ASSESSMENT OF THE PREVALENT FEEDING AND HYGIENIC PRACTICES OF RURAL AND URBAN AREAS OF BIHAR AND THEIR OUTCOME IN CHILDREN BELOW 5 YEARS

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Article Info: Received 08 April 2020; Accepted 25 May 2020

DOI: <https://doi.org/10.32553/ijmbs.v4i5.1265>

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Conflict of interest: No conflict of interest.

Abstract

Mothers should have access to skilled support to help them initiate and sustain appropriate feeding practices, and to prevent difficulties and overcome them when they occur. Actual aim of this study was a step to sort out various prevailing feeding practices and awareness status of the hygiene in the family of child in rural and urban areas of Bihar state among the age group of below 5 Years and their outcome. The aim of this work was to determine the association between household access to water, sanitation and personal hygiene practices with stunting among children. In this study, the observation was contrary to what was observed in the NFHS3. Urban area appeared better in all the aspects of breast feeding than rural area. However, breast feeding practices were still suboptimal in both the areas. This study reveals the similar pattern but magnitude is different Exclusive breastfeeding up to the age of six months is only 25% and 18% in urban and rural region respectively average is 21%.our study revealed exclusive breast feeding for 6 months Populations had significantly low prevalence of underweight (18%), stunting (1%) wasting (15%) and as expected against complementary food given before 6 months underweight (67%), stunting (57%). wasting (54%) and late after 6months group showed underweight (67%), stunting (63%).and wasting (41%). As per NFHS3 36 percent are given food from at least 3 food groups (variety of food), as recommended to ensure adequate diversity in their diet. ACCORDING TO WHO 2012 In India, approximately 53% of households and 624 million people defecate in the open. Open defecation is more pervasive in rural versus urban areas (74% vs 17%).as per recent reports 2015 69%vs 19% Open defecation is more pervasive in rural versus urban areas. In Our study (68%Vs43%). that both urban and rural population group in which use latrine for defecation has significantly better outcome than the group in which use open field defecation. This project will support the government's efforts to promote the exclusive breastfeeding, and healthy feeding practices for infant and children aged under 5 years, as well as to bring improvement in personal hygiene.

Keywords: Breast feeding, Hygienic conditions, healthy feeding practice, WHO, UNICEF

Introduction

Mothers, fathers and other caregivers should have access to objective, consistent and complete *information* about appropriate feeding practices, free from commercial influence. In particular, they need to know about the recommended period of exclusive and continued breastfeeding; the timing of the introduction of complementary foods; what types of food to give, how much and how often; and how to feed these foods safely. Mothers should have access to *skilled support* to help them initiate and sustain appropriate feeding practices, and to prevent difficulties and overcome them when they occur. Knowledgeable health workers are well placed to provide this support, which should be a routine part not only of regular prenatal, delivery and postnatal care but also of services provided for the well baby and sick child [1-5].

Community-based networks offering mother-to-mother support, and trained breastfeeding counsellors working

within or closely with, the health care system, also have an important role to play in this regard. Where fathers are concerned, research shows that breastfeeding is enhanced by the support and companionship they provide as family providers and caregivers. Mothers should also be able to continue breastfeeding and caring for their children after they return to *paid employment*. This can be accomplished by implementing maternity protection legislation and related measures consistent with ILO Maternity Protection Convention, 2000 No. 183 and Maternity Protection Recommendation, 2000 No. 191. Maternity leave, day-care facilities and paid breastfeeding breaks should be available for all women employed outside the home continuing clinical and population-based *research* and investigation of behavioural concerns are essential ingredients for improving feeding practices. Crucial areas include completion and application of the new international growth reference, prevention and control of micronutrient malnutrition, programmatic approaches and community-based interventions for improving breastfeeding and

complementary feeding practices, improving maternal nutritional status and pregnancy outcome, and interventions for preventing mother-to-child transmission of HIV in relation to infant feeding [6-19].

Household sanitation and personal hygiene practices are associated with child stunting in rural India: a cross-sectional analysis of surveys. Increasing evidence suggests that water, sanitation and hygiene (WASH) practices affect linear growth in early childhood. According to the statistics of the ministry of statistics and programme implementation, The report further says that during the period between National Family Health Survey (NFHS) 2 (1998-99) and NFHS 3 (2005-06), a decline has been observed in case of stunted growth and underweight among children under 3 years of age, whereas the percentage of case of acute malnutrition, children too thin for their height, has increased. Malnutrition of all types prevails in children of illiterate mothers and mother's having education of less than 5 years, while malnutrition cases are highest among children of underweight mothers. The states with more than 50% children under five years of age underweight are Madhya Pradesh (60%), Jharkhand (56.5%) and Bihar (55.9%) [20-23].

