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Child Care Hygiene Awareness among Nursing Mothers in Uyo Local Government Area

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Abstract

The study examines child care hygiene awareness among nursing mothers in Uyo Local Government Area of Akwa Ibom State. The study was guided by three objectives, research questions and null hypotheses respectively. The study adopted an ex-post facto design and the target population of the study comprised 2,316 nursing mothers who registered for post natal care in the twenty health centre facilities in Uyo Local Government Area. A sample of 342 was estimated using the Yaro Yameni's formula. The instrument used in data collection was Child Care Hygiene Awareness Questionnaire (CCHAQ). The instrument was validated by three experts and the reliability of the instrument was assessed using Cronbach Alpha method and reliability of 0.79 was obtained. Data obtained were analysed using frequency, percentages, dependent-t test and the result summarized in tables. Findings show that a good number of the respondents do not know how to handle baby's food and feeding material hygienically. The finding also reveals that majority are not aware of the need to sterilize baby's feeding utensils so as to reduce contamination. Most of the respondents do not also know the essence of changing baby's diaper once it is wet. Result showed significant difference in the level of awareness on baby food, clothing and body hygiene. The study found that nursing mothers were more aware on baby's food hygiene than baby's body hygiene and baby's clothing hygiene. Based on the findings, it is recommended that regular child care education through symposia and seminars for nursing mothers in Uyo Local Government Area should be organized by Home Economics Teachers Association in conjunction with Health Organisations and Parastatals Also, the antenatal programmes in the various health services providers in Uyo Local Government should be reviewed with the hope of making it meet the hygienic needs of the nursing mothers.

Keywords: Child care, Hygiene, Nursing Mothers.

Introduction

In most families, the care of the children had traditionally been the forte of the mothers, irrespective of their education, income and social differences (Castalino, Nayak and D'Sovza, 2014). Mothers are often saddled with the responsibility of providing physical, emotional, social, intellectual, moral needs as well as good hygiene for the child (Curie, 2008). The word "hygiene" comes from the Greek word 'Hygeia' which means health (Curtis, 2003). Hygiene plays a fundamental role in the prevention of infectious diseases.

Curie (2008) reported that 38% of mothers failed to wash their hands before meals, while 55% of mothers of under five-year old children failed to boil drinking water for their children. The study also, showed that if mothers encouraged their children to wash hands before and after meal, diarrhea episodes would be reduced by 60%. Curtis (2003) found that if hand washing is done with soap, the risk of diarrhea would be decreased by 50%. Infection is the most common cause of illness in young children and if frequent, can cause developmental delay and retarded growth (Cairncross & Valdmanus, 2006).

Food elaborated with satisfactory hygienic standards is one of the essential conditions for promoting and preserving health, and inadequate control is one of the factors responsible for the occurrence of food borne disease outbreaks (Oliveira, Peter, Salim & John. 2003). The number of reported outbreaks of food-borne illnesses had been high, both in developed as well as developing countries as reported by Osaili, Abu, Obeidat, Bawadin, Tayyem, Subih, (2013). This greatly compromises the achievement of the Millennium Development Goals (Osaili *et* al, 2013). The safety of foods is, therefore, one of the most pressing health and safety issues facing nursing mothers since it leads to both public health and social consequences as contaminated food is very dangerous to health.

The cleanliness of our hands is very important in all daily activities because our hands frequently get dirty in our normal activities. There are many situations in which micro-organisms are likely to attach to our hands along with the dirt. There are many communicable diseases that follow this route of transmission. Hand hygiene plays a critical role in preventing this transmission (Curtis, 2008). Hand washing hygiene involves the mechanical removal of micro-organisms from contaminating hand surfaces using soap or detergent. Effective hand washing should involve more than a quick under-tap washing or washing in running water for nursing mothers to prevent contaminating their children's body during carrying and food during handling and feeding.

Statement of the Problem:

The researchers observed that children are the most vulnerable to diseases and food poisoning. These generally increase infant mortality. Since nursing mothers are the major care givers to children, the hygiene status of children depend greatly on them. Therefore, this study sought to determine child care hygiene awareness among nursing mothers in Uyo local government.

Purpose of the Study

The major purpose of this study was to determine the level of child care hygiene awareness among nursing mothers in Uyo Local Government.

