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### **A study to identify the influencing factors for the use of bottle feeding among the mothers of under-five children's in the selected areas of Nagpur city**

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#### **Abstract**

**Introduction:** "With the birth of every child, man may calculate that God is still hopeful about the world He created" - Wordsworth. Under five children are vulnerable and high risk group for infection due to malnutrition, lacking of breastfeeding, lack of parental attitude towards health of their children's, etc. So adequate nutrient is vital for growth and development (immunological, psychology development) of under five-year children's.

**Aim:** To identify the influencing factors for the use of bottle feeding among the mothers of under five year children's in selected areas of Nagpur city.

**Method:** quantitative research approach and non-experimental descriptive research design was used for the study.

**Sample:** The sample was selected using the non-probability convenience sampling technique. A sample, of 100 mothers of under five year children's was selected from Daga Memorial Hospital, Nagpur.

**Result and Conclusion:** The total 50 factors are influences mother for the use of bottle feeding. This factors are further divided into two forms. i.e 38 factors related with mothers & 12 factors related with babies' condition. The association between the influencing factors for the use of bottle feeding among the mothers of under five-year children's and selected demographic variables of mothers of under five-year children's was calculated by using Z Test and it was found there is significant association between demographic variable and influencing factors.

**Keywords:** Identify, influencing factors, bottle feeding, mothers, under five year children

#### **Introduction**

Under five children are vulnerable and high risk group for infection due to malnutrition, lacking of breastfeeding, lack of parental attitude towards health of their children's, etc.. So adequate nutrient is vital for growth and development (immunological, psychology development) of under five-year children's.

#### **Background of study**

Optimal infant and young child feeding practices as recommended by the World Health Organization includes early initiation of breast feeding within an hour of birth, exclusive breastfeeding till 6 months of age; introduction of complementary feeding at 6 months while continuing breast-feeding up to 2 years or beyond and ensuring proper use of breast-milk substitutes. However, breast milk substitutes are used commonly worldwide with bottle feeding which should be avoided due to its impact on optimal breastfeeding and appropriate complementary feeding.

#### **Need of study**

Nowadays people are more depending on bottle feeding practices instead of breastfeeding whereas bottle feeding is one of main factor for creating complication to the baby. So in this study we need to identify the influencing factor because of which parents are preferring bottle feeding.

#### **Objectives**

1. To identify the influencing factors for the use of bottle feeding among the mothers of under five year children's in selected areas of Nagpur city.

- To find out the association between demographic variables and influencing factors for the use of bottle feeding among the mothers of under five year children's.

