Management of Acute Respiratory Infections by Mothers in the Community

Pages with reference to book, From 38 To 41

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Abstract

Home treatments are important in the management of acute respiratory infection (ARI). In order to examine how urban mothers in Lahore, managed ART, a study was carried out within 1- km radius of a teaching hospital. A total of 50 mothers who had at least one child aged 2 months -5 yeats with an ART from each of three settings - a lower class locality, a middle class locality and the outpatient department of the hospital were interviewed during the winters of 1992-93. A substantial proportion of mothers, particularly those from the lower class locality (44%), did not use home treatment for acute respiratory infection. The majority of mothers indicated that they would not use home treatment if their child had an ART in the future. The importance of home treatment has to be introduced into the community probably by programmes conducted by health professionals (JPMA 47: 38,1997).

Introduction

Home treatments for children suffering from acute respiratory infection (ART) in Pakistan are part of the culture and are recommended as appropriate therapy by health care professionals, provided that the child does not have pneumonia. The World Health Organization[1] (WHO) guidelines for management of aRT suggest that children aged 2 months and older: (1) should be given foods of high caloric and nutritional value to prevent weight loss, (2) increased fluids to prevent dehydration and (3) watched for signs of deterioration that warrant professional advice. To impmve morbidity and mortality associated with ARl, itis important to determine the extent to which mothers provide home treatment and remain vigilant about signs and symptoms of deterioration.

A study was conducted to investigatç the way in which mothers in the community managed ART and to determine if management of ART varied by social class. Social class is likely to influence the variation in management of ART due to differences in resources, education and subcultural imperatives. Specifically, the objectives of the study were to determine (i) the ways in which mothers managed children suffering from ART, (ii) the actual home treatments used by mothers. (iii) the perceived efficacy of home treatment, (iv) how mothers planned to manage their child's next ART and (v) the ways in which intervention programmes might improve the home management of children with ART.

Materials and Methods

The population for this study consisted of mothers (i) who had at least one child aged between two months and five years and (ii) one of whose children had atleast one episode of ART during the winter of 1992-93, the season when the study was carried out. Such mothers were selected from (i) those who resided within 1-km radius of Sheikh Zayed Hospital and (ii) those who visited the outpatient department of the same hospital in order to get treatment for their children suffering from ART. The main reasonfor obtaining data on mothers both in the community and in the outpatient department was to see if there was any difference in the home management of children suffering from ART between mothers living in the community, socio-cultural milieu and those who, in addition to being exposed to

the community soeio-cultural milieu, were also being currently exposed to the health facility culture. To contact mothers residing in the catchment area of the Sheikh Zayed Hospital, two urban localities representing the lower and middle classes were selected. A subjective definition of social class as perceivedby the local informants was used. The data collected later showed that in the lower class locality nine out of every ten respondents were illiterate, whereas, nine out of every ten were literate in the middle class locality. More than three-fifths of the respondents in the middle class locality were educated atleast upto the tenth grade. Mothers who brought their sick children to the outpatient department were assumed to be lower or middle class, in keeping with observations of consultants that outpatient department patients tended to be low or middle class, while patients visiting private clinics tended to be upper class.

There were about 200 households in each of the lower class and middle class localities and from each locality 50 mothers were selected. Streets were selected at random and every third household having an eligible respondent was contacted. Tf the household did not have an eligible respondent, the next household was considered. There were no refusals, which showed that the respondents were cooperative. The consultant associated with the research project attended the outpatient department twice a week. The eligible mothers were those who visited the outpatient department with their children suffering from ART during the winter of 1992-93. Of this population, every third mother was selected for the study. This procedure continued until the required number was obtained.

The information was collected with the help of a predesigned interview schedule, which was finalized after pretesting in similar localities. Interviewing in the community was done by two female sociologists, but interviewing in the outpatient department was performed by junior medical doctors. Information on maternal age, income and education level was obtained by questionnaire. Interview schedule included 56 questions in all. The range of questions asked by interviewers was 32-56. This paper used only part of the information collected.

In order to supplement the quantitative data with qualitative information, one focus group discussion in each of the two localities was arranged. Seven and eight mothers, respectively, participated in the two focus group discussions. Medical doctors and sociologists conducted the focus group discussions, which covered a list of topics related to management of ARI. (Home treatment: home remedies. Spiritual: through recitation of holy verses as shown in Table 1). Data were entered into a computer and analyzed using Epi Info, Version 5 (Division of Surveillance and Epidemiology, Epidemiology Programme Office, Centers for Disease Control and Prevention, Atlanta, GA 30333, USA). Data are presented as frequency distributions. Statistical analysis was done by using achi square test. Level of statistical significance was adjusted for multiple comparisons.

Results

Despite the limitations of the accuracy of income estimates, the data suggested that families from the middle class locality had higher income than those from the lower class locality. These findings supported the selection of the two localities. This observation was also supported by data on the educational levels of the mothers from the outpatient department showing that 22% were illiterate, 10% were educated upto primary level. 20% had secondary level schooling and 48% had a college education. Data on income level showed that 46% of respondents from the outpatient department reported earning upto P.s.3000 per month (lower class), 32% earned more than Rs.5000 (middle class) and the rest earned between Rs.3001 and Rs.5000 (lower middle class). Although self reports of income may not be entirely reliable, data on income and education levels suggested that the outpatient department clients came from both the lower and middle class.