Actual aim of this study was a step to sort out various prevailing feeding practices and awareness status of the hygiene in the family of child in rural and urban areas of Bihar state among the age group of below 5 Years and their outcome. The aim of this work was to determine the association between household access to water, sanitation and personal hygiene practices with stunting among children. This project will support the government's efforts to promote the exclusive breastfeeding, and healthy feeding practices for infant and children aged under 5 years, as well as to bring improvement in personal hygiene.

Materials and Method

Materials

Our study was a hospital based descriptive study carried out in PMCH (OPD and Indoor) Patna Bihar.

1. Prepared Questionnaire.
2. Measuring tape.
3. Infantometer.
4. Stadiometer.
5. Electronic Weighing machine.
6. Weight and Height Simplified WHO Chart.

Method

Our study type was a cross sectional study and type of sampling done was quota sampling. Total number of participants in our study was 180 in the age group 0-5 years which was further divided into 3 groups according to their age each group had 60 participants (table 1). These groups were further equally divided on the basis of

location rural and urban; these subgroups were further divided into 2 equal subgroups according to sex.

Table 1: Distribution of the population and their gender wise category among various age groups and

Months	URBAN		RURAL		TOTAL
	MALE	FEMALE	MALE	FEMALE	
0-6	15	15	15	15	60
6-24	15	15	15	15	60
24-60	15	15	15	15	60

A questionnaire was prepared to know the basic preliminaries (e.g. name, age, sex of the child, address, parental, education socio-economic status) after successfully establishing rapport the information regarding feeding practices, which were gathered after that anthropometric examination. It was done to assess the nutritional status of the child. After examination mother was advised and counseled for appropriate feeding practices. After gathering the observed data, it was tabulated in master chart. After that statistical study was done by presenting data in the form of tables and graphs.

Inclusions and exclusions criteria

Inclusions criteria

- Children below 5 years of age residing in rural and urban areas of Bihar.
- Mother /parents agree to give consent for participation in the study.
- Children coming for immunization /OPD /INDOOR for treatment or accompanying siblings with mother.

Exclusions critertia

- Children above 5 years of age.
- Children outside bihar/migrated any time outside/inside bihar.
- Critically sick children's/children from orphanages.
- Children suffering from any congenital anomalies/premature/ birth weight<2.25kg
- Children approached with other than parents as they will not be able to give information about children.

Result & Discussions

Population under study

Total number of participants in our study is 180 in the age group 0-5 years which was further divided into 3 groups according to their age each group (0-6, 6-24, and 24-60months), had 60 participants. These groups were further equally divided on the basis of location rural and urban; these Subgroups were further divided into 2 equal subgroups according to sex.

Table 2: Prevalence of underweight, stunting and wasting in population under study

AGE GROUP	SEX	COMP.	NO.	UNDER WEIGHT	STUNTING	WASTING
0-6	M	Urban	15	8(53%)	7(47%)	5(33%)
		Rural	15	9(60%)	5(33%)	6(40%)
	F	Urban	15	8(53%)	6(40%)	6(40%)
		Rural	15	9(60%)	7(47%)	7(47%)
6-24	M	Urban	15	8(53%)	5(33%)	4(27%)
		Rural	15	8(53%)	7(47%)	6(40%)
	F	Urban	15	8(53%)	8(53%)	6(40%)
		Rural	15	8(53%)	7(47%)	7(47%)
24-60	M	Urban	15	8(53%)	8(53%)	4(27%)
		Rural	15	9(60%)	9(60%)	5(33%)
	F	Urban	15	8(53%)	7(47%)	6(40%)
		Rural	15	9(60%)	8(53%)	7(47%)

Table 2 shows the exact prevalence of underweight, stunting, and wasting in the population under study.

Inferences drawn from the observation are:

- Overall prevalence of underweight, stunting and wasting is higher in the rural population.
- Overall prevalence of underweight, stunting and wasting is higher in the female population.
- Most vulnerable population is of the rural females.
- Under weight, stunting and wasting is prevalent in all age groups.