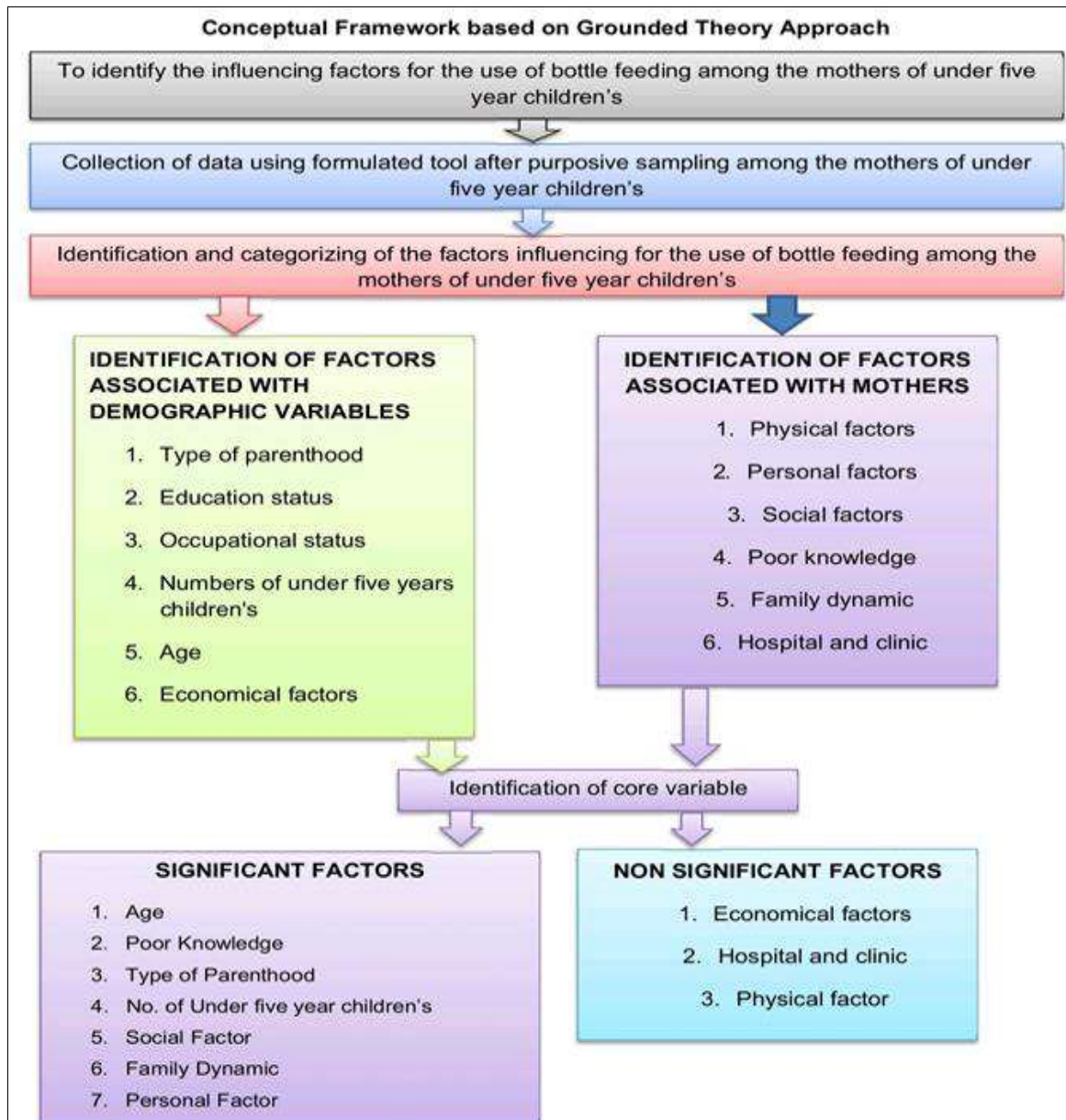
**Hypothesis**

**H0:** There will be no significant association between the influencing factors for the use of bottle feeding with the demographic variable among the mothers of under five year children's in selected areas of Nagpur

city.

**H1:** There will be significant association between the influencing factors for the use of bottle feeding with the demographic variable among the mothers of under five year children's in selected areas of Nagpur city

**Conceptual Framework**



**Fig 1:** Conceptual framework based on grounded theory approach

**Review of literature**

The relevant review of literature regarding influencing factors for the use of bottle feeding among the mothers of under give year children's is organized and presented under the following heading.

