

KNOWLEDGE, ATTITUDES AND PRACTICES OF MOTHERS ON CHILDHOOD ACUTE RESPIRATORY INFECTIONS (ARI)

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Abstract. A total of three hundred mothers in both rural and urban areas were interviewed and their knowledge, attitude and practice (KAP) on acute respiratory infections (ARI) were compared. It was observed that KAP on ARI of mothers in both categories was almost the same with the exception of their health care seeking practice. Most had traditional beliefs as to the cause of ARI with only a minority knowing the causes. Only one third of mothers knew signs and symptoms of pneumonia; the majority had not experienced the fatal danger sign, chest indrawing, and could not recognize it. As regards health care seeking practices, private general practitioners were identified as favorite health providers in urban areas. Utilization of government health facilities was higher among rural mothers. Self medication was found to be common in both categories of mothers, with western medicine being the top of the list.

INTRODUCTION

Acute respiratory infection (ARI) is a major priority that needs attention in the global strategy on child survival. The number of deaths annually in children in the world due to respiratory infections is estimated to be 4 million (Leoski, 1986). In Myanmar ARI is one of the the five leading causes of morbidity and mortality, accounting for nearly 31% of all hospital deaths in children under five (Anonymous, 1987). A joint UNICEF-WHO statement (WHO, 1985) has highlighted two control measures which might produce an immediate impact on mortality. These are the modification of health care structure and encouraging health education activities to promote appropriate childcare practices related to ARI at the family and community levels. Community health education is of utmost importance to effective case management since it has the potential to establish productive contact between the health services and the community, to increase the capability of families to recognize danger signs of ARI in children and to encourage appropriate and early care-seeking behavior. Effective health education can only be provided on the basis of an accurate understanding of

the prevailing knowledge, attitudes and practices (KAP) of the community.

Therefore it is a necessity to have relevant information concerning KAP of mothers about ARI for successful implementation of control activities.

Although the National ARI Control Program has been implemented in Myanmar since 1989, behavior studies were not feasible, so this study was conducted with the following objectives:

1. to determine the knowledge regarding cause and recognition of pneumonia;
2. to elicit health seeking practices and management of acute respiratory infections;
3. to determine the home care practices of children with ARI.

MATERIALS AND METHODS

The study was a cross sectional descriptive one conducted in Myaungmya township, Ayeyarwaddy Division, Myanmar from 26 July 1991 to 3 August 1991. The cluster sampling method was employed in the study. Thirty clusters with 10 households in each cluster were selected systematically in the township, the only criterion being that there was at

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least one under-five child in that household, but there need not necessarily have been a recent attack of ARI in the children. The respondent was the mother or caretaker of under-five children.

In Myanmar, the ratio of the general population in urban and rural areas is 1:4. In this study a total of 300 mothers/caretakers, 100 from seven wards (urban) and 200 from 10 randomly selected village tracts (rural) participated in the study.

The mothers were interviewed by a doctor or a trained health education officer and the responses were recorded on a pretested questionnaire.

Data processing was by hand-tallying and appropriate statistical techniques were applied where necessary, *ie* test of proportions (Z test) for two-sided comparison with $\alpha = 0.05$.

RESULTS

Regarding knowledge, very few proportion of mothers (1.5%) knew that the microorganisms were the cause of ARI and there was not much difference between mothers of urban and rural areas (urban = 2%, rural = 1%) (Table 1). Regarding signs and symptoms of pneumonia, nearly 70% of mothers knew that fever, cough and difficult breathing were symptoms of pneumonia and again there was no marked difference between knowledge of mothers from the two

areas (urban = 32%, rural = 35%). When knowledge on an important danger sign, chest indrawing, was probed only 13.5% of mothers (urban = 13%, rural = 14%) had experienced (seen or heard of) that sign. Concerning attitudes on fast breathing and noisy breathing, approximately 90% of mothers agreed that they were alarmed when their children had either of these signs.

In the study of care seeking practice for ARI, the utilization rate of private health clinics by urban and rural mothers were 78% and 20% respectively. But for the utilization of government health facilities, it was higher among rural mothers than their urban counterparts (65.5% vs 24%) (Table 2).

The unfavorable practice of self-medication was found to be common in both categories of mothers (urban 59%, rural 61.5%) (Table 2) and when the type was analyzed, western medicine was found to be the top priority (urban 69.49%, rural 56.09%) (Table 3).

In this survey, home care of mothers was focused on the practice section where it was found that about 30% (urban 29%, rural 33%) of mother gave a usual amount of food, while only 10% of mothers gave increased fluid to children with ARI.

Thus the KAP of mothers on ARI was not satisfactory; the KAP of mothers in urban and rural areas were almost the same with the exception of their health care seeking practice.

Table 1

Maternal knowledge and attitude on danger signs of pneumonia in their children.

Attitude	Urban n = 100	Rural n = 200	p
1. Knows etiology	2 (2%)	2 (1%)	NS
2. Do not know sign and symptoms of pneumonia	32 (32%)	70 (35%)	NS
3. Seen/heard chest indrawing	13 (13%)	28 (14%)	NS
4. Worried about fast breathing	87 (87%)	190 (95%)	< 0.05
5. Worried about chest indrawing	76 (76%)	180 (90%)	< 0.01
6. Worried about noisy breathing	91 (91%)	186 (93%)	NS
7. Worried about drowsiness	95 (95%)	185 (92.5%)	NS

NS = not significant

Table 2

Action taken for RI treatment.

Type of treatment	Urban n = 100	Rural n = 200	p
Self medication	59 (59%)	123 (61.5%)	NS
Health clinic (government)	24 (24%)	131 (65.5%)	< 0.0001
Health clinic (private)	78 (78%)	40 (20%)	< 0.0001
Traditional medicine practitioner	8 (8%)	6 (3%)	< 0.05

NS = not significant

Table 3

Treatment of ARI preferred by mothers (pattern of self treatment).

Type of treatment	Urban	Rural
Myanmar indigenous medicine	9 (15.25%)	29 (23.57%)
Myanmar traditional medicine	4 (6.77%)	13 (10.56%)
Western medicine	41 (69.49%)	69 (56.09%)
Others	5 (8.47%)	12 (9.75%)

DISCUSSION

Most mothers did not know the etiology of ARI. They considered the predisposing factors (such as rain, cold weather) as etiological agents. Moreover, most of the mothers in the community had not experienced a danger sign, chest indrawing, and consequently they could not recognize it. Therefore, the etiology of ARI and recognition of chest indrawing should be highlighted in health education materials, possibly by using audiovisual aids. Self-medication, was found to be ubiquitous among mothers of both urban and rural areas and so use of safe household medicine should be included in the health education programs. Regarding health care seeking practices of mothers, private general practitioners were identified as favorite health providers, especially in urban areas. According to this information, for the community to be able to perceive the

essence of WHO ARI standard case management, training programs for general practitioners should be organized throughout the country. For government health facilities, reasons for non-utilization should be assessed by conduction health facility surveys.

In the context of the National ARI Control Program, most ARI cases, except those with severe pneumonia, are treated at home and homecare practice of mothers is vital in management of children with ARI. From this survey, improper home care practices should be prioritized in ARI Control Program activities. For this task use of mass media communication may be helpful but face-to-face discussion with basic health staff would be more effective.

This study showed that the KAP of mothers is not satisfactory but if dissemination of health education to the target population is undertaken, the mortality

and morbidity of young infants and children could be reduced substantially.

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