

ASSESSMENT OF HEALTH CARE SEEKING PRACTICES OF MOTHERS OF UNDER FIVE TO ACUTE RESPIRATORY INFECTIONS IN IWO LOCAL GOVERNMENT

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Abstract: Acute respiratory infections (ARI) are one of the leading causes of death among children under-five years of age, and are estimated to be responsible for up to 2.2 million childhood deaths globally. But less than half of children with ARI symptoms are taken for prompt and appropriate care.

Objectives: To assess the care seeking practices and the socioeconomic factors affecting the care seeking behavior of mothers of under-five for acute respiratory infections.

Methods: A community based descriptive cross-sectional study was carried out among 385 mothers of under-five in Iwo local government, Osun state using a semi- structured interviewer-administered questionnaire.

Result: 385 participants were involved in the study; symptoms of ARI were reported by 283 out of which 223(78.4%) were taken for treatment. Only 96(24.9%) sought for care within 24 hours of onset of symptoms, 96(39.2%) sought for care in private hospital, 23.7% went to the government hospital. The main reasons for delay in seeking health care were financial cost (52%) and feeling that condition is not serious (52%).

Conclusion: Though mothers have a relatively good health seeking behavior, health education is very essential to improve their knowledge on the cause and course of ARI and their care seeking behavior in order to reduce the burden of ARI.

Keywords: Acute respiratory infection, health care seeking behavior, mothers, under-five.

I. INTRODUCTION

Acute respiratory infection (ARI) is among the leading causes of childhood morbidity and mortality in Nigeria and throughout the world. Pneumonia is the most serious outcome of ARI in young children according to the National Demographic Health Survey [1]. Pneumonia is also the major cause of death which could be prevented to a large extent through early diagnosis and treatment with antibiotics. It was estimated by the World Health Organization that seeking prompt and appropriate care could reduce child deaths due to ARI by 20%. [2]

Health seeking behavior is “any action undertaken by individuals who perceive themselves to have a health problem for the purpose of finding an appropriate remedy.” [3]. Health care seeking behavior is determined by the individual perception of self, diseases and the availability, accessibility and affordability of health care services. [5]. In other words, health care seeking behavior is multifaceted. Rahman argued that “a woman’s decision to seek healthcare is not an isolated event, but a composite result of her personal needs, social forces, actions of healthcare providers, and the location of services”. [2],[3],[4]

Millions of mothers and their children through the world are living in a social environment that does not encourage health care seeking behavior [6]. Different studies showed that mothers health care seeking behavior for common childhood illnesses are influenced by socio-demographic, cultural and educational factors [7],[8]. Studies also indicated that timely decision to seek remedies, and times of health seeking after the onset of illness are influenced by residence. [9]

The utilization of the health services by the people is as a result of the community norms and attitudes towards health and illness. In many developing countries including Nigeria, various factors that affect the health behavior of the rural dwellers yield different results and also spread of different diseases and infectious diseases. Access to health services and the quality of care administered at all levels of health care have been considered to be the central determinants of health outcomes. The survival of children in developing countries depends on the family's and community's ability to access basic needs of life. [10].

This study therefore, aimed to assess the care seeking practices and factors contributing to care seeing behaviour of mothers of under-five towards acute respiratory infections in their children.

II. MATERIALS AND METHODS

This study was conducted in Iwo local government area of Osun State, Nigeria. Iwo town consists of people of different religions- Muslims, Christians and the traditionalist, with the Muslims being the most dominating group. Modern buildings are now erected in the centre part of the town in addition to the palace and other ancient buildings and compounds. The major occupation dominating the community is farming. Also are meat sellers, transportation business, while others are artisans and craft men as well as civil servants. The health facilities providing health care services for the dwellers comprises both Private and Government Health Clinics/Hospitals. There are also chemist shops both registered and unregistered. traditional healers, also called Native Doctors are in Iwo community long before the existence of the modern health care facilities. There are still some of them practicing using traditional medicines to diagnose and treat health related problems. [11]

Study population included mothers who have children aged 1 to 59 months and are willing to participate in the study and reside in the selected communities/localities in Iwo.