Table I. Multiple modes of treatment provided to children suffering from ARI in the community and the outpatient department.

Mode of treatment	Communities			
	LCL* (n=50) %	MCL** (n=50) %	Both (n=100) %	OPD*** (n=50) %
Allopathic	78.0	84.0	81.0	92.0
Home treatment	56.0	72.0	64.0	74.0
Spiritual	28.0	24.0	26.0	24.0
Hikmat$	2.0	2.0	2.0	4.0
Homeopathic	-	8.0	4.0	-

*LCL= Lower class locality

**MCL= Middle class locality

*** OPD= Outpatient department of Sheikh Zayed Hospital

@df = 1 p=.05

$Hikmat= Traditional unani (Greek) medical practice

Table I shows that the mothers used multiple modes of treatment. Allopathic treatment (81% in the community and 92% in the outpatient department) and home treatment (64% and 74%, respectively) were the most common modes. Although within the community, a greater proportion of the middle class locality mothers used the two most frequently mentioned modes of treatment than did their lower class locality counterparts, although the difference between the two groups of mothers was not statistically significant. Most mothers reported using several kinds of home treatment concurrently (Table II).

Table II. Details of home treatment provided to children suffering from ARI in the community and outpatient department.

Treatment	Communities			
	LCL* (n=50) %	MCL** (n=50) %	Both (n=100) %	OPD*** (n=50) %
Honey	26.0	48.0	37.0	48.0
Soup (broth)	20.0	40.0	30.0	10.0
Tea	20.0	38.0	29.0	28.0
Vicks rubbing	8.0	32.0@	20.0	46.0
Garmaish (heating)	8.0	20.0	14.0	14.0
Syrup	20.0	20.0	20.0	16.0
Saunf ka paani (aniseed water)	2.0	10.0	6.0	14.0
Arq (rose water)	2.0	9.0	5.0	4.0
Brandy	8.0	6.0	7.0	4.0

*LCL = Lower class locality
**MCL = Middle class locality
***OPD = Outpatient department of Sheikh Zayed Hospital
@ df = 1 p=.005
Percentages of those who did not give any home treatment. LCL 44%, MCL 28%, OPD 26%.

In the middle class locality the four most frequently mentioned treatments were honey, soup (broth), tea and Vicks (camphor preparation) rubbing (48%, 40%, 38% and 32% respectively). Mothers in the lower class locality reported using the same home treatments, Only the use of Vicks differed by socio-economic class (p=0.005).

The same home treatments were mentioned in the focus group discussions. The participants tended not to mention the use of brandy, which they acknowledged only whenprompted. it appeared from the focus group discussions that lower class locality mothers more frequently used brandy as a treatment than the middle class locality mothers. When the outpatient department data were compared with combined data from the lower class and middle class localities (Table II), honey was the first choice treatment in both groups. However, soup and tea were the next commonest in the community as compared to Vicks rubbing and tea in the outpatient department respondents.

Perceptions of mothers about the efficacy of home treatment may be an important factor in their motivation to use it as part of the management of ART among children, Irrespective of the mode of home treatment, an effort was made to ascertain the mothers' perceptions about the effectiveness of home treatment for managing ART.

Table III. Mothers' perception about the extent of cure provided by home treatment of children suffering from ARI.

Perceived extent of cure	Communities LCL* (n=50) %	MCL** (n=50) %	Both (n=100) %	OPD*** (n=50) %
To a great extent	6.0	12.0	9.0	2.0
To some extent	26.0	46.0	36.0	50.0
Not at all@	68.0	42.0	55.0	48.0
Total	100	100	100	100

X^2 for communities=6.9 d.f 2 p=.05

*LCL = Lower class locality

**MCL = Middle class locality

***OPD = Outpatient department of Sheikh Zayed Hospital

@Includes mothers who did not subscribe to the use of home treatment for ARI.

The results presented in Table III show that a relatively greater proportion of respondents from the lower class locality (68%) compared to the middle class locality (42%) perceived that home treatment did not provide any cure for children suffering from AR!. There was a strong associationbetween social class and mothers' perception about the extent of cure provided by home treatment for A.RI (p-.0O9). A smaller percentage (48%) of mothers visiting the outpatient department than the combined total of mothers from both localities thought that home treatment was "not at all" helpful in curing children suffering from ART.

Keeping in view the past experiences with different modes of treatment, mothers were asked what would be their preferred treatment in the future if their child became sick with ART.

Table IV. Future mode of action for a child suffering from ARI.