Figure 1: Prevalence of underweight, stunting and wasting in rural and urban population **Figure 2:** Prevalence of underweight, stunting and wasting in male and female population

Table 2, Figures 1 & 2 summarizes the overall prevalence of underweight, stunting, and wasting in rural/urban and Male/Female population. 53% of urban population was

underweight, 46% was stunted, and 34% wasted. 58% of rural population was underweight, 49% was stunted, and 42% wasted. 56% of male population was underweight, 46% was stunted, and 33% wasted. 56% of female population was underweight, 49% was stunted, and 43% wasted.

PREVALENCE OF BREAST FEEDING

Table 3: Initiation of Breast Feeding after Delivery

Population	Immediately	Day1	> Day1
Urban	(24)27%	(15)17%	(51)66%
Rural	(27)30%	(7)8%	(52)67%

Table 4: Prolactal feed given or not given in rural and urban area

PRELACTEAL FEED		
POPULATION	GIVEN	NOT GIVEN
URBAN	66(73%)	24(27%)
RURAL	63(70%)	27(30%)

Table 3 and 4 shows that 73% of urban and 70% rural population lost their 1st proper feed that is the breast milk. Maximum population initiates breast after day 1 of life 66% urban population starts breast feeding after day 1. 67% rural population starts breast feeding after day1.

Table 5: Prevalence of underweight, stunting and wasting in urban and rural population respectively get colostrums or not

COLOSTRUMS		
POPULATION	GIVEN	NOT GIVEN
URBAN	64(71%)	26(29%)
RURAL	58(64%)	32(36%)
UNDERWEIGHT	URBAN (27)42%	(19)73%
	RURAL (25)43%	(27)84%
STUNTING	URBAN (25)39%	(15)58%
	RURAL (21)36%	(22)69%
WASTING	URBAN (18)28%	(12)46%
	RURAL (19)33%	(23)72%

Table 5 shows that the 29% and 36% of urban and rural population respectively are deprived from colostrums. Though 71% and 64% urban and rural population respectively get colostrums but only 27% and 30% of urban and rural population respectively give properly as described in table 4.

Prevalence of underweight, stunting and wasting in urban population colostrums given is 42%, 39%, and 28% respectively. Prevalence of underweight, stunting and wasting in urban population colostrums not given is 73%, 58%, and 46% respectively. Prevalence of underweight, stunting and wasting in rural population colostrums given is 43%, 36%, and 33% respectively. Prevalence of underweight, stunting and wasting in rural population colostrums not given is 84%, 69%, and 72% respectively. The above table made us to draw inference that both urban and rural population group in which colostrums was given has significantly better outcome than the group in which colostrums was not given.

Figure 3: Prevalence of Breast feeding, katori spoon and bottle feeding in rural & urban population (<6months)

Figure 4: Prevalence of Breast feeding, katori spoon and bottle feeding on underweight, stunting and wasting in urban & rural population (<6months)

The figure 3 shows the prevalence of Breast feeding, katori spoon and bottle feeding in urban population is 73%, 10% and 17% respectively. Prevalence of Breast feeding, katori spoon and bottle feeding in rural population is 47%, 23% and 30% respectively. Hence bottle feeding is most prevalent in rural region than in urban region. The figure 4 shows the prevalence of underweight, stunting and wasting in urban population BREAST FEEDING (<6MO) is 32%, 41% and 18% respectively. Prevalence of underweight, stunting and wasting in urban population KATORI SPOON is 100%, 33%, and 100% respectively. Prevalence of underweight, stunting and wasting in urban population BOTTLE feeding is 100%, 60%, and 60% respectively. Prevalence of underweight, stunting and wasting in rural population BREAST FEEDING (<6MO) is 57%, 21%, and 18% respectively. Prevalence of underweight, stunting and wasting in rural population KATORI SPOON feeding is 86%, 71%, and 86% respectively. Prevalence of underweight, stunting and wasting in rural population BOTTLE feeding is 86%, 71%, and 86% respectively. The above table made us to draw inference that both urban and rural population group in which BREAST FEEDING (<6MO) and KATORI SPOON feeding has significantly better outcome than the group in which BOTTLE and KATORI SPOON feeding is prevalent.

