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# A Study on High Mortality of Children in Melghat Region of Amravati (Maharashtra)

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## KEYWORDS Demography; tribals; malnutrition; population; Melghat

**ABSTRACT** Melghat is situated in the southern offshoot of Satpuda ranges. Melghat region is a part of Amravati District in the North Eastern Maharashtra. This region is hilly and is mostly covered with dense forest. The population of this region is almost rural and tribal and it mainly consists of 'Korkus'. This region has a severe problem of malnutrition and a large number of children have died and are still dying due to this. To review and understand, as well as suggest some solutions to this problem is an urgent need of today. In this paper, the data related to various factors causing the high mortality of children have been analyzed to draw the conclusion about the reason of high mortality of children.

#### **INTRODUCTION**

The study of human populations by statistical methods began in London in 1966 with the pioneering work of John Graunt. The population of an area increases by births and decreases by deaths if it is assumed that the area is not affected by immigration and emigration. The difference between the births and deaths is called natural increase in the population. For a study of population growth one should have the following information:

- i) the number of events that happens
- ii) the population to which the events occur
- iii) the interval of time during which the events occur

As the events of births and deaths occur continuously as well as simultaneously in the population the task of study of the population becomes difficult (cf. Ghosh, 1978). One of the important branch of population study is child mortality (see Cox, 1976). The mortality of children in the Melghat region is also very high. The present paper deals with the study of the problem of high mortality of children in Melghat region of Amravati (Maharashtra). The first section provides introduction of the problem as well as the need of study. In the second section, research methodology is given which also covers the various factors considered for collecting the data and their analysis. The analysis of the data has been done in the third section and the fourth section presents the conclusion drawn from the study. After the conclusion, a list of references is given and all the tables are presented at the end.

Need of Present Study: The news papers from 1974 onwards have reported that the highest percentage of severe malnutrition among 1 to 5 years old tribal children has been observed in Melghat region in Amravati district (cf. Dhore and Joshi, 1988), which also had the lowest percentage of children with adequate nutrition. This has raised a question to search the problem behind this. Till date, the researchers have not undertaken this problem of this area for study. A study can be undertaken which may throw light on the demographical factors of that region which are responsible for the malnutritional status of the children. It must be appropriate in the 21<sup>st</sup> century that a serious attention must be paid on the problems of tribal people in general and Melghatis in particular, since they are really backward in a number of ways. Most of the tribals are still at the beginning stage of development, socially as well as economically. This present study will bring out the information regarding nutritional problems of the children of Melghat.

Malnutrition being a widespread phenomenon in the tribal areas and Carlson and Wardlaw (1991) have studied the child malnutrional problem at global, regional as well as county level. It is necessary to pay an urgent attention to this grave social ailment. The reasons of malnutrition being diversified in nature and though malnutrition is a global phenomenon , the reasons vary from place to place and region to region (see Ali, 1987). To identify and locate the set of specific reasons is a must for introducing a suitable mechanism. Hence, use of statistical techniques for study of malnutrition 36

and causes there off in Melghat region is carried out. The present study is a critical analysis of causes of increase in death rate due to malnutrition of infants and children in Melghat region.

# **RESEARCH METHODOLOGY**

The sampling plan is essential as it affects the cost of the research and the time taken to complete the data collection. The number of subjects needed for any survey or study depends on the questions being asked, the critical effect size and the statistical accuracy (power) desired.

A well structured questionnaire was prepared considering the general information as well as the economical and demographical factors. This questionnaire has been filled by asking questions to the respondents. Out of 300 villages of Melghat, 10 villages have been selected randomly. A list of households on the basis of census of household number has been obtained from the Patwari of the village. The unit of enquiry i. e. household meant all members in a house, who had a common kitchen (Chullah) and who lived under one roof. From each village, households are randomly selected in proportion to the total households of the village subject to the condition that the total samples must be 300. A sample of size 300 tribal women has also been considered by Tekhre (1989), while evaluating the impact of the family welfare program on tribal women of Tamian development block of Chindwara district of Madhya Pradesh.