Preferred Treatment	Communities LCL* (n=50) %	MCL** (n=50) %	Both (n=100) %	OPD*** (n=50) %
Allopathic	46.0	52.0	49.0	96.0
Multiple treatment	42.0	42.0	42.0	-
Home treatment	8.0	-	4.0	4.0
Hikmat (tradional unani practice)	4.0	6.0	5.0	-
Total:	100	100	100	100

*LCL = Lower class locality
**MCL = Middle class locality
***OPD = Outpatient department of Sheikh Zayed Hospital

As seen in Table IV, the highest proportion of the mothers in each locality would prefer to consult a doctor in such a
situation. There was no difference in the proportions of those opting for tnultiple treatment in the localities. When asked about theirfuture preference, none of the middle class mothers had confidence in home care. The statement may be read with caution as it contradicts with the sanie mothers' previously given perception about the extent on cure provided by home care. As it emerged in the focus group discussions, these mothers were hesitant to go for home treatment urtless advised by a health professional. There were only a few mothers from both the localities who would choose a hakeem (practitioner of the traditional unani (Greek) system of healing) for treatment. In contrast to the combined data of the two localities, an overwhelming majority of the mothers visiting the outpatient department (96%) said that they would consult the doctor in future. Such a high percentage may have some element of bias as it were the physicians who interviewed the mothers inOPD about future preferences.

Discussion

Of the five reported modes of ART management, only home treatment and spiritual treatment were mentioned by a substantial number of mothers in addition to the use of allopathy. Home treatment was primarily administered in the early stages of ARI. Similar findings were reported in a rural Indian study by Kapooret al[2]. In that study 52% of the mothers managed mild ART by using home treatments, 44% went to medical professionals and the rest did nothing. The use of several home treatments was reported. In the middle class locality, honey, soup, tea and Vieks rubbing were the most frequently mentioned treatments. Such a pattern did not clearly emerge in the lower class locality. Cultural

interpretations of these home treatments suggest that, in addition to the medicinal value of honey, many people in the Pakistani culture have some religious attachment to it as it is mentioned in the Holy Quran as having medicinal properties. Soup and tea are usually given hot; Vicks rubbing acts as garmaish (heating) to provide heat to the body by external application; similarly, brandy is thought to provide heat to the body from inside. All these treatments are believed to prevent colds, which are locally reported as "thand laag gai" (caught cold).

According to respondents' reports, these home treatments appear to be based on the pereeption that ART among children is caused by their exposure to cold (thandlaag gai). Therefore, it should be fought by (i) food that is hot in temperature (soup, tea) and/or rich in nutrition (soup); (ii) external applications that produce heat in the body and (iii) some intake of medicinal items such as honey and brandy, which supposedly provide a cure for cold. In a study of mothers living in the squatter settlements of Karachi and rural Punjab, Mull and Mull[3] also found that home treatments of pneumonia (external applications as well as dietary remedies) were aimed at creating "heat" to counter the "cold effect" (thand lagna) in the body. Lactating mothers were also expected to eat humorally "hot foods". The exclusive use of home remedies was not seen in ART. They may be useful as the first line of defence during the initial stages of ARI and/or a supplement to other medicinal treatments. Nevertheless, many mothers from each of the three groups did not mention use of home treatments for ART including almost half of the "lower class mothers". The observation made by Mull and Mull may explain this result: "One mason people focus on medicines is that practitioners, whether licensed or not, spend very little time with their impoverished patients.Mothers have no opportunity to ask questions and get little or no advice. From long experience, they expect that the doctor's principal function is to provide medicines, not a consultation".

Most mothers reported that they would not be inclined to use home treatment for a child during an episode of AR! in the future. There may be some bias in the outpatient department sample, where the mothers may have provided socially desirable answers as the information was being collected by medical doctors. Although the doctors never advocated the discontinuation of home treatment, itis possible that mothers from the outpatient department subsample were wary of the doctors and that they wanted to stick to their current allopathic mode of treatment. (This is an inherent bias because physicians are asking themselves). In the focus group discussions many mothers said that they neither applied home treatment nor sought professional advice for children with! ARI because the ART was not recognized early in the course of illness, and/or lack of time. Ahmad[4] in his study of mothers in a slum area of Lahore and a nearby village also found that mothers tended to delay consultation with health professionals. In his study, the most frequently mentioned reasons for a (delayed) poor response of mothers in seeking medical advice were poverty, lack of time to access medical care, shOrt working hours of government dispensaries and lack of transportation. A study of 320 women in a Rawalpindi, Pakistan, hospital by Mull et al[5] showed that children with AR! were given attention when the case became serious. Case histories showed that lack of money was not often mentioned as a reason for delay; rather, the authors concluded that the delay was attributed to negligence and/or the simultaneous occurrence of a competing responsibility involving the welfare of the entire family. This could very well be the reason why mothers in this study and the localities would choose the allopathic mode of treatment forachild suffering from ARI in the future.

In conclusion. we found that a substantial proportion of women. particularly from the lower class, did not subscribe to the use of home treatment for ARI. Home treatment was also not supported for a child suffering from ARI in the future. Delay in treatment may exhaust bodily resistance and aggravate the condition of the patient. Subsequent treatment may become costly for the family as well as for the health facility. Therefore, the significance of home treatment has to be impressed upon the mothers at all stages of ART. Since home treatment that was provided by the mothers was geared towards providing a defence against thand lang gal (catching cold), future educational messages could use the

ideas that treatments provide nutrition and warmth.

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