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# PERCEPTION ABOUT BOTTLE FEEDING AMONG MOTHERS IN SELECTED HEALTH CARE SETTINGS IN ABA SOUTH LGA, ABIA STATE, NIGERIA

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#### **ABSTRACT**

The study determined the perception of bottle feeding among mothers attending child welfare clinic in selected health centers in Aba South LGA. It also ascertained the knowledge of mothers about the breast feeding and factors responsible for chosen bottle feeding. A descriptive research design was adopted for the study where a total survey of 45 mothers who were selected systematically from the centers were interviewed as a method of data collection. The findings of the study showed that 93% of the mothers agreed that breast milk is ideal for an infant, 96% agreed that breast milk is better than bottle feeding; 27% and 35% agreed that they choose bottle feeding because of their type of work and to complement feeds respectively. Therefore, the study concluded that mothers ascertained breast feeding as an ideal feed for the infant, and they demonstrated good understanding about using bottle feeding and its management.

KEYWORDS: Perception, Bottle feeding, Breastfeeding, Mothers, Health Care

### INTRODUCTION

The increased risk of infections with the introduction of formula and/or complementary feeds are related to the likelihood of these feeds being contaminated during mixing and/or being fed from a contaminated bottle or cup. Lancet and Rowland (2003) search on prevalence of diarrhea in infants under 3 months, asserted that, there is high prevalence of diarrheal diseases among bottle fed infants. This was as a result of improper washing of utensil, improper mixing and storage, contaminated water and poor personal hygiene. Despite the logical assumption that it is microbiologically safer to feed infants who cannot be breastfed by cup rather than bottle, cup feeding is unpopular in most parts of the world particularly in developed countries. Objection to cup feeding include the perception that it is more difficult than bottle feeding, it results in more spillage and it takes longer time

WHO (2001) in conjunction with American Academy of Paediatrics recommended exclusive breast feeding for the infant for the first six months of life. Homelier, (2005) stated that chosen whether to breastfeed or bottle feed your baby is one of the first decisions expectant parents will take. Forman (2005) asserted that infant feeding can be considered as a behavior, a perception, a nutritional pattern and/or a risk factor in infant growth and development. Mothers' perception about bottle feeding depends on whether the mother sees herself as an exclusive breast mother, a breast and bottle mother, or an exclusive bottle mother, since their perception can be based on the positive factors of fear of dependency and moral reasoning.

Neil (2005) stated that nursing mothers cherish the experience of breast feeding; not only does it provide ideal nourishment but also provides special bonding. They believe that their babies are healthier and look bigger than others that are not breastfed. Homelier (2005), still commenting on bottle feeding asserted that the logical belief of mothers who bottle-feed is obvious to anyone who has tried to clean the utensil. Since the feed is not prepared, it requires bottle, formula milk, nipple and water. Most breast milk substitutes are modified cow milk.

Chabrol and Warburg (2004) clarifying on the factors responsible for the choice of bottle feeding stated that physiological advantages to the mother, fear of dependency and moral reasoning could suffice as factors. Cukier (1999) posited some factors to be responsible for the introduction of bottle feeding as in illness of the baby, crying, preconceived idea of the mother, work outside home, nervousness and lack of patience, spouse influence, insufficient milk and lack of desire to nurse. Although Homelier (2005) asserted that breastfeeding is considered the best nutritional option for babies by major medical organizations, some mothers still choose

bottle feeding due to convenience and flexibility, because in their opinion, you can prepare the feed and leave it with your partner to give to the baby.

Midris (1999) stated that mothers who refuse bottle feeding considered the relative effects – such as diarrhea due to contamination of the feeds and infant otitis media (infection of the middle ear) which is attributed to intra-oral pressure generated while bottle feeding the infant. Minchin (2001) asserted that, mothers who cannot breastfeed and must adopt bottle feeding, should be properly educated on the hygiene measures in the preparation of the feeds and adequate information should be given to them on the proper sterilization of the feeding utensils.