The specific purposes were to determine the;

1. Baby's food hygiene awareness level of nursing mothers
2. Baby' clothing hygiene awareness level of nursing mothers
3. Baby's body hygiene awareness level of nursing mothers

Research Questions

The research questions were stated thus;

1. What is the level of Baby' food hygiene awareness among nursing mothers?
2. What is the level of Baby's clothing hygiene awareness among nursing mothers?
3. What is the level of Baby's body hygiene awareness among nursing mothers?

Null Hypotheses

This study was guided by the following Null hypotheses:

1. There is no significant difference in baby's food and clothing hygiene awareness level of nursing mothers in Uyo Local Government Area.
2. There is no significant difference in baby's food and body hygiene awareness level of nursing mothers in Uyo Local Government Area.
3. There is no significant difference in baby's clothing and baby's body hygiene awareness level of nursing mothers in Uyo Local Government Area.

Methodology

This study adopted ex-post facto research design. The area of the study was Uyo Local Government Area of Akwa Ibom State. The people of Uyo are majorly business men and women, civil servants as well as farmers. The population of the study was 2,316 nursing mothers who registered for post natal care in the twenty health centers facilities in Uyo Local Government as obtained from public health centre, base located at barracks road, Uyo (Public Health Centre, Barrack Road, 2014). Since the population for this study is known to be 2,316, the appropriate sample size was estimated scientifically using the Yaro Yameni's formula. Hence, a sample size of 342 nursing mothers was selected from the 20 health service providers in Uyo Local Government. The 342 samples was selected by stratified random sampling. The 342 sample that was selected represented 14.8% of population.

The instrument used for data collection was researcher developed questionnaire tagged "Child Care Hygiene Awareness Questionnaire (CCHAQ)". The instrument has a total of 17 items. The instrument was divided into four parts. Part A questions were on personal datum, parts B,C and D questions were according to the variables on hygiene knowledge level. Each part was followed by four response options - I don't know, Yes, Sometimes, No - respectively. The instruments were submitted to three independent assessors. Two from the Faculty of Education, University of Uyo and one from the Faculty of Agriculture, University of Uyo. Inputs from expert validation were used to modify the instrument for reliability test.

Twenty (20) copies of the instruments were administered to twenty nursing mothers in Itu Local Government. The resulting data were subjected to Cronbach alpha reliability

analysis. The result yielded reliability coefficient of 0.79. The instrument was administered to 342 samples of nursing mothers in the study area. Of the 342 copies of the questionnaire administered, 95 percent of the copies of questionnaires were found usable for the analysis. The instrument was administered during their post-natal visit as schedule by the different health service centres. Frequency and percentages was used to answer the research questions. The hypotheses were tested using dependent t-test. The statistical analysis of data was performed using the Statistical Package for Social Science (SPSS version 20.0).

Results

Table 1: Frequency Distribution of Respondents based on Baby's Food Hygiene Awareness level among Nursing Mothers in Uyo Local Government Area of AkwaIbom State.

S/N	Items	I don't Know N(%)	Yes N(%)	Some times N(%)	No N(%)	Performance	
						Wrong	Right
1	Nursing mothers can give babies water collected from any source	7 (2.2)	5 (1.5)	12 (3.7)	301 (92.6)	24 (7.4)	301 (92.6)
2	Foods for babies can be prepared and cooked at any environment	6 (1.8)	12 (3.7)	16 (4.9)	291 (89.5)	34 (10.5)	291 (89.5)
3	Nursing mothers must not touch baby's food and feeding material if they have not wash at least their hands	1 (0.3)	241 (74.2)	25 (7.7)	57 (17.5)	84 (25.8)	241 (74.2)
4	A baby would not have any health problem even if any person coughs or sneezes without covering mouth and nose while nursing the baby	9 (2.8)	58 (17.8)	5 (1.5)	253 (77.8)	72 (22.2)	253 (77.8)
5	Washing of baby feeding utensils thoroughly with hot water and soap once in a while can help to prevent the child from diseases	6 (1.8)	161 (49.5)	29 (8.9)	129 (39.7)	164 (50.5)	161 (49.5)

Results in Table 1 show the performance rating of the nursing mothers in terms of their hygiene knowledge. It was revealed that 7.4 percent of nursing mothers have poor knowledge on what type of water babies should be given while 92.6% have good knowledge on same; 10.5 percent do not have good knowledge about the type of environment to prepare babies' food whereas 89.5% have; 25.8% do not understand how to handle baby's food and feeding materials hygienically whereas 74.2% understands; 22.2% do not understand the process of air-borne contamination of baby's food whereas 77.8% do; 50.5% do not agree that sterilization of baby's feeding utensils reduces rate of contacting diseases whereas 49.5% do agree.

