CHILDHOOD DIARRHOEA KNOWLEDGE POSSESSED BY MOTHERS IN EZEAGU LOCAL GOVERNMENT AREA OF ENUGU STATE

Helen Ebunoha¹ & Tr. Prof. E.S Samuel²

^{1,2}, Department of Health and Physical Education University of Nigeria, Nsukka

Abstract

The main purpose of the study was to find out the knowledge of childhood diarrhea possessed by mothers in Ezeagu Local Government Area of Enugu State. The sample consisted 300 women selected through multistage sampling technique. The instrument for data collection was the questionnaire. Direct approach was used to administer the questionnaire by the help of some assistants. Percentages were used for answering the research questions while ANOVA statistic was used in testing the null hypotheses. The finding revealed that mothers have high level of knowledge of the dimensions of childhood diarrhoea. There was no significance difference in the level of knowledge of mothers regarding the various dimensions of childhood diarrhea. Based on the findings, it was recommended that the health worker in the study area should strengthen their teaching on management practices of childhood diarrhoea, as well as the introduction of childhood education in all levels of education.

Keywords: Knowledge, Diarrhoea, Childhood, Mother

Introduction

Diarrhoea accounts for high rate of mortality in young children in developing countries like Nigeria, despite worldwide efforts to improve overall child health levels. Each year, in the developing countries of Asia, Africa and Latin America, approximately five million children under five years of age die from acute diarrhoea. Of the annual 3 million infant births in Nigeria, approximately 170,000 result in deaths that are mainly due to poor knowledge of childhood diarrhoea (Lucas & Gilles, 2009) Diarrhoea is the disturbance of the gastrointestinal tract comprising of changes in intestinal motility and absorption, leading to increase in the volume of stools and in their consistency (Ballabriga, Hilpert & Isliker, 2000). In diarrhoea, stool contains more water than normal and is often called loose or watery stool. Any passage of three or more watery stools within a day (24 hours) is referred to as diarrhoea (Tauxe, 1997). Diarrhoea is a symptom of infection caused by a host of bacterial, viral and parasitic organisms most of which can be spread by contaminated water. All over the world, viruses especially rotavirus have been identified as the major cause of acute diarrhoea in children. Most of these pathogens are transmitted by faeco-oral route. Spradley and Allender (1998) stated that the most common modes of transmission of diarrhoea are contaminated food and water, dirty feeding utensils (especially feeding bottles and teats) and the faecally contaminated fingers of the infants or the mother. Any diarrhoea that is associated with childhood is called childhood diarrhoea. Childhood diarrhoea therefore refers to any type of loose, watery stool that occurs more frequently than usual in a child. Adequate knowledge childhood care could lead to healthiness of the child in terms of prevention of early childhood diseases like diarrhoea, while lack of knowledge increase the chances of prevalence of childhood diseases.

Knowledge according to Conforth (1996) is the sum of conceptions, views and propositions which has been established and tested. Horn (1979), conceived knowledge as the accumulated facts, truths, principles and information to which the human mind has access. Knowledge could be seen as the product of the operation of man's intellect, either within or apart from human experience. Omeregbe (1998) refers to knowledge as the awareness of factors associated with something. This means that for a person to be knowledgeable of something, he or she must be aware of the property of the object, event or situation. Knowledge as used in this paper refers to the act of having adequate information and understanding of the concept, signs and symptoms, modes of transmission of diarrhoea by the mothers. Childhood diarrhoea knowledge refers to the act of having adequate information and understanding of the concepts, signs and symptoms, modes of spread, preventive measures of diarrhoea among children (under-five). Possession of very high level of these dimensions of diarhoea becomes necessary for the mothers as a panacea for the prevention of childhood diarrhoea.

Mothers according to Landy (1992) are the key persons and managers of the home. She asserted that people, especially mothers should possess adequate knowledge about their baby's health and disease prevention. They are recognized as very important persons for the smooth running of the family including supervision of the health of their children. MacLeans (1998) on his own part, accorded mothers the traditional responsibility of looking after their children with the weaning and nursing care. The knowledge of adequate and high quality childhood care could lead to very high level health of the child in terms of prevention of early childhood disease like diarrhoea.

The level to which mothers portray their knowledge regarding childhood diarrhoea do not appear to have received adequate research attention. Since diarrhoea is found among children all over the country. It is therefore, worthwhile to study childhood diarrhoea knowledge of mothers. This study therefore attempted finding out the childhood diarrhoea knowledge of mothers in Ezeagu LGA of Enugu State. In order to accomplish this task, five research questions were posed.