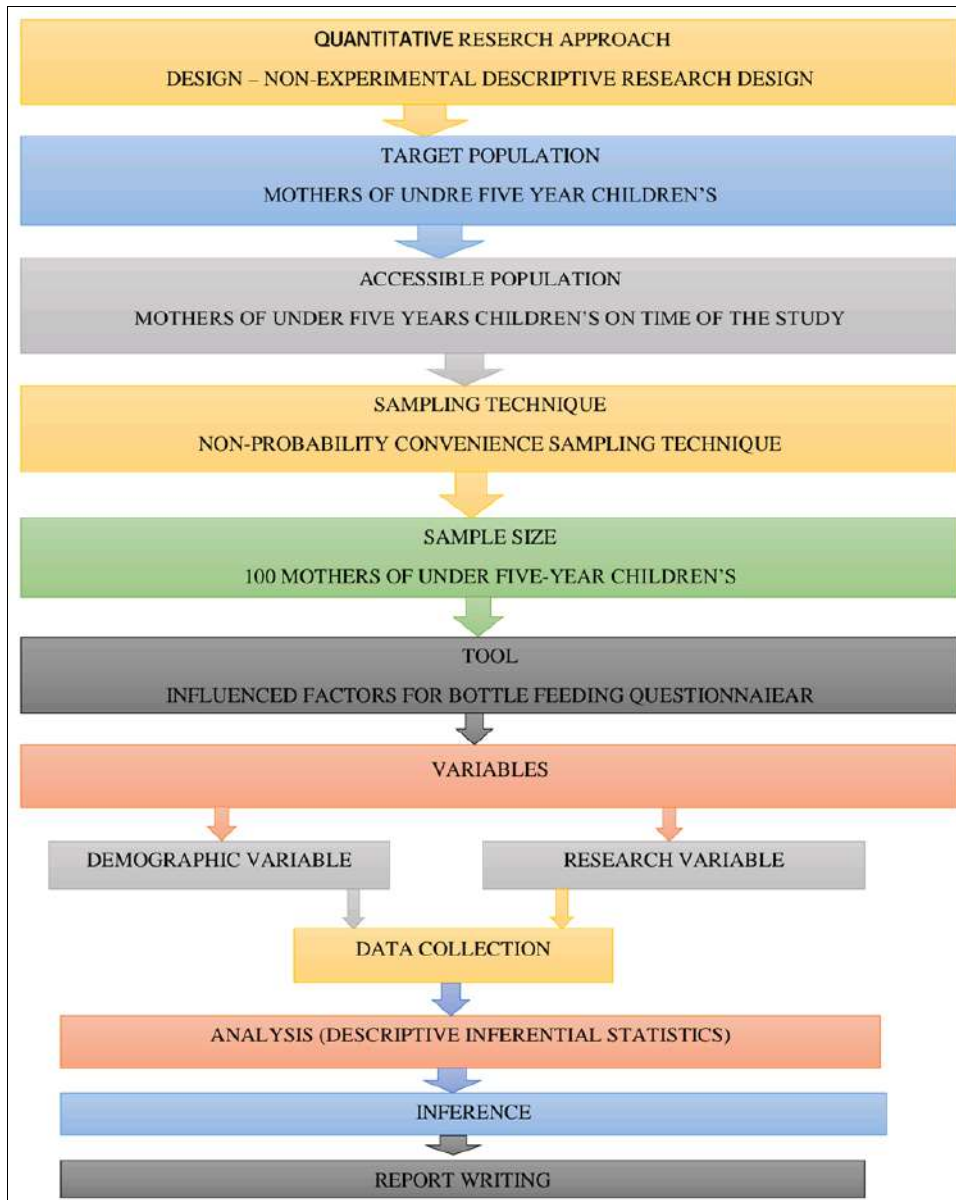
- Literature related to community based cross-sectional studies on the factors influencing bottle feeding.
- Literature related to descriptive studies on the factors influencing bottle feeding.
- Literature related to comparative studies on the breastfeeding and bottle feeding.
- Literature related to study based on the effects of bottle

feeding on children's.

- Literature related to study based on the knowledge of bottle feeding among mothers, parents or caretakers.

Dr. Namrata Kalpesh Makwana in January 2020, this study was conducted to determine the various determinants bottle feeding like factors related to children, mother and other factor. This study concludes that Improper maternal knowledge regarding breast feeding, mothers' belief of "Not enough milk", inputs to start bottle from nearby circle, LSCS delivery, Male child, NICU stay, Unsupportive father & >2 kids are most eminent factors.

**Research methodology**



**Fig 2:** Schematic represent of study design

**Data analysis and Interpretation**

**Organisation of the study finding**

The collected data is analyzed on the basis of the objectives of the study in the following ways: Section 1: Description on frequency and percentage wise distribution of baseline data.

**Section 2**

a. Description on frequency, mean and percentage of

influencing factors for the use of bottle feeding among the mothers of under five-year children's.

b. Z test is used to find out the association between demographic variables and influencing factors for the use of bottle feeding among the mothers of under five-year children's.

**Demographic variables**

**Table 1:** Frequency and percentage of baseline variable

Sr	Questions	Frequency	Percentage	Mean	Sd
1	<b>Age</b>			25	24.44
a)	17 to 26	44	44%		
b)	27 to 36	48	48%		
c)	37 to 46	8	8%		
d)	Above 46	0	0%		
2	<b>Educational status</b>				
a)	Primary	34	34%		
b)	Secondary	33	33%		

