

**KNOWLEDGE, ATTITUDE AND PRACTICE OF ORAL REHYDRATION THERAPY  
AMONG MOTHERS ATTENDING UNDER FIVE CLINIC IN NNAMDI AZIKIWE  
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Article Received on 12/08/2017

Article Revised on 04/09/2017

Article Accepted on 25/09/2017

**ABSTRACT**

The main purpose of the study was to assess knowledge, attitude and practice of oral rehydration therapy among mothers under five Clinic in Nnamdi Azikiwe University Teaching Hospital (NAUTH), Nnewi. The target population of the study was 300, the sample size consisted of 120 using stratified and simple random sampling technique, the instrument for data collection was 19 items questionnaire. Data were analysed using inferential statistics and presented in frequency and table. The study revealed that the respondents have adequate knowledge of disease diarrhea and oral rehydration solution since majority 109 (90.8%) of the respondents have heard of the disease called diarrhea, a good number 104 (95.4%) of them ascertained that it occurs by passage of frequent loose stools at least twice a day, in the same vein more than half 104 (86.6%) of the respondents heard about oral rehydration solution. Also the study revealed that the respondents have positive attitude towards oral rehydration therapy since 87 (72.5%) of the respondents agreed that oral rehydration solution is what is used to treat diarrhea, in the same vein 101 (84.2%) disagreed that giving a child oral rehydration solution when having diarrhea is not important. Similarly, the study revealed that the mothers practice oral rehydration therapy since majority 102(85.0%) of the respondents has practiced oral rehydration and 78(76.5%) claimed they normally give their children sachet salt sugar solution bought over the canter. There should be an organised health education especially designed to educate the women in the society about the causes of diarrhea disease.

**KEYWORDS:** Knowledge, Attitude, Practice, Oral Rehydration Therapy, Mothers, Under Five Clinic, Nnamdi Azikiwe University Teaching Hospital, Nnewi.**INTRODUCTION**

Diarrhea can be defined as passage of watery stools more frequently than normal. World Health Organisation (WHO) defined diarrhea as passage of more than 3 loose or water stools per day, or more frequently than is normal for the individual. The WHO further asserted that diarrhea is a symptom of gastrointestinal infection, which can be caused by a variety of bacterial, viral and parasitic organisms. Infection is spread through contaminated food or drinking water, or from person to person as a result of poor hygiene. It leads to fluid loss, and may be life-threatening, particularly in young children and people who are malnourished or have impaired immunity (WHO, 2013).

Diarrhea can cause death in children under five years of age. World Health Organisation (2013) stated that diarrhea is the second leading cause of death in children under five years old, and that each year diarrhea kills 760,000 children under five. WHO further added that a

significant proportion of diarrhea disease can be prevented through safe drinking water and adequate sanitation and hygiene. However, they emphatically asserted that globally, there are nearly 1.7 billion cases of diarrhea disease every year and diarrhea is a leading cause of malnutrition in children under five years old.

Oral rehydration therapy (ORT) is a primary intervention for the management of diarrhea. It can be easily administered at home by the mothers/caregivers as soon as a diarrhea episode begins (Adimoral and Ilechekwa, 2011). ORT is simple, inexpensive and the most effective way to treat dehydration and reduce diarrhea mortality. It use has been widely advocated mainly by World Health Organisation (2010).

However, despite the extensive efforts made to promote ORT for the last several decades, its utilization by rural communities has remained unsatisfactory (WHO/UNICEF, 2009). A study has found that maternal

perception of ORT usefulness, barriers regarding its preparation were associated with ORT use (Adimoral *et al.*, 2011). Other study indicated the relationship of ORT use with maternal education, residence, income of the household and age of the patient (WHO/UNICEF, 2009).

The use of ORS largely depends on the level of knowledge and attitude of mothers. Misconceptions are prevalent that prevent the use of ORS during diarrhea. Many mothers believed that one needs a prescription from a doctor in order to buy ORS or ORS has a bad or no fluids to be given during diarrhea (Yasir *et al.*, 2012).

ORS consists of a solution of salts and sugars which is taken by mouth. It is taken around the world but is most important in the developing world where it saves millions of children a year from death due to diarrhea (UNICEF, 2010).

In Nigeria, diarrhea causes 151,700 deaths of children under five every year (WHO/UNICEF, 2009). Diarrhea can be managed with oral rehydration solution (ORS), oral rehydration solution is effective in management of patients with severe dehydrating diarrhea caused by cholera. The development of this simple therapy for the treatment of diarrhea, one of the most common illness of mankind was heralded as one of the greatest medical achievements of the 20<sup>th</sup> century (Jamiu *et al.*, 2009).

The current management of diarrhea is using oral rehydration solution with zinc tablet, it has been the treatment of choice currently and has saved many lives (WHO, 2009). Consequently the researchers designed this study to assess the knowledge, attitude and practice of oral rehydration therapy among attending under five clinic in Nnamdi Azikiwe University Teaching Hospital (NAUTH), Nnewi.