- 1. What is the level of knowledge possessed by mothers regarding the concept of childhood diarrhoea?
- 2. What is the level of knowledge possessed by mothers regarding the signs and symptoms of childhood diarrhoea?
- 3. What is the level of knowledge possessed by mothers regarding modes of transmission of childhood diarrhoea?
- 4. What is the level of knowledge possessed by mothers regarding the dangers of childhood diarrhoea?
- 5. What is the level of knowledge possessed by mothers regardings the preventive measures of childhood diarrhoea?

Hypotheses

Three null hypotheses which tested no significant difference in the level of knowledge of mothers regarding childhood diarrhoea according to level of education, age and purity were tested at .05 level of significance.

- 1. There is no significant difference in the level of knowledge of mothers regarding childhood diarrhea according to level of education.
- 2. There is no significant differences in the level of knowledge of mothers regarding childhood diarrhoea according to age.
- 3. There is no significant difference in the level of knowledge of mothers regarding childhood diarrhoea according to parity status of mother.

Methods

The descriptive research design was used for the study. The population for the study comprised of 3000 mothers from which a sample of 300 were used by multi-stage sampling procedure. The instrument for data collection was the researcher designed questionnaire. It consisted of two sections: A and B. Section A contained the personal data of the respondents, while section B dealt with the knowledge of concept, signs and symptoms, preventive measures of childhood diarrhoea. Face and content validity of the instrument was established through the judgment of four experts in Health Education. The test-retest method was used to establish the reliability of the instrument. The Spearman Brown formula was utilized to compute the reliability coefficient which resulted in index of .78.

In order to gain access into the different maternal and child health (MCH) clinics and also to enlist the cooperation of the respondents, the investigator and two assistants reported first to the Chief Medical Director of the different MCH clinics, before commencing data collection. Three hundred (300) copies of the questionnaire were distributed to the respondents from which 284 were correctly filled.

	Ν	$\overline{\mathbf{X}}$	Decision
KCD	284	71.21	High Level
KSSCD	284	84.95	Very High Level
KMTCD	284	76.58	High Level
KDCD	284	77.82	High Level

Results Table 1 Level of knowledge mothers regarding childhood diarrhea (n = 300)

KCD - Knowledge of the concept of childhood diarrhea

KSSCD - Knowledge of the signs and symptoms of childhood diarrhea

KMTCD - Knowledge of the mode of transmission of childhood diarrhea

KDCD - Knowledge of the dangers of childhood diarrhoea

KCD shows a mean score of 71.21 per cent, KMTCD with a mean score of 76.58 per cent and KTCD with a mean score of 77.82 per cent and KSSCD with a mean score of 84.95 per cent shows that the mothers level of knowledge regarding childhood diarrhea was high respectively.

Table 2. Level of knowledge possessed by mothers regarding the preventive measures of childhood diarrhoea (KPMCD)

	Ν	$\overline{\mathbf{X}}$	Decision	
KPMCD	284	60.28	High Level	

KPMCD - Knowledge of the preventive measures of childhood diarrhoea

Table 2 shows a mean score of 60.28 percent which implies that mothers level of knowledge of the preventive measures of childhood diarrhoea was high.

Table 3. One-way ANOVA on Differences in Knowledge of Mothers Regarding Childhood Diarrhoea According to Age

Dimensions	Sum of Squares		df	Mean Squares		F	Р
of childhood diarrhoea	Between groups	Within groups		Between groups	Within groups	Value	Value
KCD	2394.238	225411.660	2	1197.119	802.177	1.492**	227
KSSCD	72.798	163701.410	2	36.399	582.567	.062**	.939
KMTCD	1239.201	235547.770	2	619.601	838.248	.739**	.478
KDCD	1930.662	215815.817	2	965.331	768.028	1.257**	.286
KPMCD	1637.804	172739.661	2	818.902	614.732	1.332**	.266

** not significant

Table 3 shows the F – values for the various dimensions of childhood diarrhoea knowledge with their corresponding P – values (KCD – F = 1.492, P = .227, KSSCD – F = .062, P = .939, KMTCD – F = .739, P = .478, KDCD – F = 1.257, P = .286 and KPMCD – F = 1.332, P = .266) which are greater than .05 level of significance at 2 and 281 degrees of freedom. The null hypothesis of no significant difference is therefore accepted. This implies that age did not make any difference in the level of knowledge of mothers regarding the various dimensions of childhood diarrhoea.