From each village a married male or female has been questioned to get the required details of the questionnaire by direct questioning. A simple Marathi version of questionnaire has been used for respondents. In addition to the method of direct interview, the method of schedule and observation are adopted to seek additional information on economic status, family planning and various other aspects. This study is based on primary data which has been collected by us during the later half of 2002.

### **Factors Under Consideration**

To study the demographical characteristics several factors have been considered in the present work and the data related to these have been collected and analyzed (see Sinha, 1986). These factors have been discussed here in brief. *Marriage and Fertility:* Marriage is of interest to demographers mainly because of its influence on fertility (Basu, 1993a). The most significant feature is the age at which marriages take place. The age at which the girls get married depend on social values (see Chauhan, 1990). This also decides the number of children a couple produces as well as the length of time of having first child from marriage. An inappropriate age of marriage sometimes can be fatal during pregnancy or delivery for mother as well as child. This affects the death of children. Apart from this, the other factors which affects mortality are the place of delivery and presence of doctor or nurse.

**Hospital Facility:** If the hospital or primary health centre are not in the village or far away from the village, such situations are dangerous for mother and child. If mobile hospital is visiting the villages then this facility must be frequent and regular. All the above factors directly affects the death of children in this area and therefore their study is must.

Family Planning Programme: Family welfare programme impact on the society is very less in this region. Since, the people do not know about the family planning, they produce more children without proper spacing. This may increase the mortality of mother and children. Therefore, it becomes necessary to assess the different aspects of family planning programmes in this region. It is important here to collect the information about their opinion regarding necessity of family planning, their knowledge of family planning, knowledge about using the family planning methods, etc. Here, it is also important to search out, whether the most commonly practiced family planning method is male based or female based. On the other hand, it is a common practice that the people are not aware and not interested in different family planning program. Sometimes due to their illiteracy, they may not get a correct information about family planning. Therefore it also becomes important to study their source of information.

*Vaccination of Children:* As pointed earlier the deaths of children are high in Melghat region and this can be prevented by implementing the vaccination programme me properly (Chand, 1994). To assess this, some questions related to vaccination has also been asked. The point of stress are the source of treatment for any disease, opinions regarding vaccination of children

Spacing ( in years)							
Age at Marriage	NA	1	2	3	4	Total	Percent
NA	37	1	0	0	0	38	12.67
14	1	1	1	1	0	4	1.33
15	0	0	2	4	0	6	2.00
16	0	3	1	0	0	4	1.33
17	0	6	11	2	0	19	6.33
18	0	35	27	4	0	66	22.00
19	0	21	14	2	1	38	12.7
20	3	31	17	1	0	52	17.3
21	1	12	11	1	0	25	8.3
22	0	18	3	0	0	21	7.0
23	0	8	4	0	0	12	4.0
24	3	4	2	0	0	9	3.0
25	1	2	1	1	1	6	1.9
Total		46	142	94	16	2	
Percent		15.33	47.33	31.33	5.33	0.7	

Table 1: Frequency distribution of age at marriage and spacing before first child from marriage.

opinions about benefit of vaccination number of children vaccinated, number of vaccines given to children, diseases for which vaccines are given and places of vaccination. The aim of considering these factors is to explore their attitude towards child care.

Dietary Habits: Malnutrition is common and greatly affect the ability to resist infection, leading to chronic illness and in the post meaning period leading to death (Basu, 1993 b). The situation is particularly serious in view of the fact that the women even during their pregnancy have a heavy work load. Maternal and child malnutrition are common in this region. Also, the nutritional status of pregnant women directly influences their reproductive performance and affects lactation and breast feeding which are key elements in the health of infants and young children. To study the dietary habits as well as malnutritional status of children, the factors like food habits, status of vegetarian or non vegetarian, availability of two full meals per day, number of non-vegetarian meals per week and types of non-veg have been considered for this present study (see Basu, 1990 and Blank, 1996).

**Child Feeding Habits:** Similarly, to study the specific malnutritional status of children, the factors such as breast feeding habits, the duration of breast feeding, supplementary food, age of starting supplementary foods and the food grains used for preparing the supplementary foods are also needed to be analyzed. Also, it may be quite informative to know the awareness about giving the medicines to children.