### AIM

The aim of the study was to assess knowledge, attitude and practice of oral rehydration therapy among mothers attending under five clinic in Nnamdi Azikiwe University Teaching Hospital (NAUTH) Nnewi.

### MATERIALS METHODS

#### Study area

The study was done in under five clinic in Nnamdi Azikiwe University Teaching Hospital (NAUTH) Nnewi.

#### Population of the study

The target population of the study comprised a total of 300 women registered attending under five clinic in NAUTH at the time of this study, January to July 2016.

#### Samples

Out of the population of 300, the researchers selected 120 women as sample size. Sampling was done on weekly bases as the mothers came to the clinic as follows;

Week 1: 65 mothers came, 26 sampled  
 Week 2: 55 mothers came, 22 sampled  
 Week 3: 60 mothers came, 24 sampled  
 Week 4: 55 mothers came, 22 sampled  
 Week 5: 65 mothers came, 26 sampled  
**Total 300 sampled=120.**

#### Sampling techniques

Stratified sampling techniques were used together with simple random sampling techniques. The women were grouped into weeks and each week simple random sampling was used to select 40% of the attendance to ensure equal chance of participation. The technique involved a lucky dip without replacement.

#### Method of data collection

Data were collated and tallied before computing. The data were analysed using descriptive statistics of frequencies, percentages and presented using tables.

#### Ethical consideration

The researchers collected identification letter from the Department of Nursing Science IMSU Orlu Campus and visit the hospital and explained purpose of the study to the management who gave their permission for the study to be carried out at the hospital. The respondents' consent was gained before involving them in the study and they were allowed to participate voluntarily during the study.

### RESULTS

**Table. 1: socio-demographic characteristics of respondents n=100.**

variable	Response	Frequency	Percentage (%)
Age group (in years)	15-20	22	18.3
	21-26	48	40.0
	27-32	33	27.5
	33 and above	17	10.0
Total		120	100

Table 1 above shows that 22 of the respondents representing 18.3% of sampled population were within the age bracket of 15-20 years, 48 of respondents representing 40.0% of sampled population were within the ages of 21-26 years, 33 of respondents representing 27.5% of sampled population falls under the ages 27-32 while the remaining 17 of the respondents representing 10% of sample population were 33 and above.

**Table. 2: showing educational qualification.**

variable	Response	Frequency	Percentage (%)
Highest Educational Level	No formal Education	11	9.2
	Primary Education	17	14.2
	Secondary Education	69	57.5
	Tertiary Education	23	19.2
Total		120	100

Table 2 above shows that 11 (9.2%) of the respondent did not attend formal Education, 17 (14.2%) attended primary education, 69 (57.5%) attended secondary education while 23 (19.2%) attended tertiary education.

**Table 3: showing marital status.**

Variable	Response	Frequency	Percentage (%)
Marital status	Single	9	7.5
	Married	95	79.2
	Divorce/separate	6	5
	Widow	10	8.3
	Total	120	100

Table 3 above shows that 9(7.5%) of the respondents are single, 95 (79.2%) are married, 6(5%) were separated and divorced while 10 (8.3%) are widow.

**Table 4: showing occupational.**

Variable	Response	Frequency	Percentage (%)
Occupational	Trader	36	30.0
	Civil servant	31	25.8
	Farming	13	10.8
	Unemployed	33	27.5
	Others	7	5.8
	Total	120	100

Table 4 above shows that 36 (30%) of the respondents are traders, 31 (25.8%) are civil servant, 13 (10.8%) were farmers, 33 (27.5%) were unemployed while others are 7 (5.8%).

**Table 5: showing number of children.**

Variable	Response	Frequency	Percentage(%)
Number of Children	3	32	26.6
	4	44	36.6
	5	26	21.6
	More than 5	18	15
	Total	120	100

**Table 6: showing religions.**

Variable	Response	Frequency	Percentage (%)
Religion	Christian	120	100
	Muslim	0	0
	Pagan	0	0
	Total	120	100

Table 6 above shows that all the respondents were Christian 120 (100%).

**Table 7: showing the knowledge of others towards oral rehydration therapy.**

Variable	Response	Frequency	Percentage (%)
Do you know or have	yes	109	90.8
You heard of any disease	No	11	9.2
Called diarrhea			
If yes, how does it occur?	Passage of frequent loose stools at least twice a day	104	95.4
	Passage of solid stools	5	4.6
Do you know or have	Yes	104	86.6
You heard about oral	No	16	13.3
Rehydration solution (ORS) before?			
If yes, where did you first	Media (TV and Radio)	12	11.5
heard a about it?	From health personnel	77	74.1
	Family/friends	8	7.7
	Others	7	5.8
What is oral rehydration	sugar and water	4	3.3
Solution	salt-sugar solution (salt, Sugar and water)	114	1.6
	Salt and water	2	1.6
	Total	120	100

Table 7 above shows that 109 (90.8%) of the respondent have heard of the disease called diarrhea while 11 (9.2%) have not heard of it. Where 104 (95.4%) ascertained that it occurs by passage of frequent loose stools at least twice a day, whereas 5(4.6%) said that it occurs by passage of solid stools. Then 104 (86.6%) have heard about oral rehydration solution while 16 (13.3%) have not heard about it. 12 (11.5%) said they heard it through media (ie TV and Radio), 77 (74.1%) heard it from health personnel, 8(7.7%) heard it from family/friends while 7(5.8%) heard it from others. Moreover, 4(3.3%) opinioned that oral rehydration solution is made up of sugar and water (salt-sugar solution). While 2(1.6%) says the solution contains only salt and water.