Dimensions	Sum of Squares		df	Mean Squares		F	Р
of childhood diarrhoea	Between groups	Within groups		Between groups	Within groups	Value	Value
KCD	12567.256	215238.641	3	4189.085	768.709	5.450*	.001
KSSCD	4318.272	159455.935	3	1439.424	569.485	2.528**	.058
KMTCD	14493.406	222293.566	3	4831.135	793.906	6.085*	.001
KDCD	21440.424	196306.054	3	7146.808	701.093	10.194*	.000
KPMCD	1226.869	173150.596	3	408.956	618.395	.661**	.576

 Table 4. One way ANOVA on Differences in Knowledge of Mothers Regarding Childhood

 Diarrhoea According to Level of Education

* Significant

** Not Significant.

Table 4 shows the F-calculated values for KCD (F = 5.450, P = .001), KMTCD (F = 6.085, P = .058), and KDCD (F = 10.194, P = .000) with their corresponding P – values which are less than .05 level of significance at 3 and 280 degrees of freedom. The null hypothesis was therefore accepted. This implies that mothers did not differe in their level of knowledge of these dimensions of childhood diarrhea according to level of education.

The table further shows the F – calculated values for KSSCD (F = 2.528, P = .058) and KMPCD (F = .661, P = .576) with their corresponding P – values which are greater than .05 level of significance at 3 and 280 degrees of freedom. The null hypothesis of no significant difference was rejected. This implies that differences existed in the level of knowledge of mothers regarding these dimensions of childhood diarrhea according to level of education.

Dimensions	Sum of Square		df	Mean Squares		F	Р
of childhood diarrhoea	Between groups	Within groups		Between groups	Within groups	Value	Value
KCD	4215.895	223590.003	2	2107.947	795.694	2.649**	.072
KSSCD	1998.592	161775.616	2	999.296	575.714	1.736**	.178
KMTCD	3974.977	232811.995	2	1987.488	828.512	2.399**	.093
KDCD	645.588	217100.891	2	322.794	772.601	.418**	.659
KPMCD	1889.947	172487.518	2	944.974	613.835	1.539**	.216

Table 5. One way ANOVA on Difference in Knowledge of Mothers Regarding Childhood Diarrhoea

 According to Parity

** Not Significant

Table 5 shows the F – values for the various dimensions of the knowledge of childhood diarrhoea with their corresponding P – values: KDCD (F = .418, P = .659), KPMCD (F = 1.539, P = .216), KSSCD (F = 1.736, P = .178), KMTCD (F = 2.399, P = .093) and KCD (F = 2.649, P = .072) which are greater than .05 level of significance at 2 and 281 degrees of freedom. The null hypothesis of no significant difference was therefore accepted. This implies that parity did not make any difference in the level of knowledge of mothers regarding the various dimensions of childhood diarrhoea.

Discussion

The findings of this study revealed that mothers have high level of knowledge of concept, signs and symptoms, modes of transmission, dangers and preventive measures of childhood diarrhea which ranges from (60.28-80.95%). This findings was not surprising and agrees with that of Ahmed et al (1994) and Hijleh (2003) who reported that their respondents exhibited high level knowledge of the components of childhood diarrhea.

The findings also reveal that there was no significant difference in the level of knowledge of mothers regarding childhood diarrhoea according to age. The finding was expected because experience

has shown that age of an individual does not necessarily influence the individual's capacity to acquire knowledge about any given concept. This disagrees with the finding of Zeva and Heather (1992) which revealed that knowledge of childhood ailments was generally low and increased with age. This implies that both young and old mothers did not differ in their level of knowledge regarding all the dimensions of childhood diarrhoea. This should be so, because both age groups attend ante-natal clinics where health education is given and they also rear children.

The finding of no significant difference in the level of knowledge of mothers on the signs and symptoms and preventive measures of childhood diarrhoea according to level of education was surprising and therefore not anticipated because, mothers with high educational attainment are expected to exhibit very hgh level of knowledge of the components of childhood diarrhoea. This finding disagrees with that of Kibret (2003) who reported that educational level of respondents investigated had significant impact on their health knowledge. There was significant difference in the level of knowledge of mothers regarding the concept of diarrhea to level of education. The finding was expected because it agrees with the finding of Rashad (2003) who reported that mothers with higher level of education were significantly more knowledgeable about childhood diarrhoea. This is so because education enables women to assess information about childhood ailments which includes childhood diarrhoea.