The sample size was determined using Leslie Kesh formula for estimating single proportion at 95% level of confidence.

$$N = \frac{(Z_{\alpha/2})^2 pq}{d^2}$$

Where:

N = minimum sample size

$Z_{\alpha/2}$ = standard normal deviate usually set at 1.96 which corresponds to the 95% confidence level

p = proportion of children with symptoms of ARI for whom advice or treatment was sought from a health facility/ provider is 34.5% which is 0.345 (NDHS, 2013)

$$q = 1 - p = 0.655$$

d = degree of precision which will be set at 5% i.e. 0.05 of the population

$$N = \frac{Z_{\alpha/2}^2 pq}{d^2}$$

$$N = \frac{1.96^2 \times 0.345 \times 0.655}{0.05^2}$$

$$N = 347.2$$

Calculating for non-respondent:

$$N_r = 347.2 \times \frac{10}{100}$$

$$= 381.9$$

The minimum sample size for this study is 347.2 with an additional 10% of 34.72 to give a total of 381.9. The total sample size used for this study was 385.

A multistage sampling technique was used to select the study participants. The local government has 15 wards, out of which eight (53.3%) wards were randomly selected. These were: Isale Oba ward 4, Molete ward 3, Oke Adan ward 1, Oke Adan ward 2, Gidigbo ward 3, Gidigbo ward 1, Oke Oba ward 1 and Oke Oba ward 2. Selection of the localities was done by systematic sampling. Out of two hundred and fifty-three localities, a total of fifteen localities were randomly

selected as a representative sample. House-to-house survey was conducted in each of the selected locality to attain the desired number of respondents.

A semi- structured interviewer- administered questionnaire was developed using information from reviewed literatures as a guide. The questionnaire included closed and open ended questions. The questionnaires were screened for completeness, cleaned, coded and entered into the Statistical Package for Social Sciences, version 16.0 (SPSS Inc. Chicago, Illinois, USA), for analysis. Ethical principles were considered during the study to ensure the safety of the participants. Ethical approval was obtained from Obafemi Awolowo University Ethics Review Committee.

III. RESULT

Socio-demographic Characteristics of participants

A total of 385 mothers were involved in the study. Of these 233 (60.8%) were between age 25-34, while both mothers age 15-24 and 35 above were 75(19.6%) each. Majority of the respondents were married 358 (93%). Pertaining to educational status indicated by the respondents 161 (41.8%) had post -secondary education. More than half of the respondents were Muslims 197 (51.2%). Occupational status of the respondents revealed that 45.2% were traders. Respondents with total family income of more than 10,000 Naira were 142 (36.9%). **Table 1**

TABLE 1: Distribution of Socio-demographic characteristics of mothers of under-five children in Iwo LGA, Nigeria

| | Frequency (n) | Percent (%) |
|--------------------------------------|---------------|-------------|
| Age of mother in years | | |
| 15-19 years | 17 | 4.4 |
| 20-24 years | 60 | 15.6 |
| 25-29 years | 127 | 33.0 |
| 30-34 years | 106 | 27.5 |
| 35-39 years | 55 | 14.3 |
| 40-44 years | 19 | 4.9 |
| ≥45 years | 1 | 0.3 |
| Marital Status | | |
| Single | 20 | 5.2 |
| Married | 358 | 93.0 |
| Divorced/Separated | 7 | 1.8 |
| Level of Education | | |
| No formal education | 14 | 3.6 |
| Primary education | 51 | 13.2 |
| Secondary education | 159 | 41.3 |
| Post-secondary education | 161 | 41.8 |
| Religion | | |
| Christianity | 183 | 47.5 |
| Muslim | 197 | 51.2 |
| Others | 5 | 1.3 |
| Occupation | | |
| Housewife | 27 | 7.0 |
| Civil servant | 108 | 28.1 |
| Trader | 174 | 45.2 |
| Others | 76 | 19.7 |
| Total family income per month | | |
| < 5000 naira | 107 | 27.8 |
| 5000 – 10000 naira | 136 | 35.3 |
| > 10000 naira | 142 | 36.9 |