Figure 5: Prevalence of Breast feeding, katori spoon and bottle feeding in rural & urban population (>6months)

Figure 6: Prevalence of Breast feeding, katori spoon and bottle feeding on underweight, stunting and wasting in urban & rural population (>6months)

Figure 5 shows the prevalence of Breast feeding Exclusive, katori spoon and bottle feeding in urban population is 8%, 50% and 42% respectively. Prevalence of Breast feeding, katori spoon and bottle feeding in rural population is 12%, 38% and 50% respectively. Hence bottle feeding is most prevalent in rural region than in urban region. Prevalence of underweight, stunting and wasting in urban population BREAST FEEDING (>6MO) is 60%, 60% and 20% respectively. Figure 6 shows the prevalence of underweight, stunting and wasting in urban population KATORI SPOON is 27%, 17%, and 17% respectively. Prevalence of underweight, stunting and wasting in urban population BOTTLE feeding is 80%, 80%, and 56% respectively. Prevalence of underweight, stunting and wasting in rural population BREAST FEEDING (>6MO) is 71%, 57%, and 29% respectively. Prevalence of underweight, stunting and wasting in rural population KATORI SPOON feeding is 22%, 17%, and 20% respectively. Prevalence of underweight, stunting and wasting in rural population BOTTLE feeding is 80%, 77%, and 67% respectively. The above table made us to draw inference that both urban and rural population group in which KATORI SPOON feeding has significantly better outcome than the group in which BREAST FEEDING (>6MO) and BOTTLE feeding is prevalent.

So, it can be concluded that the prevalence of underweight, stunting and wasting in urban population BREAST FEEDING (<6MO) is 32% 41% and 18% respectively. Prevalence of underweight, stunting and wasting in urban population KATORI SPOON is 27%, 17%, and 17% respectively. Prevalence of underweight, stunting and wasting in urban population BOTTLE feeding is 85%, 70%, and 61% respectively. Prevalence of underweight, stunting and wasting in rural population BREAST FEEDING (<6MO) is 25%, 17%, and 25% respectively. Prevalence of underweight, stunting and wasting in rural population KATORI SPOON feeding is 22, 17%, and 26% respectively. Prevalence of underweight, stunting and wasting in urban population BOTTLE feeding is 84%, 71%, and 67% respectively. The above table made us to draw inference that both urban and rural population group in which use latrine for defecation has significantly better outcome than the group in which use open field defecation.

PREVALENCE OF HYGIENIC PRACTICES

Figure 7: Shows hygiene practices of urban population are better than rural population

Figure 8: Prevalence of underweight, stunting and wasting in rural and urban population which uses latrine and open field for defecation

Figure 7 show that the 57% and 29% of urban and rural population respectively use latrine for defecation. 32% and

68% of urban and rural population respectively use open field defecation. Thus hygiene practices of urban population are better than rural population. Figure 8 shows the Prevalence of underweight, stunting and wasting in urban population which uses latrine for defecation given is, 41%, 35%, and 25% respectively. Prevalence of underweight, stunting and wasting in urban population which uses open field defecation is 64%, 56%, and 44% respectively. Prevalence of underweight, stunting and wasting in rural population use latrine for defecation given is 31%, 28%, and 38% respectively. Prevalence of underweight, stunting and wasting in rural population use open field defecation is 70%, 57%, and 51% respectively. The above table made us to draw inference that both urban and rural population group in which use latrine for defecation has significantly better outcome than the group in which use open field defecation

Table 6: Prevalence of hand washing after toilet with soap, ash, mud in rural vs urban population

HAND WASHING AFTER TOILET				
		SOAP	ASH	MUD
URBAN		39(43%)	23(26%)	28(31%)
RURAL		22(24%)	20(22%)	48(53%)
OUTCOME	POPULATION	SOAP	ASH	MUD
UNDERWEIGHT	URBAN	11(28%)	11(48%)	24(86%)
	RURAL	5(23%)	7(35%)	40(83%)
STUNTING	URBAN	8(21%)	11(48%)	24(86%)
	RURAL	4(18%)	4(20%)	33(69%)
WASTING	URBAN	7(18%)	8(35%)	15(54%)
	RURAL	5(23%)	9(45%)	28(58%)

Prevalence of hand washing after toilet with soap, ash, mud in urban population (table 6) is 43%, 26% and 31% respectively. Prevalence of hand washing after toilet with soap, ash, mud in rural population is 24%, 22% and 53% respectively. Hence hand washing after toilet with mud is most prevalent in rural region than in urban region. Table 6 shows that the prevalence of underweight, stunting and wasting in urban population hand washing after toilet with soap, is 28%, 21% and 18% respectively. Prevalence of underweight, stunting and wasting in urban population hand washing after toilet with ash, is 48%, 48%, and 35% respectively. Prevalence of underweight, stunting and wasting in urban population hand washing after toilet with mud, is 86%, 86%, and 54% respectively. Prevalence of underweight, stunting and wasting in rural population hand washing after toilet with soap is 23%, 18%, and 23% respectively. Prevalence of underweight, stunting and wasting in rural population hand washing after toilet with ash is 35%, 20%, and 45% respectively. Prevalence of underweight, stunting and wasting in rural population hand washing after toilet with mud is 83%, 69%, and 58% respectively. The above table made us to draw inference that both urban and rural population group in which hand washing after toilet with soap has significantly better outcome than the group where hand washing after toilet with ash and mud is prevalent.

