



“STUDY OF MORBIDITY PROFILE OF UNDER FIVES IN MIGRANT POPULATION”

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ABSTRACT

Introduction: India has population with various ethnicity, customs, culture, beliefs and behavior. Migrant population is one such population group which is different in various aspects like environmental conditions, migratory nature, attitude towards health facilities.

Objectives: (1) To study of morbidity profile of under fives in migrant population. (2) To assess immunization status of under fives in migrant population. (3) To suggest recommendations based on study findings.

Materials & Methods: It is Cross-sectional descriptive study carried out in 162 under-five children in migrant population of Sugarcane workers, present at the time of study by Universal sampling method.

Results: In the present study 54.94% of under-five children were boys & 45.06 % were girls. 22.22% of children were from 48-60 months age group, 46.30% children suffered from Morbidity in last 2 weeks, of which ARI (62.67%) was most common followed by Diarrhoea (17.33%) & Fever (5.33%). Prevalence of morbidity was maximum in infants (65.52%) and in girls (53.42%). Only 3.71% of children were fully immunized. Immunization status was poor in girls.

Conclusion: In the present study there is adverse sex ratio of 820. Morbidity is more in girls and immunization is also poor in girls.

KEYWORDS : Immunization status, Migrant population, Morbidity profile, Under fives

Introduction:

India is country of diversity. India has population with various ethnicity, customs, culture, beliefs and behavior. Migrant population is example of one such population group and which is different in various aspects like environmental conditions, migratory nature, attitude towards health facilities, occupation etc. So, this study is aimed to assess morbidity profile and immunization status of under fives in migrant population (Sugarcane workers).

Objectives:

- (1) To study of morbidity profile of under fives in migrant population.
- (2) To assess immunization status of under fives in migrant population.
- (3) To suggest recommendations based on study findings.

Materials & Methods:

Study design: Cross-sectional descriptive study.

Sample size: Based on prevalence of morbidity profile of under fives (44.83%)¹ with precision level of 5%. Sample size was calculated to be 100 under five children. So, minimum 100 children should be examined. We have interviewed and examined all i.e. 162 under-five children in migrant population of Sugarcane workers, present at the time of study.

Sampling method: Universal sampling method was used.

Study period: 1 October, 2015 to 31 December, 2015

Data collection: A hut to hut survey was carried out. At the time of visit, the parents of under five children were informed about the history taking and examination procedure and consent of parents was taken. At the time of visit detailed history was taken and clinical examination done.

Similar to NFHS3, Mothers of children born during the five years preceding the survey were asked if their child was suffered from illnesses during the two weeks preceding the survey².

A child who has received all the vaccines according to his/her age included in Indian National Immunization Schedule was considered as completely immunized and a child who has received at least one of the vaccines included in Indian National Immunization Schedule is considered as partially immunized. A child who has not received any vaccine is taken as unimmunized³.

Results:

Present study was cross-sectional descriptive study carried out in 162 under-five children in migrant population of Sugarcane workers located around 10 kms from solapur district carried out between 1 October, 2015 to 31 December, 2015.

In the present study 54.94% of under-five children were boys & 45.06 % were girls pointing towards a adverse sex ratio of 820. Maximum (22.22%) of children were from 48-60 months age group (Table 1).

Table 1 : Age and sex wise distribution of under-five children.

Age groups	Sex		Total
	Male	Female	
0-12 months	17	12	29 (17.90%)
12-24 months	20	15	35 (21.60%)
24-36 months	17	17	34 (20.99%)
36-48 months	16	12	28 (17.28%)
48-60 months	19	17	36 (22.22%)
Total	89 (54.94%)	73 (45.06%)	162 (100%)

46.30% of children suffered from Morbidity in last 2 weeks (figure 1), of which ARI (62.67%) was most common followed by Diarrhoea (17.33%) & Fever (5.33%) as shown in figure 2.

Fig-1: Morbidity profile of under-fives

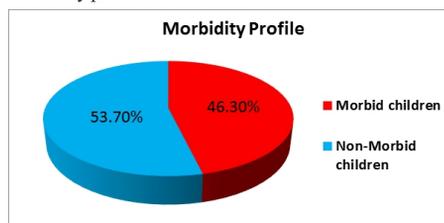
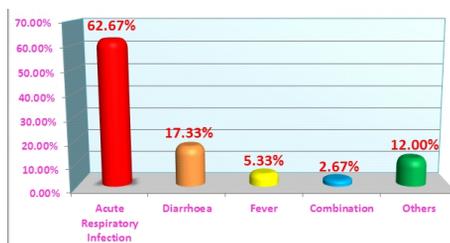


Fig-2: Morbidity pattern of under-fives



Prevalence of morbidity was maximum in infants (65.52%) and minimum in 48-60 months (33.33%) age group. The difference was not statistically significant (table 2). Prevalence of morbidity was more in girls (53.42%) than boys (40.45%) but the difference was not statistically significant (table 3).