The study also revealed that there is no significant difference in the level of knowledge of mothers regarding the concepts, signs and symptoms, mode of transmission, dangers and preventive measures, according to parity status. This was not expected and surprising because it is expected that mothers with high parity status should be more knowledgeable and experienced in childhood matters. It disagrees with the findings of Ejima (2010) who reported that mothers with low parity status under-utilized health services which may include knowledge of antenatal health services.

Conclusions

Based on the findings and discussions of the study, the following conclusions were attained:

- 1) Mothers had high knowledge of the concept of childhood diarrhoea (71.21%), signs and symptoms (84.95%), modes of transmission (76.58%) and dangers of childhood diarrhea (77.82%).
- 2) Mothers had high knowledge (71.21%) of the preventive measures of childhood diarrhoea.
- 3) There was no significant difference in the level of knowledge of childhood diarrhoea regarding the various dimensions of childhood diarrhea according to age and parity while there were significant difference according to level of education.
- 4) There was no significant difference in the level of knowledge of the SSCD and PMCD, while there was significant difference in the level of knowledge of CD, MTCD and DCD according to level of education of the mothers
- 5) There was no significant difference in the level of knowledge of mothers regarding the various dimensions of childhood diarrhea: CD, SSCD, MTCD, DCD and PMCD according to parity status. (CD concept of diarrhoea, SSCD Signs and symptoms of childhood diarrhoea, MTCD mode of transmission of childhood diarrhoea, DCD dangers of childhood diarrhoea, and PMCD preventive measures of childhood diarrhoea).

Recommendations

Based on the findings of the study, the following recommendations were made:

- 1. The health workers at the various MCH not only in Ezeagu but else, should strengthen their teachings on the management practices of mothers regarding childhood diarrhoea.
- 2. Childhood education need to be introduced in all secondary and tertiary levels of education to all students to prepare them to face the childhood ailment (childhood diarrhoea) challenges.

References

- Ahmed, I.S., Eltom, A.R., Karrar, L.G., & Gibril, A.R. (2009) Knowledge, Attitude and Practices of Mothers Regarding Diarrhoea among Children in a Sudaness Rural Community. *East African Medical Journal* 71 (11) 716-719.
- Ballabriga A., Hilpert H, & Ishiker H., (2000) Immunity of the infantile gastro intestinal tract and implications on modern infant feeding. Nestle Research News, Netherlands, Nestle Nutrition Services: 17-27.
- Conforth, M. (1996), Dialectical Materialism. An Introduction. London: Lawrence & Wishert Ltd.
- Ejima S.U. (2010) Correlates of Utilization of Maternal health in Ankpa LGA of Kogi State. Unpublished Doctoral Dissertation, University of Nigeria, Nsukka.
- Hijleh, A.S.M. (2003) Mothers Knowledge, Attitude and practices Regarding Diarrhoea Management in Palestine. *Journal of Tropical Pediatrics*. 56 (4) 180 – 182.
- Horn, D. (1979) A Model for the Study of Personal Choice Health Behaviour, *International Journal of Health Education* 19, 89-98.
- Kibret, J.C. (2003) Access to Health Care in Urban Area of Developing Societies. *Journal of Health Social Behaviour* 30:398-411.
- Landy, N.E. (1992) Approaches to Treatment of Childhood Diarrhoea. *Dialogue on Diarrhoea Issues*, 18, 2 March.
- Macleans, C.M. (1998) Yoruba Mothers: A Study of Changing Methods of Child Rearing in rural Nigeria. *Journal of Tropical Medicine and Hygiene*, 69 (11), 153-263.
- Omeregbe, J. (1998) *Epistemology Theory of Knowledge*. A Systematic and Historical Study, Lagos: Joja Press Ltd.
- Rashad, G.B. (2003) Health-Care Seeking and Expenditure by Young Indian Mothers in the public and Private Sectors. Health Policy Plan: 16:55-61.
- Spradely, B.W. & Allender, T.A. (1998) Community Health Nursing Concepts and Practice, Philadelphia, Lippincolt.
- Tauxe, C.E. (1997), *Emerging Food Borne Diseases:* An Evolving Public Health Challenge Emerging infections Disease 3, 425-434.
- Zeva, B., & Heather E.M. (1992) *The Quest for Therapy in Lower Zaire*. Berkeley California, USA: University of California Press.