Table 7: Prevalence of proper hand and utensil washing, hand washing only and none before feeding in rural vs urban population

		HAND&UTENSILS	HANDS ONLY	NONE
URBAN		32(36%)	14(16%)	44(48%)
RURAL		27(30%)	12(13%)	51(56%)
OUTCOME				
		HAND&UTENSILS	HANDS ONLY	NONE
UNDERWEIGHT	URBAN	22%(7)	57%(8)	70%(31)
	RURAL	29%(8)	58%(7)	73%(37)
STUNTING	URBAN	13%(4)	50%(7)	66%(29)
	RURAL	26%(7)	50%(6)	59%(30)
WASTING	URBAN	16%(5)	21%(3)	50%(22)
	RURAL	33%(9)	42%(5)	54%(28)

Table 7 elicited that the prevalence of proper hand and utensil washing, hand washing only and none before feeding in urban population is 36%, 16% and 48% respectively. Prevalence of proper hand and utensil washing, hand washing only and none before feeding in rural population is 30%, 13% and 56% respectively. Hence washing properly none before feeding is most prevalent in rural region than in urban region. Table 7 Prevalence of underweight, stunting and wasting in urban population proper hand and utensil washing is 22% 13% and 16% respectively. Prevalence of underweight, stunting and wasting in urban population proper hand washing only, is 57%, 50%, and 21% respectively. Prevalence of underweight, stunting and wasting in urban population hand washing none before feeding, is 70%, 66%, and 50% respectively. Prevalence of underweight, stunting and wasting in rural population proper hand and utensil washing is 29% 26% and 33% respectively. Prevalence of underweight, stunting and wasting in rural population proper hand washing only, is 58%, 50%, and 42% respectively. Prevalence of underweight, stunting and wasting in rural population hand washing none before feeding, is 73%, 59%, and 54% respectively. The above table made us to draw inference that both urban and rural population group in which practices proper hand and utensil washing has significantly better outcome than the group where hand washing only and none before feeding. Worst outcomes are in the populations who practice none.

Comparative Statement:

Healthy Breast feeding practices:

Initiation of breast feeding immediately after delivery in our study in urban and rural population is 30% and 27 % respectively. This is slightly higher as compared to NFHS3, which is 25% and less than rural area of west Bengal 31.4% carried out by N. Das and A Dasgupta [24], study carried out .In STUDY carried out in Delhi by Amir Maroo, Paras agrawal and others[25-30], only 37.2% were put on breastfeeding within one hour of birth. However National Family Health Survey - 3 (NFHS-3) data at the national level and also at Delhi showed it as 23.4% and 21.7%, respectively, for children aged less than 3 years. Another Study from West Bengal had shown it much lower as 13.6%. According to times of India report august 1, 2012

[31, 32], only 30% of infants (in urban population) started breastfeeding within one hour of birth, as is recommended, the figure goes down to 22% in rural population. In our study majority of both rural and urban population 66% and 67% initiates breast feeding after day 1 of delivery. Prelacteal given is 73% and 70% in urban and rural population of Bihar respectively. Colostrums given in urban and rural population is 71% and 64% respectively. However only 29% and 36% of urban and rural population had appropriately get colostrums. Observations showed that Populations in which colostrums was given had significantly low prevalence of underweight (43%), wasting (38%) and stunting (30%) as expected against not given underweight (79%), wasting (60%) and stunting (64%). NFHS 3[22] had showed that rural area is better than urban area in breast feeding practices summarized as exclusive breast feeding being 48.3% in rural and 40.3% in urban area. In our study, the observation was contrary to what was observed in the NFHS3. Urban area appeared better in all the aspects of breast feeding than rural area. However, breast feeding practices were still suboptimal in both the areas. Exclusive breastfeeding up to the age of six months is only 46.3% as per NFHS-3. Further analysis of age wise data of NFHS-3 [22], also reveals that exclusive breastfeeding rapidly declines from first month to sixth month, and only about 20% children continue it by six months giving a real figure of exclusive breastfeeding and rest i.e. 26.3% weaned before 6 months. Our study reveals the similar pattern but magnitude is different Exclusive breastfeeding up to the age of six months is only 25% and 18% in urban and rural region respectively average is 21%. our study revealed exclusive breast feeding for 6 months Populations had significantly low prevalence of underweight (18%), stunting (1%) wasting (15%) and as expected against complementary food given before 6 months underweight (67%), stunting (57%). wasting (54%) and late after 6 months group showed underweight (67%), stunting (63%) and wasting (41%).

