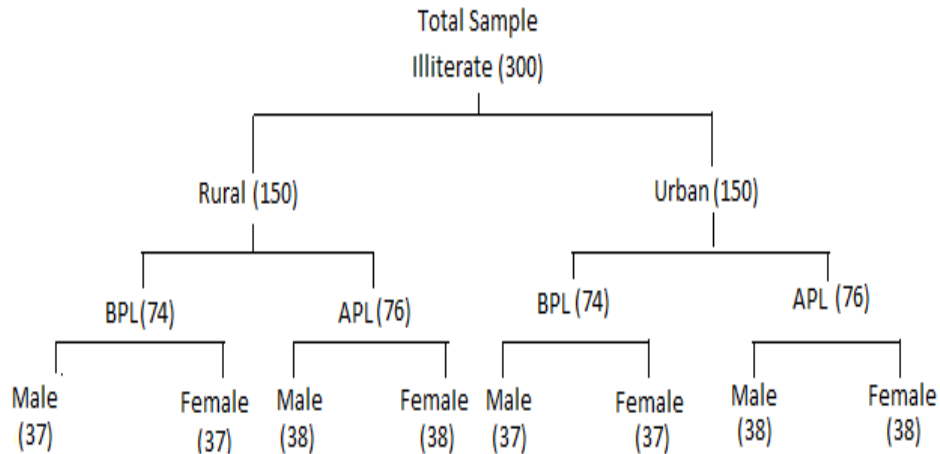


Figure 1: Detailed breakup of the sample

### Standardization of the Attitude Scale:

The scale was standardized through pre-try-out on sixty women residing in Malda district, West Bengal. On the basis of their responses, item analysis was done by calculating popularity index and index of discrimination (Ray & Mandal, 2000). There were 52 items on knowledge and 31 items on attitude in the final form of the scale. There were equal numbers of favourable and unfavourable items on knowledge, and on attitude - 15 favourable and 16 unfavourable items. The favourable items scored from maximum to minimum, i.e., 3, 2, 1 corresponding to responses - Agree (A), Don't Know (DK) and Disagree (D) respectively. Whereas, the unfavourable items were scored in the reverse way, i.e., 1, 2, 3 corresponding to similar responses. The maximum score on knowledge and attitude was 156 and 93, with the minimum 52 and 31 respectively. The scale has good content validity. Its reliability was calculated by test-retest method and found to be of high value ( $r = +0.96$  on knowledge and  $+0.94$  on attitude).

**Procedure:** The researcher approached the subjects of this study personally at their locality and after establishing rapport with them, the knowledge and attitude scale was administered in a convenient group of 20 members at a time. For illiterate samples, the researcher himself read out the questionnaire before them and advised them to give their responses on the items, one by one. On the basis of their responses, the researcher put tick mark on the appropriate boxes on the response sheet. Scoring was done with the help of scoring key of the scales.

**Statistical Analysis:** The statistical analysis of the collected data on the scale was done with the help of mean, standard deviation and “t”-test method between different educational status groups, variation in socio-economic status as well as in locational variation of the samples. The data so analysed were interpreted accordingly.

### RESULTS

Table-1 presents the statistical comparison of knowledge about polio

disease between illiterate male and illiterate female of Muslim community people. A significant difference in knowledge was found between them at 0.01 level.

Table-2 shows that the statistical comparison of attitude on polio disease between illiterate Muslim male and female. The result was found to be insignificant at 0.01 level and even at 0.05 level.

It is clear from table-3, the mean knowledge score of rural illiterate Muslim was  $111.93 \pm 7.03$  as compared to  $113.35 \pm$

8.94 for the urban illiterate Muslims. The t-value between the groups was insignificant at 0.01 level and even at 0.05 level.

It is evident from table-4, the mean score of rural Muslim was  $70.17 \pm 8.16$  as compared to  $78.21 \pm 9.88$  for their urban counterpart. The t-value between these groups was significant at 0.01 level. Hence, the attitude of urban Muslims towards polio disease differs significantly from that of their rural counterpart.