# ANALYSIS OF DEMOGRAPHICAL DATA

The sampling plan and size of sample villages and house holds are already discussed in the research methodology section. The data collected regarding various demographical factors have been summarized and presented in the tabular form (Tables 1-15). The analysis of collected data is presented and discussed here.

The table 1 gives frequency distribution of the age at the time of marriage of female and length of time before having the first child from marriage. From this table we can see that the number of persons who have not replied about their age at the time of marriage and the duration before having first child are 38 and 46, respectively. It can also be seen that the maximum marriages have taken place in the age group of 18 to 20 years. Marriages at a very young age are not rare. Marriages have also taken place before 18 years of age i.e. as young as 14 to 18 years but this percentage is comparatively low. Similarly, marriages are observed up to the age of 25 years, but as age increases above 20 years the percentage of number of marriages decreases.

It can also be seen from this table that maximum number of females have given birth to a child after one year of marriage i.e. 47.3 percentage. Total 94 females i.e. 31.3 percent have given birth to a child after 2 years of marriage. The percentage of females who have delivered their first child after 3 and 4 years of marriage are 5.3 and 0.7 percent, respectively and these percentages are quite low. Since marriages are being done at a very young age and in most of the cases, the year of marriage and, therefore, female get a large span of child bearing age. Hence, they will produce more number of children unless they take some family planning measures. The information about the place of delivery has been collected and it is seen that most of the delivery i.e. nearly 84 percent are taking place at home. The percentage of deliveries in government hospital or primary health centers are very less i.e. 2.7 percent for each and 10.3 percent respondent has not replied. Since, a very significant number of children are taking birth at home without appropriate facilities, this may be one of the cause of high death rate of children in this region.

Table 2: Frequency distribution of the person who did the delivery

Person	Frequency	Percent
NA	31	10.3
Mother & Other ladies	59	19.7
Neighbouring Ladies	25	8.33
Nurse	80	60.0
Other	5	1.67

From table 2, we can see that most of the deliveries i.e. 60.0 percent are taking place in presence of a nurse though that takes place at home. Nearly, 75 percent have responded that nurses are present during the delivery time and only 15 percent answered about the absence of nurses. It has also been seen that some of the deliveries are being done by mother and other ladies at home i.e. 19.7 percent as well as neighboring ladies i. e. 8.3 percent.

Their responses regarding the hospital / primary health centre facility in their village, has been taken. Here, they have been asked about the presence of a hospital in/ near their village. In response to this, 87.4 percent have answered positively and informed about the presence of a hospital in / near their village. Whereas, 12.3 percent have given negative response about its presence and only 1 person has not answered the question. It seems that most of the people have the hospital / primary health facility. The mobile hospital facility provided by government, also visits their villages. Here, 66.66 percent i. e. 200 people have said that the mobile hospital visits their village once in a week. Fifty one people out of 300 i. e. 17 percent have answered that it visits their village twice in a week. Nearly equal number of people i. e. 16 percent have informed about more number of visits per week of this hospital to their village and one person has not answered this question. The number of times a particular respondent visits a hospital is as, most of the people i. e. 93 percent go to a hospital only when they feel necessary. Also, 3.7 percent people (4 respondent) have informed that they visit the hospital once in a month. Two persons each out of 300 have reported about their visit to the hospital once in a week and once in a fortnight whereas six respondents have not answered.

Table 3: Responses regarding family planning program

Tuble of Respons	es reg	, an anns	Iumiy	Plann	ne pr	ogram
Responses	Yes	Per-	No	Per-	NA	Per-
		cent		cent		cent
Knowledge of family planning	205	68.3	89	29.7	6	2.0
Necessity of family planning	140	46.7	13	4.3	147	49.0
Information about different methods of F. P.	97	32.3	162	54.0	41	13.7
Using any family planning method	96 1	32.0	74	24.7	130	43.3
Using male family planning method	34 1	11.3	38	12.7	228	76.0
Using female family planning method	39	13.0	33	11.0	228	76.0
Easy availability of these things	76	25.3	39	13.0	185	61.7
These things available Free of cost	78	26.0	35	11.7	187	62.3
Knowledge of Using these thin	45 gs	15.0	62	20.7	193	64.3