Hand washing practices:

According to UNICEF [11, 14] over 1.5 million children under five die each year as a result of diarrhoea. It is the second most common cause of child deaths worldwide. Hand washing with soap at critical times - including before eating or preparing food and after using the toilet - can reduce diarrhoea rates by more than 40 per cent Hand washing with soap can reduce the incidence of acute respiratory infections (ARI's) by around 23 per cent. Pneumonia, is the number one cause of mortality among children under five years old, taking the lives of an estimated 1.8 million children per year. Hand washing can be a critical measure in controlling pandemic outbreaks of respiratory infections. Several studies carried out during the 2006 outbreak of severe acute respiratory syndrome (SARS) suggest that washing hands more than 10 times a

day can cut the spread of the respiratory virus by 55 per cent-

Figure 9: Hand washing habit before eating & preparation of food

Figure 10: Comparative statement of latrine vs open filed defecation with WHO vs our study

Figure 11: Comparative statement of hand washing habit with soap after toilet with UNICEF vs our study

Rates of hand washing around the world are low. Observed rates of hand washing with soap at critical moments – i.e, before handling food and after using the toilet - range from zero per cent to 34 per cent. According to UNICEF (fig. 11) a study shows that hand washing with soap by birth attendants and mothers significantly increased newborn survival rates by up to 44 per cent. According to the recent Public Health Association, data only 53 per cent of the population wash hands with soap after defecation, 38 per cent wash hands with soap before eating and only 30 per cent wash hands with soap before preparing food. In our

study 47% per cent wash hands with soap before eating and only 33% per cent wash hands with soap before preparing food. Our study has revealed that population practicing wash hands with soap before preparing and eating food has significantly better outcome in nutritional status rather than population not practicing it.

Only 11 per cent of the Indian rural families dispose child stools safely. 80 per cent children's stools are left in the open or thrown into the garbage. . ACCORDING TO WHO 2012 [15], in India, approximately 53% of households and 624 million people defecate in the open. Open defecation is more pervasive in rural versus urban areas (74% vs 17%).as per recent reports 2015 69%vs 19% Open defecation is more pervasive in rural versus urban areas. In Our study (68%Vs43%). that both urban and rural population group in which use latrine for defecation has significantly better outcome than the group in which use open field defecation.

Conclusion

In our study, the observation was contrary to what was observed in the NFHS3. Urban area appeared better in all the aspects of breast feeding than rural area. However, breast feeding practices were still suboptimal in both the areas. Our study reveals the similar pattern but magnitude is different Exclusive breastfeeding up to the age of six months is only 25% and 18% in urban and rural region respectively average is 21%.our study revealed exclusive breast feeding for 6 months Populations had significantly low prevalence of underweight (18%), stunting (1%) wasting (15%) and as expected against complementary food given before 6 months underweight (67%), stunting (57%). wasting (54%) and late after 6months group showed underweight (67%), stunting (63%).and wasting (41%). As per NFHS3 36 percent are given food from at least 3 food groups(variety of food), as recommended to ensure adequate diversity in their diet. ACCORDING TO WHO 2012 In India, approximately 53% of households and 624 million people defecate in the open. Open defecation is more pervasive in rural versus urban areas (74% vs 17%).as per recent reports 2015 69%vs 19% Open defecation is more pervasive in rural versus urban areas. In Our study (68%Vs43%). that both urban and rural population group in which use latrine for defecation has significantly better outcome than the group in which use open field defecation.

Prevalent mode of feeding in children below 6 months in non exclusive breast feeding is bottle feeding in rural and urban areas. 42% and 50%of urban and rural population bottle feed their children above 6 months respectively bottle feeding significantly affect the outcome i.e. the poor nutritional status as compared to the katori spoon feeding.

- Only 25 per cent of newborns were put to the breast within one hour of birth.

- Less than half of children (46 per cent) under six months of age are exclusively breastfed.
- Only 20 per cent children age 6-23 months are fed appropriately according to all three recommended practices for infant and young child feeding- See more at: 38 per cent before eating, and 30 per cent before preparing food.

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