#### **OBJECTIVES OF THE STUDY**

- assess mothers' concept about breast feeding and bottle feedings
- identify mothers' concept on the differences between bottle and breast feeding and outline it's consequences
- identify the factors that informed the choice of bottle feeding.
- ascertain and correct mothers' perception on management of bottle and bottle feeding

### MATERIALS AND METHODS

The study was conducted in Aba South Local Government (LGA) of Abia State. It comprises of four clinics, Aba south, Amaufuru, Eziukwu and Umungene health centers. Aba is an urban city dominated by business men and women and civil servants. Permission to conduct the study was granted by the institution and mothers attending the clinics with their babies.

The study adopted a descriptive survey approach geared towards a cross-sectional study on the perception of mothers about bottle feeding among mothers attending child welfare clinic in selected health centers in Aba South LGA. The study population comprised of 180 mothers that attended child welfare clinics on monthly basis (Aba South) (Amaufuru, Eziukwu and Umungene Health Centers – Aba South LGA).

The sampling technique employed was a purposive sampling technique due to accessibility. Two health centers were purposively selected – that is Aba South and Eziukwu Health Centers.

Out of 60 and 35 number of mothers who attended the clinics respectively on monthly basis, 30 and 15 number of mothers were selected systematically for the study. So a total number of 45 mothers were interviewed for the study.

The research instrument used for the collection of data was an interview guide. This comprises of socio-demographic variable and other variables. Data collection lasted for one month and data collected were analyzed with the use of descriptive statistical procedure – presenting frequencies, and percentages – which were used to present summary tables for relevant variables.

#### **RESULTS**

Tables 1: Demographic data of respondents

Variable		Frequency	Percentage
Age in years	20 -29	17	38%
	30-39	23	51%
	40 and above	5	11%
	Total	45	100%
Marital status	Single	4	9%
	Married	41	91%
	Total	45	100%
Educational level	Primary	8	18%
	Secondary	21	47%
	Tertiary	16	35%
	Total	45	100%
Occupation	House wife	4	9%
	Civil servant	12	27%
	Business women	23	51%
	Students	6	13%
	Total	45	100%

Table 1 shows that 38% have their age between 20 - 29 years, 51% are between 30 - 39 years, while 11% between 40 and above; 9% of the respondents are single, 91% are married; 18% of the respondents had primary education, 47% had secondary education, while 36% had higher education, 9% of the respondents are house wives, 27% are civil servants, 51% are business women, while 13% are students.

Table 2: Responses on knowledge of ideal infant feed

Variable	Frequency	Percentage
Human milk	41	91%
Cow milk	2	4%
Pap and cow milk	1	3%
Cereals	1	2%
Total	45	100%

Table 2 showed that 91% respondents says that it is ideal to feed an infant with human milk, 4% says cow milk is ideal, 3% agreed it is ideal with pap and cow milk and 2% agreed on cereals.

Table 3: Responses on if breast feeding is better than bottle feeding

Variable	Frequency	Percentage
Yes	43	96%
No	2	4%
Total	45	100%

Table 3 showed that 96% of the respondents agreed that breast feeding is better than bottle feeding while only 4% disagreed with breast feeding.

Table 4: Respondents responses on the rationale of the choice of Breastfeeding

Variable	Frequency	Percentage
It is more hygienic	3	7%
It is more nutritious	19	44%
It contains antibodies	8	18%
It is easy	2	5%
It is cheap	11	26%
Total	43	100%

From Table 4, it revealed that 7% says their reason is because breast feeding is hygienic, 44% agreed it's because it is nutritious, 5% said it is easy, 18% said it is because it contains antibodies, while 26% agreed that it is cheap.

Table 5: Responses on the preference of bottle feeding

Variable	Frequency	Percentage
Yes	13	28.9%
No	32	71%
Total	45	100%

Table 5 showed that 29% agreed that it is good to feed baby with bottle while 71% disagreed.