Family planning plays a crucial role in controlling the population of a society. The different aspects of family planning have been asked from the respondents and their responses which are in the form of 'Yes' or 'No' have been summarized in table 3. Here, it can be seen that 205 respondents i.e. 68.3 percent have the knowledge of family planning and 29.7 percent respondents do not have this knowledge. When the necessity of the family planning has been asked to the respondents then 46.7 percent have said that they think it is necessary and only 4.3 percent find, it is unnecessary. A large number of respondents i.e. 147 have not answered this critical question. The knowledge of family planning methods is not very high in this region. Fifty four percent people do not have any information about different methods of family planning whereas 32.3 percent have knowledge of it.

A large number of people i.e. 43.3 percent have not answered the question when asked about using any family planning method. Out of

300, only 96 i.e. 32 percent have informed about currently using family planning methods and 24.7 percent are not using it. It is also seen that, 11.3 percent are using male family planning methods and 13 percent are using female family planning methods whereas 76 percent people have avoided to answer these questions. It means, family planning methods are still not being used by a large segment of the population in this region. The question has also been asked about the easy availability of the necessary materials needed for family planning. In response to this, 25.3 percent respondents have said that it is easily available and 13 percent have reported about the non availability of these things. As government provides the necessary facilities of family planning, free of cost but here, only 26 percent have informed about the availability of these things, free of cost and 11.7 percent have said that they purchase such things from the market. The knowledge of using family planning methods are lacking in this region. Only 15 percent have said that they have the knowledge of using these material whereas 20.7 percent reported about not having the knowledge of using it. It is important here to note that a very large number of respondents i. e. above 61 percent have avoided to answer the above discussed three questions, may be due to illiteracy and shyness.

The different sources of getting information about family planning are also studied. The maximum number of people i.e. 95 have not answered the question. Ninety two i.e. 30.7 percent have got this information from Anganwadi, whereas 26.7 percent from other sources such as media, newspaper, friends, etc. A very few people are getting the information from gram sevak / sevika and gram Panchayat. Their percentages are 5.7 and 5.3 respectively. Thus gram Sevak/ Sevika are not spreading the information related to the family planning methods to the people as expected.

Table 4: Frequency distribution of number of children in the family

No. of children	Frequency	Percent
NA	30	10.0
1	32	10.7
2	47	15.7
3	104	34.7
4	49	16.3
5	31	10.3
6	4	1.33
7	1	0.33
8	2	0.67

Total children = 836, Mean = 3.10

The data collected regarding the number of children in each family is given in table 4. Here, it is found that the maximum number of families have 3 children and their percentage is 34.7. The percentages of families having 4 and 5 children are 16.3 and 10.3 respectively. Whereas, the percentages of 1 and 2 children are 10.7 and 15.7 respectively, but these couples were still in child bearing age group and producing more children may not be ruled out. The average children per family is 3.1 on the basis of collected data.

In the table 5, the frequency distribution of the different sources from which the people take treatment are given. We can see that, the maximum people i. e. 75.66 percent take treatment from the primary health center nearest to their village. The government mobile hospital also provides treatment to the people and their percentage is 48. These two are the main providers of the treatment facility, whereas the treatment from Vaidh, Mantrik and home remedies are nearly negligible. Here, it is to be noted that the treatment of Mantriks are still in existence in this region.

Table 5: Frequency distribution of source of treatment

Source	Frequency	Percent	
NA	2	0.7	
Home Remedies	5	1.7	
Mantrik	3	1.0	
Govt Mobile Hospital	144	48.0	
Primary Health centre	227	75.7	
Vaidh	7	2.3	

In table 6, the reply of respondents about the vaccination of children are given. We can see that 96.3 percent people have vaccinated their children and only 1.33 percent have not vaccinated. Similarly, nearly 98 percent people have vaccinated to all the children in their family. Only 2 families have not vaccinated all the

 
 Table 6: The reply of respondents regarding vaccination of children

nation of enhalten						
Responses	Yes	Per-	No	Per-	NA	Per-
		cent		cent		cent
Vaccinated Children	289	96.3	7	1.3	7	2.33
All the children in family vaccinated	293	97.7	2	0.7	5	1.67
After Vaccination Child is protected against diseases	141	47.0	156	52.0	3	1.0
No. Vaccination can lead to death	104	34.7	190	63.3	6	2.0

children in their family. This shows that the people are aware of vaccination as well as they do vaccinate their children surprising only 47 percent people feel that their child is protected against the disease after vaccination, whereas 52 percent did not feel this. Similarly, a large number of people i.e. 63.3 percent think that without vaccination their children cannot die and 34.7 percent feel that their children can die without vaccination.

