



Knowledge regarding cleaning and sterilization of feeding bottles among staff nurses in selected hospitals

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Abstract

A study to assess the knowledge regarding cleaning and sterilization of feeding bottles among staff nurses. Prevention of gastroenteritis due to inappropriate feeding practices is a very important step in reducing infant mortality and morbidity. It includes proper sterilization or cleaning of bottles, hygienic preparation of feeds, avoiding contamination of bottles by leftover milk leading to bacterial infection and correct preparation of formula feeds. Sterilize the baby bottle which is deemed as especially important for new born and high risk infants.

Methodology: A quantitative research approach was adopted for the study. Descriptive design was adopted to assess the knowledge regarding cleaning and sterilization of feeding bottles among staff nurses. A sample size of the study includes 30 staff nurses. Non probability convenience sampling technique was adopted for the study. The data was collected by using structured questionnaire. The data was analyzed by using descriptive and inferential statistics.

Results: With regard to level of knowledge regarding cleaning and Sterilization of feeding bottles among staff nurses 18(60%) had inadequate knowledge, 12(40%) had moderately inadequate knowledge.

Conclusion: The study concluded that majority of staff nurses had inadequate knowledge, regarding cleaning and Sterilization of feeding bottles among staff nurses. There is necessity to conduct CNE programs and preparation of educational modules on cleaning and Sterilization of feeding bottles in order to reduce infant mortality rate and morbidity rates.

Keywords: cleaning and sterilization, knowledge, staffnurses, feeding bottles

Introduction

An informed decision about an infant's diet should be based on healthcare professional advice as well as the parents' lifestyles and preferences. Choosing whether to breastfeed or formula feed the baby is one of the first decisions expectant parents will make. The American Academy of Pediatrics (AAP) joins other organizations such as the American Medical Association (AMA), the American Dietetic Association (ADA), and the World Health Organization (WHO) in recommending breastfeeding as the best for babies. The AAP says babies should be breastfed exclusively for the first 6 months. Beyond that, the AAP encourages breast feeding until at least 12months, and longer if both the mother and baby are willing.

It is now a well understood concept that breast milk is the ideal milk for infants as it has many anti-infective factors which prevent the child from various bacterial and viral infections.

However, in certain conditions like acute febrile maternal illness, mothers receiving anti thyroid drugs, anticancer drugs, debilitating chronic illness, it is contraindicated to breast-feed their babies either temporarily or permanently. Working mothers need to supplement breast-feeding with artificial feeds because of social constraints of breastfeeding. Bottle feeding may also be required when lactation is inadequate or

mother has twin or triplet babies. But it can be potentially hazardous for the baby as it can lead to infections such as acute gastroenteritis or repeated diarrhea.

Prevention of gastroenteritis due to inappropriate feeding practices is a very important step in reducing infant mortality and morbidity. It includes proper sterilization or cleaning of bottles, hygienic preparation of feeds, avoiding contamination of bottles by leftover milk leading to bacterial infection and correct preparation of formula feeds.

Sterilize the baby bottle which is deemed as especially important for new born and high risk infants.

According to World Health Organization (2014), over two-thirds of under-five deaths are associated with inappropriate feeding practices occurring during the first year of life. Under normal circumstances, infants who are not breast-fed are 14 times more likely to die from gastroenteritis, than infants who are exclusively breastfed for the first 6 months. Bottle-feeding is the biggest killer of babies in the developing countries. Bottle-fed babies have 2 to 7 times increased risk of mortality compared to breast-fed babies.

Statement of Problem

A study to assess the knowledge regarding cleaning and sterilization of feeding bottles among staff nurses in selected hospitals at Nellore.

Objectives

- To assess the level of knowledge regarding cleaning and sterilization of feeding bottles among staff nurses.
- To associate the level of knowledge regarding cleaning and sterilization of feeding bottles among staff nurses with their selected socio demographic variables.

Methodology

A quantitative research approach was adopted for the study. Descriptive design was adopted to assess the knowledge regarding cleaning and sterilization of feeding bottles among staff nurses. A sample size of the study includes 30 staff nurses. Non probability convenience sampling technique was adopted for the study. The data was collected by using structured questionnaire. The data was analyzed by using descriptive and inferential statistics.

Results

Section 1: Frequency and percentage distribution of demographic variables of staff nurses.

Section 2: Mean score and standard deviation of level of knowledge regarding cleaning and sterilization of feeding bottles among staff nurses.

Section 3: Association between the level of knowledge regarding cleaning and sterilization of feeding bottles among staff nurses with their selected socio demographic variables.

Section 1: Frequency and percentage distribution of demographic variables of staff nurses.