**Table 1: Comparison between illiterate Muslim male and female regarding knowledge about polio disease**

Comparison Between Groups	Sample No	Mean	S. D.	df	t-value	Significant at 0.01 level
Male	150	110.73	7.11	298	4.23	Yes
Female	150	114.55	8.51			

**Table 2: Comparison between illiterate Muslim male and female regarding attitude towards polio disease**

Comparison Between Groups	Sample No	Mean	S. D.	df	t-value	Significant at 0.01 level
Male	150	73.69	10.11	298	0.88	No
Female	150	74.69	9.69			

**Table 3: Comparison between locational variation of illiterate Muslims regarding knowledge about polio**

Comparison Between Groups	Sample No	Mean	S. D.	df	t-value	Significant at 0.01 level
Rural	150	111.93	7.03	298	1.54	No
Urban	150	113.35	8.94			

**Table 4: Comparison of attitude due to locational variation of illiterate Muslims towards polio disease**

Comparison Between Groups	Sample No.	Mean	S. D.	df	t-value	Significant at 0.01 level
Rural	150	70.17	8.16	298	7.68	Yes
Urban	150	78.21	9.88			

**Table 5: Comparison between socio-economic status variations of Muslim community regarding knowledge and attitude towards polio disease**

Independent Variable	Comparison Between Groups	Sample No.	Mean	S. D.	df	t-value	Significant at 0.01 level
Knowledge	BPL	148	110.30	8.36	298	5.16	Yes
	APL	152	114.91	7.07			
Attitude	BPL	148	73.43	9.31	298	1.32	No
	APL	152	74.93	10.42			

The mean value of knowledge score of BPL Muslim community differs significantly from that of the APL Muslims (Table-5). Therefore, the knowledge of APL Muslims about polio disease differs significantly from that of their BPL counterparts at 0.01 level. Whereas, on the other hand, table-5 also shows no significant difference in attitude towards polio between the BPL and APL Muslims.

## DISCUSSION

Children's health depends upon parent's knowledge and attitude towards the disease and health safety measures. Table 1 show that the Muslim women possess higher level of knowledge ( $114.55 \pm 8.51$ ) than their male counterpart ( $110.73 \pm 7.11$ ) and this difference is significant at 0.01 levels. The result is in conformity with the fact that the illiterate women mainly remains at home at day time, when they can avail better scope for gathering information from door-to-door pulse polio immunization campaign. Thus, possession of relatively higher knowledge

level by the female counterpart on polio can be attributed to the greater role of our female in child-care and the large scale mass polio awareness campaigning up-to door-to-door extent (Quaiyum, *et al.*, 1997).

Table 2 shows that the attitude of the Muslim community towards polio disease does not depend on the variation of their gender. It has no dependency upon the quantum of knowledge possessed by the people. As discussed above, the Muslim female have higher level of knowledge on polio, but their attitude towards the polio do not differ significantly from that of the male. This is because; attitude is a complex socio-religious and cultural outcome in human mental setup.

For illiterate people, their locational variation does not affect their quantum of knowledge about polio, as is depicted in Table 3. But the mean of polio score are of moderate magnitude here (Rural=  $111.93 \pm 7.03$  & Urban=  $113.35 \pm 8.94$ ). Probably the extensive door-to-door pulse polio campaign in rural areas is compensated by the relatively advanced mode of advertisement in the urbanity.

It is evident from Table 3 and 4 that the attitude of people is not related to knowledge, or the vice versa. Illiterate urban dwelling Muslims show higher level of attitude. This difference is statistically significant at 0.01 level. This is in accordance with the fact that there is easy access to different types of knowledge, information, etc. in urbanity in compared to rural areas (Garcia and Davison 2013).

But poverty dose definitely come in the way of acquiring knowledge, as is the case for knowledge on polio among illiterate Muslim community, as depicted in table 5 above. Here, the economically well-off (APL) Muslims possess higher level of knowledge about polio as compared to the poor (BPL) Muslims, which is found to be significant at 0.01 levels. But, keeping

consistency with the other observations here regarding attitude of the illiterate Muslims towards polio. Table -5 also shows no significant change between the BPL and APL people's attitude towards polio. The result is supported by a study conducted by Anbarasan and Tamilenth, (2013)

## CONCLUSION

It can be concluded that the knowledge of illiterate Muslim people polio disease depends upon gender and economic condition but not on locational variation. Whereas, their attitude towards polio remains unaltered by the variation of gender and economic condition, but influenced by locational variation.

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How to cite this article: Ali Md. A, Sikdar DP. Polio education among illiterate muslims. Int J Health Sci Res. 2015; 5(9):430-435.

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