Table 2: Frequency Distribution of Respondents based on Baby's Clothing HygieneAwareness level among Nursing Mothers in Uyo Local Government Area of AkwaIbom State.

S/N	Items	I don't Know N(%)	Yes N(%)	Some times N(%)	No N(%)	Performance	
						Wrong	Right
1.	Nothing will happen to a child of 0-2 years even if stools and other waste products be kept close to infant's clothing	7 (2.2)	49 (15.1)	24 (7.4)	245 (75.4)	80 (24.6)	245 (75.4)
2.	Not changing babies clothes at least three times a day may make babies prone to disease	4 (1.2)	84 (25.8)	21 (6.5)	215 (66.2)	109 (33.5)	216 (66.5)
3.	Not changing of babies' diapers as soon as it is wet can cause rashes	1 (0.3)	82 (25.2)	54 (16.6)	188 (57.8)	243 (74.8)	82 (25.2)

Results in Table 2 indicates that 75.4% understand the pollutant effect of stools and other waste products around baby's clothing whereas 24.6% do not; 66.2% maintained that rate of baby's contact with disease can be reduced by regular changing of baby's soiled clothes; 25.2% agree that baby's nappy rash can be controlled by changing of diapers when they are wet whereas 74.8% disagrees.

Table 3: Frequency Distribution of Respondents based on Baby's Body Hygiene Awareness level among Nursing Mothers in Uyo Local Government Area of AkwaIbom State.

S/N	Items	I don't Know N(%)	Yes N(%)	Some times N(%)	No N(%)	Performance	
						Wrong	Right
1	Clean hands with water only before carrying baby	4 (1.2)	101 (31.1)	56 (17.2)	164 (50.5)	161 (49.5)	164 (50.5)
2	Clean hands with liquid hand wash before carrying baby	2 (6)	210 (64.6)	76 (23.4)	37 (11.4)	115 (35.4)	210 (64.6)
3	Clean hands with soap before carrying baby	0 (0.0)	217 (66.8)	51 (15.7)	57 (17.5)	108 (33.2)	217 (66.8)
4	Clean hands with sanitizer before carrying baby	179 (55.1)	92 (28.3)	34 (10.5)	20 (18.5)	233 (71.7)	92 (28.3)
5	Clean hands with clothes before carrying baby	7 (2.2)	92 (28.3)	32 (9.8)	194 (59.7)	131 (40.3)	194 (59.7)
6	It is safe for babies if care givers keep long nails during the period	6 (1.8)	58 (17.8)	9 (2.8)	252 (77.5)	73 (22.5)	252 (77.5)
7	Long nail kept by babies cannot be a source of infections	4 (1.2)	117 (36.0)	5 (1.5)	199 (61.2)	126 (38.8)	199 (61.2)

The result in Table 3 shows that 50.5% of the respondents clean their hands with water only before caring babies. The result also reveals that majority of the respondents understood the essence of Cleaning hands with liquid hand wash before carrying baby (64.6%); Clean hands with soap before carrying baby (66.8%); Clean hands with clothes

before carrying baby(59.7%). They also understood the negative effect of keeping long nails. In terms of cleaning of hands with sanitizer before carrying baby, majority of the respondents did not understand its essence (71.7%). This result is an implication that there is need for these nursing mothers to be adequately educated on the relevance of these hygiene practices in enhancing the health of the child.

Test of Null Hypotheses

Null Hypothesis 1: There is no significant difference in baby's food and clothing hygiene awareness level of nursing mothers in Uyo Local Government Area.

Table 4:Dependent t- test result summary showing differences in baby's food and clothing hygiene awareness level of nursing mothers in Uyo Local Government Area.

Awareness	n	$\bar{X}$	SD	t-calc.	t-crit.	Remarks at p<0.05
Baby's food hygiene	325	0.84	0.09	17.09	1.97	*
Baby's clothing hygiene	325	0.57	0.27			

*significant at p<0.05.