**Table 8: showing the attitude of women towards oral rehydration therapy.**

Variable	Agreed	Disagreed	Undecided
Diarrhea disease is dangerous to Children	87(72.5%)	21(17.5%)	12(10.0%)
Oral rehydration solution is what is Used to treat diarrhea	94(78.3%)	9(7.2%)	17(14.2%)
Given a child oral rehydration Solution when having diarrhea is not important	8(6.6%)	101(84.2%)	11(9.2%)
Oral rehydration solution contains Salt, sugar solution	38(31.6%)	15(12.5%)	67(55.8%)
A child given oral rehydration Solution is not easily recovered From diarrhea disease	4(3.3%)	108(90%)	8(6.6%)
Diarrhea disease cannot lead to the Death of a child	13(10.8%)	89(74.2%)	18(15.0%)

Table 8 above shows that 87(72.5%) of the respondents agreed that diarrhea disease is dangerous to children while 21(17.5%) disagreed, 12(10.0%) were undecided about it. 94(78.2%) of the respondents agreed that oral rehydration solution is what is used to treat diarrhea, 9(7.2%) disagreed, while 17(14.2%) were undecided of it. 8(6.6%) agreed that given a child oral rehydration solution when having diarrhea is not important, 101(84.2%) disagreed while 11 (9.2%) were undecided.

38 (31.6%) agreed that oral rehydration solution contain salt, sugar solution, 15(12.5%) disagreed while 67(55.8%) were undecided. Concerning the opinion that says a child given oral rehydration solution is not easily recovered from diarrhea disease 4(3.35) agreed, 108(90.0%) disagreed while 8(6.6%) were undecided. 13(10.8%) agreed that diarrhea disease cannot lead to the death of a child, 89(74.2%) disagreed while 18(15.0%) were undecided of it.

**Table. 9: showing the practice of oral rehydration therapy.**

Variable	Respondent	Frequency	Percentage
Do you give your child Oral Rehydration Solution	Yes	102	85.0
	No	18	15.0
When he or she is having diarrhea?			
If yes what type of oral Rehydration solution do you give to your child	Salt-sugar solution prepared by us	24	23.5
	Sachet salt-sugar solution bought over canter drug sellers	78	76.5
	Salt and water Prepared by me	0	0
	Sugar and water Prepared by me	0	0
	<b>Total</b>	<b>102</b>	<b>100</b>

Table 9 shows that 102(85.0%) of the respondents have practiced oral rehydration solution when their children are having diarrhea, while 18(15.0%) have not practiced it. 24(23.5%) have given their children salt sugar solution prepared by them, 78(76.5%) claimed they normally give their children sachet salt sugar solution bought over the canter, none of the respondents gives salt solution and sugar solution to their child.

## DISCUSSION

The study disagreed with the findings of the study by Yasir *et al.* (2012) on knowledge, attitude and practice of mothers towards oral rehydration therapy in Duhok. The results showed that mothers had low knowledge of ORS, in 201 cases 67% mothers did not know exactly what oral rehydration solution is used for in cases of diarrhea. This difference in the two studies may be due to geographical location, educational level or background and exposure of the respondents.

This study did not concur with the findings of the study by Yasir *et al.* (2012) on knowledge, attitude and practice of mothers towards oral rehydration therapy in Duhok. The results showed in 201 cases 67% mothers did not know exactly what ORS is used for in cases of diarrhea and 77% did not believe it is enough as a treatment. The proper way for preparation was unknown to 48% of mothers and proper way for administration was unknown to 35.7% while 59% of them did not know that it should be discarded after 24 hours. 34% (102) did not comply with its use and stopped while 129(43%) mothers did not know how to behave if the child develop vomiting. This difference in the two studies may be due

to geographical location, educational level or background and exposure of the respondents.

This study is not in line with the findings of the study by Yasir *et al.*(2012) on knowledge, attitude and practice of mothers towards oral rehydration therapy in Duhok.

## CONCLUSION

In conclusion the results of the study revealed that the respondents have adequate knowledge of disease diarrhea and oral rehydration solution since majority of the respondents have heard of the disease called diarrhea, a good number of them ascertained that it occurs by passage of frequent loose stools at least twice a day, in the same vein more than half of the respondents have heard oral rehydration solution, more claim they heard it from health personnel for the first time.

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