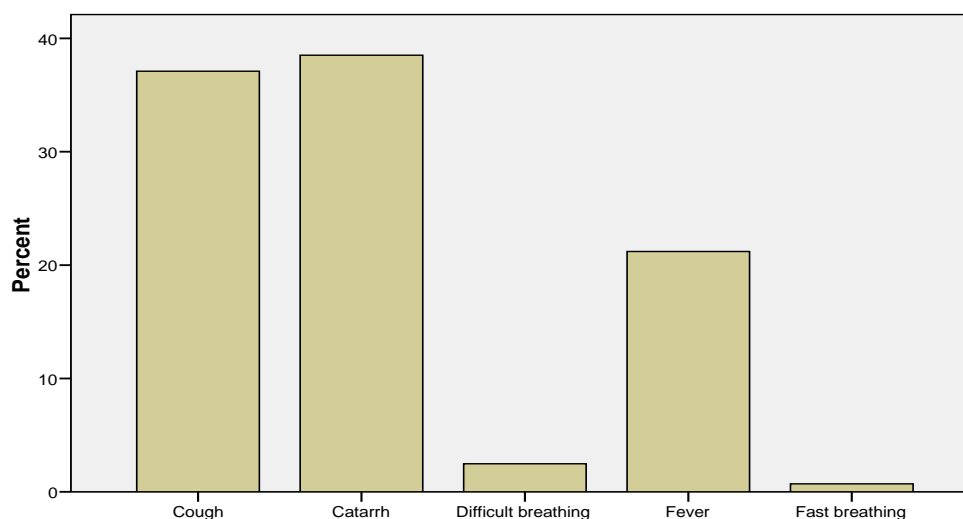


Fig. 1 Types of symptoms reported by mothers two weeks prior to the study period

Types of symptoms reported

Symptoms of ARI were reported by 283 mothers as manifested in children two weeks prior to the time of study. These were cough, catarrh, difficulty in breathing, fever and fast breathing. Catarrh was the most common reported symptoms 109 (38.5%). **Fig.1**

Measures taken by mothers

This study shows that of 283 children who had a symptom of ARI, 223(78.4%) were taken for treatment. The choice of health care giver by mothers varies from taking the child to a health facility (Private hospital (39.9%) and Government hospital 25.1%), purchasing drug from drug sellers, going to a pharmacy store, and traditional healer. Among the mothers who sought for care, 96 (43%) did so within 24 hours of onset of symptoms. **Table 2**

TABLE 2: Measures taken by mothers for children with symptoms of ARI

| Variables | Frequency | Percent (%) |
|---|-----------|-------------|
| Child taken for treatment | | |
| N=283 | | |
| Yes | 223 | 78.4 |
| No | 60 | 21.6 |
| Place of treatment N=223 | | |
| Government hospital | 56 | 25.1 |
| Private hospital | 89 | 39.9 |
| Pharmacy shop | 33 | 14.8 |
| Drug seller | 40 | 17.9 |
| Traditional healer | 4 | 1.8 |
| Others | 1 | 0.4 |
| Time after onset of symptom when care was sought N=223 | | |
| Within 24 hours | 96 | 43 |
| After 2-3 days | 106 | 47.6 |
| More than 3 days | 21 | 9.4 |

Reasons for delaying seeking immediate care

Reasons giving by mothers for delaying seeking immediate health care were majorly financial cost (52%) and the feeling that the condition is not serious (52%), others include long distance, discouragement from spouse, traditions and values, attitude of health care workers, long distance to health facility and long waiting time in the health facility. **Table 3**

TABLE 3: Mothers’ reason for delaying seeking health care

| Reasons for delaying seeking immediate care | Frequency (n) | Percent (%) |
|---|---------------|-------------|
| Financial cost | 197 | 52 |
| Condition not serious | 197 | 52 |
| Long waiting time in the health center | 38 | 10 |
| Attitude of health care workers | 27 | 7.1 |
| Discouragement by spouse or family members | 23 | 6.1 |
| Long distance | 20 | 5.2 |
| Traditions and values | 15 | 4 |

Relationship between socio-economic status of mothers of under-five in Iwo LGA and their care seeking practices

This study revealed no significant relationship between respondents’ socio-economic status and their care seeking behavior to ARI. **Table 4**

