

PERCEPTION OF MOTHERS ABOUT PNEUMONIA

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ABSTRACT

57 randomly selected mothers were assessed for their perception about pneumonia by showing them children with severe pneumonia. The abnormal signs shown were recognised by all of them. Nearly 50% of them related these signs with 'pneumonia'. The results indicate that flaring alae nasi is the sign which mothers find easiest to spot.

INTRODUCTION

Pneumonias are one of the common causes of mortality and morbidity in children under five (1,3)- Annually more than four million children die worldwide, (3) One third of hospital admissions in developing countries like Pakistan are due to this disease (1,2). An early diagnosis and proper case management is essential to reduce the number of deaths due to pneumonia. This is possible only if parents bring their children with pneumonia in time. The parents will need to be educated as to under what circumstances they should bring their children. This will need devising health messages. Parents' present knowledge and perception of clinical features of pneumonia will make the basis for such message.

To our knowledge no such study has been carried out in Pakistan, which the authors undertook with two objectives in mind. (1) To point out what signs of pneumonia are commonly recognised by the mothers and if they can relate it to pneumonia or not. (2) To inform the health planners regarding mother's perception about signs of pneumonia. This helps them to plan educating of mothers through health messages, based on the understanding thus acquired.

MATERIALS AND METHODS

57 mothers' perception about pneumonia was studied. Every 15th mother attending the Paediatrics outpatient department of Rawalpindi General Hospital during the winter of the year 1990-91 was included. The mothers were asked two questions and were shown three signs as given below. The children selected were between the ages of six and twelve months with severe pneumonia (respiratory rate of more than 50/minute, subcostal retractions, supraclavicular retractions and flaring of alae nasi). The children with simple pneumonia were not included in this study because it is diagnosed on basis of only increased respiratory rate beyond certain cut off points for particular age groups (WHO criteria). It is very difficult even for medical personal to recognise it. We did not expect mothers to count the respiratory rate. On the other hand the children with "severe disease" were not included, the signs of which are (WHO criteria): (1) Not able to drink. (2) Convulsions. (3) Abnormally sleepy or difficult to wake. (4) Stridor in calm child or (5) Clinically severe undernutrition.

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Each mother was asked two questions after showing her an exposed child: (1) Comment on the condition of the child? (2) What disease has caused this condition? They were also shown three signs: (1) Subcostal retractions (2) Supraclavicular retractions. (3) Flaring of alae nasi. Their response to these questions and observations were noted.

RESULTS

Table 1: MOTHERS' COMMENTS ON A CHILD WITH PNEUMONIA

| Comments on general condition | | |
|--|-------|-----|
| Child is looking ill | 52/57 | 91% |
| Child is looking normal | 05/57 | 09% |
| Mother's perception of relation between child's illness and the body system affected | | |
| Illness related to chest | 42/52 | 81% |
| Illness related to abdomen | 04/52 | 08% |
| Miscellaneous | 06/52 | 11% |

Table 1, shows that 91% of mothers appreciated the child to be ill and 81% of mothers related it with chest disease.

Table 2: MOTHERS' INTERPRETATION OF THE PERCEIVED ILLNESS

| Mothers expression | Interpretation | No. | % |
|------------------------------|-----------------------|------------|----------|
| Pneumonia hey | Pneumonia. | 22 | 38% |
| Raishey ki wajha say hey. | Due to Phloem. | 03 | 05% |
| Sardi ki wajha say hey. | Due to exposure | 03 | 05% |
| Patta naheen | Not sure | 17 | 0% |
| Thcek hey. | Normal | 05 | 10% |
| Pachasch ki wajha say hey | Due to diarrhoea | 03 | 05% |
| Pait ki takleef hey. | Due to pain abdomen | 03 | 05% |
| Hifazati tikoon ki wajha say | Due to immunisation | 01 | 02% |

38% of mothers (22/57) named the disease as pneumonia and another 10% used phrases which imply pneumonia.

Table 3. MOTHERS' PERCEPTION OF SUBCOSTAL RETRACTIONS.

| | No. | % |
|---|-----|----|
| Due to chest problem | 26 | 45 |
| Due to some problem but couldn't relate | 21 | 37 |
| Abdominal Problem | 08 | 14 |
| Miscellaneous | 02 | 04 |

Subcostal retraction was recognized by 100% of mothers as an abdominal finding. (46%) ascribed it to pneumonia – (23%) used the word “pneumonia” and other (23%) used local expression implying pneumonia.

Table 4: MOTHERS' PERCEPTION OF SUPRACLAVICULAR RETRACTIONS.

| | NO | % |
|--|----|----|
| Recognised but couldn't relate to disease. | 37 | 64 |
| Related to the chest | 19 | 33 |
| Related to abdomen | 01 | 03 |

Supraclavicular retractions were recognised by 100% mothers to be an abnormal finding. 19 (33%) related it to chest problem of which used word “pneumonia” while remaining used phrases which pertain to pneumonia.

TABLE 5: PERCEPTION OF MOTHERS ABOUT FLARING ALAE NASI

| | NO | % |
|---------------------------------|----|----|
| Recognised flaring of alae nasi | | |
| as abnormal | 42 | 73 |
| Interpreted it as pneumonia | 12 | 28 |
| Called it as normal | 15 | 27 |

73% recognised it to be abnormal. 21% called it to be due to pneumonia.

DISCUSSION

The word pneumonia and its clinical features do not seem to be new to the mothers in this part of Pakistan. After a bird eye view of the patient 49% described the clinical condition to be pneumonia, of which 39% (22) used the term “pneumonia” and another 10% said so by implication by using the local expressions, (table 1 and 2).

The authors do admit that in this study mothers were shown patients under circumstances which were artificial e.g. they were hospitalised and were undressed, while in natural circumstances the

children are usually wrapped which may preclude the observations like subcostal retractions which is an important sign for recognition of severe pneumonia and has also been recommended by WHO as an essential feature of severe pneumonia. While it may be easy for a trained medical person to look for it in a child with pneumonia, a mother will not be expected to do so.

In this study 100% of mothers recognised the subcostal retraction as an abnormal finding, about 25% named it to be due to pneumonia while another 20% used different expressions which are common use for pneumonia or pneumonia like illness. It is a sign which can easily be missed by mothers because during winter the children are over wrapped and even more so when they have respiratory symptoms. There is a need to educate mothers that they should look for the subcostal retraction in a child with cough and fever, and should consult nearest health facility for help.

In the same way supraclavicular retraction was picked by 100% of mothers in our study as an abnormal finding. Although this may be a feature that comes later than subcostal retractions but it has one advantage that it is likely to be spotted by a mother even in a wrapped child.

In our view the flaring of alae nasi recognised by 73% and related to pneumonia by 28% is a better sign for educating the public as it has distinct advantage that it is clearly visible and any mother can recognise it.

Unfortunately, we know of no study of this kind to compare our results with. We recommend that similar studies should be conducted in different centres of the country and perceptions of local mothers be established. Another area on which a research is required is the words, phrases and expression mothers use for expressing the symptoms and signs of a child with A.R.I. in general and pneumonia in particular.

CONCLUSION

In conclusion the word pneumonia is not new in our public nor are its signs. If a mother is not aware, the grand parents or neighbor is likely to know. This is encouraging and will be of great help in educating the parents to contact nearest health facility when they see any of these signs particularly flaring alae nasi.

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