Table 2 : Age-wise distribution of Morbidity among under-five children

Age groups	Morbidity		Total
	Present	Absent	
0-12 months	19 (65.52%)	10 (34.48%)	29 (100%)
12-24 months	18 (51.43%)	17 (48.57%)	35 (100%)
24-36 months	15 (44.11%)	19 (55.89%)	34 (100%)
36-48 months	11 (39.29%)	17 (60.71%)	28 (100%)
48-60 months	12 (33.33%)	24 (66.67%)	36 (100%)
Total	75 (46.30%)	87 (53.70%)	162 (100%)

[$\chi^2=7.732$, d.f.=4, P>0.05; not significant]

Table 3 : Gender-wise distribution of Morbidity among under-five children

Sex	Morbidity		Total
	Present	Absent	
Boys	36 (40.45%)	53 (59.55%)	89 (100%)
Girls	39 (53.42%)	34 (46.58%)	73 (100%)
Total	75 (46.30%)	87 (53.70%)	162 (100%)

[$\chi^2=2.72$, d.f.=1, P>0.05; not significant]

Only 3.71% of children were fully immunized, 85.18% partially immunized and 11.11% were not at all immunized (Figure 3). Not a single child more than 2 years old was completely immunized. The difference was not statistically significant (Table 4). Immunization status was poor in girls than boys. 15.07% of girls were not at all immunized as compared to 7.86% in boys (Figure 4).

Fig-3 : Immunization status of under-fives in migrant population

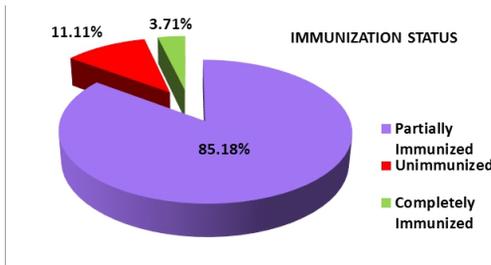
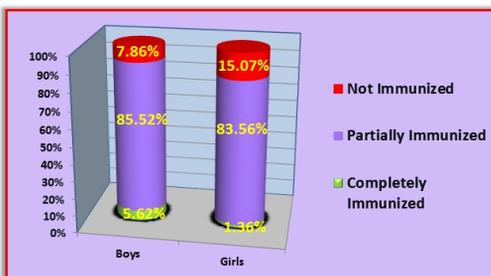


Table 4:- Age-wise distribution of immunization status of under-fives

Age groups	Immunization Status			Total
	Partially immunized	Completely immunized	Unimmunized	
0-12 months	22 (75.86%)	04 (13.79%)	03 (10.34%)	29 (100%)
12-24 months	28 (80.00%)	02 (05.71%)	05 (14.29%)	35 (100%)
24-36 months	29 (85.29%)	00 (00.00%)	05 (14.71%)	34 (100%)
36-48 months	27 (96.43%)	00 (00.00%)	01 (03.57%)	28 (100%)
48-60 months	32 (88.89%)	00 (00.00%)	04 (11.11%)	36 (100%)
Total	138	6	18	162 (100%)

[$\chi^2=15$, d.f.=8, P>0.05; not significant]

Fig 4: Gender wise distribution of Immunization status



Discussion:

In the present study 54.94% of under-five children were boys & 45.06% were girls pointing towards a adverse sex ratio of 820. Similar to present study **Thakur M S et al¹** observed more boys (53.6%) than girls (46.4%) amongst under fives from urban area with sex ratio of 866.

In the present study maximum (22.22%) of children were from 48-60 months age group. In contrast to this **Boramma G et al⁵** observed maximum i.e. 27.56% of children from 12-24 months age group amongst under five children.

In the present study, 46.30% of children suffered from morbidity in last 2 weeks, of which ARI (62.67%) was most common followed by Diarrhoea (17.33%) & Fever (5.33%). Less (23.7%) prevalence of morbidity than present study was shown by **Singh MB et al⁶**. More morbidity in this population may be due to poor hygiene, nutrition and immunization. Similar to present study **Basu M et al⁷** reported that Acute Respiratory Infections (54.22%) and diarrhea (52.66%) were the common morbidities prevalent in the children, along with worm Infestation (22%), and dental problems (17.33%).

In the present study, prevalence of morbidity was maximum in infants (65.52%) and in girls (53.42%). While **Singh HN et al⁸** reported that under five children illness was maximum (97.1%) in 1 – 2 years age group and minimum (77.9%) in less than 1 year age group. In contrast to present study **Grover VL et al⁹** observed that the prevalence of morbidity at the time of study was significantly higher in boys (63.4%) as compared to girls (26.4%). More morbidity in girls may be due to neglect towards girl child.

Only 3.71% of children were fully immunized, 85.18% partially immunized and 11.11% were not at all immunized. Not a single child more than 2 years old was completely immunized. Immunization status was poor in girls than boys. 15.07% of girls were not at all immunized as compared to 7.86% in boys. **Dhatrak PP et al¹⁰** reported in his study that 72% of under five children were completely immunized and 28% partially immunized. Such poor immunization in present study may be due to migratory nature of population and lack of health facilities. Similar to present study **Biswas T et al¹¹** found 77.9% partially immunized children.

Conclusion:

In the present study there is adverse sex ratio of 820. Morbidity is more in girls and immunization is also poor in girls. It points towards negligence towards girl child. So, health education should be done about importance of girl child. As immunization status is poor in this population special camps should be arranged to cover migratory population.

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