	c)	Graduation	24	24%	
	d)	Post-graduation	9	9%	
3		<b>Occupational status</b>			
	a)	House wife	79	79%	
	b)	Private job	16	16%	
	c)	Government job	1	1%	
	d)	Others	4	4%	
4		<b>Type of family</b>			
	a)	Nuclear	48	48%	
	b)	Joint	46	46%	
	c)	Extended	4	4%	
	d)	Other	2	2%	
5		<b>Monthly family income</b>			
	a)	Up to 5000	19	19%	25
	b)	5001 to 10,000	25	25%	
	c)	10,001 to 20,000	34	34%	
	d)	More than 20,000	22	22%	
6		<b>Marital status</b>			
	a)	Married	0	0%	
	b)	Unmarried	100	100%	
	c)	Divorced	0	0%	
	d)	Widowed	0	0%	
7		<b>No. Of under five year children's</b>			
	a)	One	62	62%	
	b)	Two	30	30%	
	c)	Three	8	8%	
	d)	Four	0	0%	
8		<b>Gestational age of child</b>			
	a)	Less than 30 week	1	1%	25
	b)	31 to 35 week	24	24%	
	c)	36 to 40 week	72	72%	
	d)	Greater than 40 week	3	3%	
9		<b>Birth weight of baby</b>			
	a)	Less than 1.5 kg	6	6%	
	b)	2.0 to 2.5 kg	51	51%	
	c)	2.6 to 3.0 kg	33	33%	
	d)	3.1 to 4.0 kg	10	10%	
10		<b>Residential area</b>			
	a)	Urban	62	62%	
	b)	Rural	23	23%	
	c)	Slum	12	12%	
	d)	Migrants	3	3%	

**Discussion**

Ms. Soniya Chacko & Prof. P. Chitra in May - August 2014, A non-experimental quantitative research approach was used for the study. The sample was selected using the convenience sampling method. A sample, of 100 mothers, was selected from the Pediatric Medical and Surgical Out Patient Departments. The Mothers of the children, aged between 6 months and 2 years, were included in the study. Factors influencing bottle feeding practices in children, 1. Biological factors (inadequate production of milk).2. Psychological factors (breast milk does not fulfill all the requirements of the infants). 3. Educational factors (belief that if the bottle is cleansed properly, it will not cause any Disease). 4. Socio-economic factors (choosing bottle feeding for the need to go back to work).5. Environmental factors (separation from the infants for a longer period of time cause difficulty to breast feed). 6. Cultural factors reference (mother/grandmothers’ decision to give breast milk only upto 3months).

**Result**

Total 50 factors are influences mother for the use of bottle

feeding. These factors are further divided into two forms. i.e 38 factors related with mothers & 12 factors related with babies’ condition.

This 38 factors related to the mothers are inadequate breast feeding (56%), breast feeding does not fulfil need of the child (55%), not getting time in workplace (40%), anyone can feed (37%), provide all nutrition (33%), influence by neighbor (33%), when mother is not free (32%), working women (32%),irritating attitude towards breast feeding after coming from work (31%), prevention of cross infection from mother (30%), breastfeeding is time consuming (27%), lack of confidence about breast feeding (26%), lack of time for breast feeding (25%), in public place(24%), pre-eclampsia (24%), influence by family member (24%), unable to restore breast milk at workplace (23%), influence by peer group (23%), excessive sleeping habit of mothers (21%), disturbance of sleep (21%), easy to feed (20%), influence by mass media (20%), during travelling (19%), not getting time to express breast milk at workplace(19%), ready to use formula (18%), not getting Privacy at workplace (18%), sore nipple (15%), lack of Knowledge about position of breast feeding (15%), time saving (15%),

breast engorgement (14%), tired attitude of mother after coming from work (14%), inverted nipple (11%), prescription about diet restriction (10%), breastfeeding is painful (8%), postpartum Depression (7%), mastitis (3%), breast abscess (3%), diabetic mellitus (1%).

This 12 factor related to baby are pre-term (31%), bottle feeding boost immune system (28%), swallowing difficulty (22%), prevent from malnutrition (19%), for sucking reflex (15%), post term baby (14%), birth asphyxia (14%), meconium aspiration syndrome (14%), low birth weight (13%), cleft lip (6%), cleft palate (4%), seizures (5%).

### Conclusion

From our research study total 50 factors are influences mothers for the use of bottle feeding. From our research study we have to suggest that the mother that bottle feeding is prohibited according to Indian Medical Association society act (2003) that it has having long term effect on the children health so until and unless doctor are not advice do not use bottle feeding

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