Table 6: Factors responsible for choice of bottle feeding

Variable	Frequency	Percentage
Baby's ill health	3	7%
Father's suggestion/influence	0	0%
Type of work	12	27%
You don't feel like breast feeding	3	7%
Insufficient milk	5	11%
Mother's ill health	6	13%
Others	16	35%
Total	45	100%

From Table 6, it revealed that 7% of the respondents asserted that, they choose bottle because of their baby's ill health, 0% for father's suggestion/influence, 27% because of their type of work, 5% said they don't feel like breast feeding, 11% because of insufficient milk, 13% because of mothers ill health and 35% gave other reasons which are - baby likes it, baby sucks too much, use to complement milk, due to flat nipples and some that they do not use at all.

Table 7: Management of bottle and bottle feeding

Variable	Frequency	Percentage
Boiling for 10 minutes	28	62%
Cold sterilization with hydrochloride	5	11%
Just washing	6	13%
No response	6	14%
Total	45	100%

Table 7 showed that 62% said they manage their baby's bottle by boiling for 10 minutes, 11% asserted it is by cold sterilization with hydrochloride, 13% said it is just by washing while 14% did not response because they don't use it.

Table 8: Responses on how quantity of feed in measured

Variable	Frequency	Percentage
Using instruction from leaflet	23	59%
Quantity measured using scoopful provided	16	41%
Total	39	100%

From Table 8, it revealed that 59% responded that they use instruction from the leaflet to prepare their baby's feed, while 41% responded that they measured quantity using scoopful provided.

## **DISCUSSION**

Analysis revealed that majority of mothers (91%) asserted that human milk is the ideal feed for an infant. This support Homelier (2005) who stated that breast milk is the ideal form of nutrition for newborns but those mothers who are unable to breastfeed or who decide not to, infant formula is a good alternative. A greater percentage of mothers (71%) prefer to use cup and spoon other than bottle if their baby is not sucking the breast.

This also supports what Rowland and Lancet (2004) says that, it is recommended that prepared formula and complementary feeds be given with cup and spoon which is thought to be safer microbiologically than feeding with bottle and nipple.

Further findings revealed that majority of the mothers (95%) accepted breastfeeding to be better than bottle feeding, with their reasons rated mostly on the nutritional content of breast milk, it's ability of containing antibodies and it's cost effective. This is in line with Neil (2003) and Homelier (2005) assertion that antibodies in breast milk is passed from a nursing mother to her baby which helps to prevent infection, also the breast milk is cost effective and it contains essential nutrients for growth and development.

Also, majority of mothers (71%) accepted that bottle feeding is not good for an infant, their reason being that the bottle can be contaminated because of proper handling and preparation techniques, there is also the problem of over and under concentration of feeds – this can lead to diarrheal disease and other diseases. This supports Homelier (2005) explanation that bottles and nipples can transmit bacteria if they are not cleaned properly and also if the formula is not stored in sterile container. Minchin (2001) also stated that the problem of bottle feeding could arise from over and under concentration of feed, and since it lacks antibodies that the baby needs to be protected from infection and illness.

Analysis also revealed that mothers accepted bottle feeding due to certain factors – which are insufficient milk production (11%), type of work, (27%) mother's ill health (13%) respectively. This corroborates the work of Cukier (1999) and Arora and Wehrer (2000) that bottle feeding was started due to insufficient milk, work outside home, lack of desire to breastfeed, mother's ill health and uncertainty regarding quantity of milk.

Finally, a greater percentage of mothers (71%) used boiled tap water to prepare their baby's feed and 59% of mothers measure the baby's feeding using leaflet instruction. This supports the work of Midris (1999) suggestion in order to hygienically prepare a bottled formula feed.

#### CONCLUSION

Findings showed that majority of the mothers understand that breast feeding is ideal for an infant. Majority of the mothers also agreed that it is better to feed an infant with cup and spoon instead of bottle because they understand that bottle could cause infection because of contamination with bacteria during preparation. It was obvious that mothers choose bottle feeding due to certain factors which is mainly that of mother's fault and that of baby which is to complement feed. They also demonstrated their understanding and idea about preparation and management of the bottle feeding, it therefore implies that mothers understand breast feeding an infant is ideal and they demonstrated good understanding about using bottle and its management.

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