TABLE 4: Relationship between socio-economic status of mothers of under-five in Iwo LGA and their care seeking behavior to ARI

| Socio-economic variables | Care seeking behavior | | X ² | P-value |
|-------------------------------|---------------------------|---------------------------|----------------|---------|
| | Poor seeking behavior (%) | Good seeking Behavior (%) | | |
| Age of mother in years | | | | |
| 15-19 years | 7(2.3) | 5(1.7) | 8.430 | 0.208 |
| 20-24 years | 20(6.7) | 25(8.4) | | |
| 25-29 years | 46(15.4) | 54(18.1) | | |
| 30-34 years | 28(9.4) | 54(18.1) | | |
| 35-39 years | 14(4.7) | 31(10.4) | | |
| 40-44 years | 3(1.0) | 10(3.4) | | |
| ≥45 years | 0 | 1(0.3) | | |
| Marital Status | | | | |
| Single | 9(3.0) | 7(2.3) | 2.381 | 0.497 |
| Married | 107(35.9) | 169(56.7) | | |
| Divorced | 1(0.3) | 3(1.0) | | |
| Separated | 1(0.3) | 1(0.3) | | |
| Level of Education | | | | |
| No formal education | 5(1.7) | 5(1.7) | 5.062 | 0.167 |
| Primary education | 23(7.7) | 21(7.0) | | |
| Secondary education | 49(16.4) | 74(24.8) | | |
| Post-secondary education | 41(13.8) | 80(26.8) | | |
| Occupation | | | | |
| Housewife | 8(2.7) | 13(4.4) | 7.772 | 0.051 |
| Civil servant | 23(7.7) | 57(19.1) | | |
| Trader | 55(18.5) | 80(26.8) | | |
| Others | 32(10.7) | 30(10.1) | | |
| Total family income | | | | |
| < 5000 naira | 32(10.7) | 46(15.4) | 2.340 | 0.310 |
| 5000 – 10000 naira | 36(12.1) | 70(23.5) | | |
| >10000 naira | 118(39.6) | 180(60.4) | | |

IV. DISCUSSION

Findings from this study showed no relationship between socioeconomic status and care seeking behavior. This shows that socio-economic status does not limit the access to health care services. This was similar to the study carried out in Sri Lanka, Zimbabwe, and a suburban West African community, where no association was found between socioeconomic status and the rate of care seeking. While similar studies carried out in Pakistan, Ethiopia and Kenya found a positive relationship between socioeconomic status and health seeking behavior. [7],[11],[12],[13],[14]

This study showed that less than half of the respondents, whose children had symptoms of ARI two weeks prior to the study, sought for care before three days after onset of symptoms. This finding supported the report of NDHS, where only 34.5% of children with symptoms of ARI were taken to appropriate health facility for prompt and adequate treatment. [1] This behavior could be related to the mothers' thought that the condition is not serious, which was also the case in Oyo state, where ARI, is regarded by most mothers as 'just coughs and cold and not serious diseases'. This behavior towards seeking prompt care found in this study is also similar to the findings of a study in Anyigba, Nigeria, where more than half of the respondents delayed seeking health care as a result of the thought that they would get over the illness without any treatment. [15]

In this current study, more respondents preferred private hospital for treatment. The choice of a private hospital could be attributed to the proximity of health care facility to their residence as well as the level of satisfaction of services rendered. Unlike the study carried out in Gujarat, where about 61.4% of mothers preferred government hospital for health care. The delay in seeking care could be attributed to the fact that many prefer private hospital, and therefore would have to be prepared to pay the bill, since private health facilities do not render free services unlike the government health facilities. This could lead to delay in taking the child for treatment, thereby worsening the condition of the child before getting to the facility. [16]

V. CONCLUSION

The study showed that mothers are aware that children with ARI should be taken to health facility for treatment, but majority of the children with symptoms of ARI who were taken for treatment did so after 2-3days. The reasons stated for the delay was because of financial implication of treatment and the feeling that the condition is not serious. Private hospital is the preferred place of health care service for more than half of the participants. Improved knowledge of mothers on the causes and dangerous signs of acute respiratory infections will go a long way in improving prompt health seeking practices of mothers towards ARI. Moreover, high cost of care in the private hospitals should be reduced to facilitate prompt care seeking.

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