- With regard to age of staff nurses, 30(100%) are between 20-25years.
- With regard to gender of staff nurses, 30(100%) are females.
- With regard to educational status of staff nurses, 5(26.7%) studied GNM, 25(73.3%) studied B.Sc (N).
- With regard to professional experience, 20(66.7%) had <1 year, 10(33.3%) had between 1-3 years.
- With regard to source of information of staff nurses, 1(6.7%) received from internet, 20(66.6%) received from curriculum, 8(20%) received from text books and 1(6.7%) received from all the above.
- With regard to attended CNE programme, 5(26.7%) are attended and 25 (73.3%) are not attended the CNE programme.

Section 1: Level of knowledge regarding cleaning and sterilization of feeding bottles among staff nurses

Table 1

Level Of Knowledge	Staff Nurses	
	F	%
Inadequate knowledge (<50%)	18	60
Moderately adequate knowledge (51-70%)	12	40
Total	30	100

With regard to level of knowledge regarding cleaning and Sterilization of feeding bottles among staff nurses 18(60%) had inadequate knowledge, 12(40%) had moderately inadequate knowledge.

Section 3: Mean score and standard deviation of level of knowledge regarding cleaning and sterilization of feeding bottles among staff nurses. (N=30)

Table 2

Knowledge regarding cleaning and sterilization of feeding bottles	Mean	Standard deviation
Staff nurses	16.86	4

Section 4: Association between the level of knowledge regarding cleaning and sterilization of feeding bottles among staff nurses with their selected socio demographic variables.

There is significant association between the level of knowledge regarding cleaning and sterilization of feeding bottles among staff nurses with their selected socio demographic variables like Age, Educational qualification, Professional experience.

There is significant association between the level of knowledge regarding cleaning and sterilization of feeding bottles among staff nurses with their selected socio demographic variables like Source of information and attended any CNE programme.

Discussion

Findings Related To Demographic Variables

With regard to age of staff nurses, majority of 30(100%) are between 20-25years, with regard to gender, majority of 30(100%) are females, with regard to educational status majority of 25(73.3%) studied B.Sc (N), with regard to professional experience majority of 20(66.7%) had <1 year, with regard to source of information majority of 20(66.6%) received from curriculum, with regard to attended CNE programme, majority of 25 (73.3%) are not attended.

Findings of the Study Based On Objectives

Level of knowledge regarding cleaning and sterilization of feeding bottles among staff nurses

With regard to level of knowledge regarding cleaning and Sterilization of feeding bottles among staff nurses 18(60%) had inadequate knowledge, 12(40%) had moderately inadequate knowledge.

Findings of this study was consistent with study conducted by Azienda Ospedaliera San Camillo Forlanin, Roma, (2014) to assess an educational training program for staff nurses working in MCH centers regarding cleaning and sterilization of feeding bottles. The study was conducted in all maternal and child health centers (MCH) in Assiut City. The total number of the study sample in all MCH centers was 72 staff nurses. There were two tools used for data collection: a structured interview questionnaire and an observation check list. Majority of staff nurses had proper hand washing techniques and cleaning of baby bottles on the posttest with a statistical significant difference of <0.01. Nurses play an important role in (MCH) centers to minimize and prevent infection through providing the staff nurses with adequate and appropriate counseling, which include demonstration of cleaning of baby bottles and sterilization of equipment in health care settings.

Section 5: Association between the level of knowledge

regarding cleaning and sterilization of feeding bottles among staff nurses with their selected socio demographic variables.

There is significant association between the level of knowledge regarding cleaning and sterilization of feeding bottles among staff nurses with their selected socio demographic variables like Age, Educational qualification, Professional experience.

There is significant association between the level of knowledge regarding cleaning and sterilization of feeding bottles among staff nurses with their selected socio demographic variables like Source of information and attended any CNE programme.

Findings of the study are consistent with study conducted by Cardiff. UK (2012) to assess the knowledge on cleaning and sterilization of feeding bottles and to find the association between the knowledge score and selected demographic variables among staff nurses in Varanasi and Haryana by a structured knowledge questionnaire. The subjects comprised of 30 staff nurses selected through purposive sampling technique. Major findings of the study showed that all 100% were within the age group 22-34 years, most of 22 (73.4%) were females, majority 16 (53.3%) had experience of 0-3 years and only a few of the respondents 4 (13.3%) were having Paediatric ward experience.

Conclusion

The study concluded that staff nurses 18 (60%) had inadequate knowledge, 12(40%) had moderately inadequate knowledge regarding cleaning and Sterilization of feeding bottles among staff nurses. There is necessity to conduct CNE programs and preparation of educational modules on cleaning and Sterilization of feeding bottles in order to reduce the GI infections and mortality rate.

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