Result presented in Table 4 shows that the t-calculated (17.09) is greater than the t-critical of 1.97 at 0.05 level of significance. This implies that a significant difference exists in the level of awareness on baby's food and baby's clothing hygiene. The null hypothesis is rejected. Hence, there is a significant difference in baby's food and clothing hygiene awareness level of nursing mothers in Uyo Local Government Area. Based on the weighted mean score, nursing mothers were more aware on baby's food hygiene (0.84) than baby's clothing hygiene (0.57). This means that the level of awareness of nursing mothers on baby's food hygiene is significantly higher than that of their awareness on baby's clothing hygiene.

Null Hypothesis 2: There is no significant difference in baby's food and body hygiene awareness level of nursing mothers in Uyo Local Government Area.

Table 5:Dependent t- test result summary showing differences in baby's food and body hygiene awareness level of nursing mothers in Uyo Local Government Area.

Awareness	n	$\bar{X}$	SD	t-calc.	t-crit.	Remarks at p<0.05
Baby's food hygiene	325	0.84	0.09	25.49	1.97	*
Baby's body hygiene	325	0.58	0.16			

*significant at p<0.05.

Result presented in Table 5 reveals that the t-calculated (25.49) is greater than the t-critical of 1.97 at 0.05 level of significance. The null hypothesis is rejected. Hence, there is a

significant difference in baby's food and body hygiene awareness level of nursing mothers in Uyo Local Government Area. Judging from the weighted mean score, nursing mothers were more aware on baby's food hygiene (0.84) than baby's body hygiene (0.58). This means that the level of awareness of nursing mothers on baby's food hygiene is significantly higher than that of baby's body hygiene.

Null Hypothesis 3: There is no significant difference in baby's clothing and body hygiene awareness level of nursing mothers in Uyo Local Government Area.

Table 6:Dependent t- test result summary showing differences in difference in baby's clothing and body hygiene awareness level of nursing mothers in Uyo Local Government Area.

Awareness	N	$\bar{X}$	SD	t-calc.	t-crit.	Remarks at p<0.05
Baby's clothing hygiene	325	0.57	0.27	0.57	1.97	NS
Baby's body hygiene	325	0.58	0.16			

NS=significant at p>0.05.

Result presented in Table 6 reveals that the t-calculated (0.57) is not greater than the t-critical of 1.97 at 0.05 level of significance. The null hypothesis is retained. Hence, there is no significant difference in baby's clothing and body hygiene awareness level of nursing mothers in Uyo Local Government Area. Judging from the weighted mean score, the level of awareness of nursing mothers about baby's food hygiene (0.57) was almost the same as that of baby's body hygiene (0.58).

Discussion of Findings

The result identified areas where nursing mothers had poor knowledge about hygiene in terms of baby care. These include the use of hand sanitizer, washing of baby feeding utensils with hot water and soap and changing of babies diapers as soon as it is wet. This result implies that there is need for these nursing mothers to be adequately educated on the relevance of these hygiene practices in enhancing the health of the child (Table 2). This findings agrees with that of Elizabeth (2011) that most nursing mothers do not have good knowledge of hygiene on how to prevent their children from been infected with diseases. Also, this finding corroborates that of Jahan (2000) who found that the percentage of nursing mothers who could not translate health information into practical application. The finding also showed that the level of awareness of nursing mothers on baby's food hygiene was significantly higher than that of their awareness on baby's clothing and baby's body hygiene.

Conclusion

This study examined child care hygiene awareness among nursing mothers in Uyo Local Government Area of Akwa Ibom State. The study found that although the sampled nursing mothers demonstrated moderate level of awareness on child care, there are still other vital areas that the nursing mothers were not aware particularly in the area of sterilization of baby's utensils, changing of baby's diaper once it is wet and the use of sanitizer. This therefore emphasizes the need for more education on child health care for nursing mothers in the study area.

Recommendations

Based on the findings, the following are recommended to enhance child care in the study area:

1. Regular child care education for nursing mothers in Uyo Local Government Area should be organized by Home Economics Teachers Association in conjunction with Health Organisations and Parastatals.
2. The antenatal programmes in the various health services providers in Uyo Local Government should be reviewed with the hope of making it meet the hygienic needs and yearnings of the nursing mothers, particularly in areas where they lack sufficient knowledge.
3. Non-governmental organizations should also be actively involved in the sensitization of nursing mothers on child care especially on baby's clothing hygiene and baby's body hygiene.

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