Above, we have seen that generally the people are aware about the vaccination but it is also important to know whether they give all types of vaccines to their children as suggested by health officials. The information regarding the number of vaccines given to the children are presented in the table 7. The maximum number of people i.e. 44 percent have given only one vaccine and nearly equal i.e. 43 percent have given 2 vaccines. The percentage of people who have given three or more vaccines are very less i.e. nearly 3 percent for three and four vaccines. Whereas, 6 vaccines have been given by only one family and 5 vaccines given by 3 families.

 Table 7: Frequency distribution of number of vaccines given

No. of vaccines	Frequency	Percent
NA	17	5.7
1	132	44.0
2	129	43.0
3	8	2.7
4	10	3.3
5	3	1.0
6	1	0.3
M 150 C D	0.00	

Mean = 1.58, S. D. = 0.89

The table 8 gives the frequency distribution of the vaccines given for various diseases. It has been seen that the maximum people i.e. 86.66 percent have given triple + polio vaccines to their children. Then 43.66 percent have given the BCG vaccines. The vaccines for pox and measles have been given to children of only 1 and 3 families, meningitis vaccine to their children. Here, we can

Table 8: Frequency distribution of vaccines of different diseases

Vaccines	Frequency	Percent
NA	17	5.67
BCG	131	43.7
Triple + Polio	260	86.7
Pox	1	0.33
Measles	3	1.0
Meningitis	0	0.0

conclude that the government program of triple polio is reaching up to the people in this region.

The next table provides the information about the places where the child is vaccinated. From the table 9 it is clear that 57 percent i.e. maximum number of people vaccinated their children from government mobile hospital and 29.7 percent from primary health centers. These two are the main centers where most of the people (nearly 87 percent) do the vaccination to their children. Private doctor also provide vaccines but their contribution in this area is very less i. e. 2 percent only.

 Table 9: Frequency distribution of place where the child is vaccinated

Place	Frequency	Percent
NA	9	3.0
Govt. mobile Hospital	171	57.0
Primary Health Centre	89	29.7
Private doctor	6	2.0
Social worker	0	0.0
Others	25	8.3

The food habits of the people of this region are very simple and majority of the population i.e. nearly 67 percent takes mixed diet( vegetarian and non- vegetarian both). The percentage of purely vegetarian and non - vegetarian persons are nearly equal and their percentage are 16.3 and 17 respectively Similarly, the response regarding the availability of two full meals per day has been gathered to know the malnutrition status, 95.3 percent people have said that they get two full meals everyday and 4.7 percent have said, they do not get it. The number of times, the people of Melghat region eat non -vegetarian meals per week has also been asked to assess their intake of highly nutritious diet. We have observed that 84.3 percent take non-vegetarian meals whenever it is possible for them. Also, taking such meals everyday as well as up to 5 times in a week are nearly impossible to take for them. It means, they take it really. The table 10 gives the frequency distribution of different types of non-vegetarian by which they prepare

 Table 10: Frequency distribution of different types of non-veg foods

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Туре	Frequency	Percent
NA	44	14.7
Birds	35	11.7
Goats	178	59.3
Pigs	2	0.7
Chicken	238	79.9
Fishes	65	21.7

their meals. Chickens are the most popular non – vegetarian (79.33 percent people eat it). And the next popular is goat (59.33 percent people eat it). The fish and birds are also being eater in this region and their percentage are 21.66 and 11.66 respectively, whereas we have seen only two families who eat pigs.

Since, malnutrition is common in children of this region, therefore the question has been asked about breast feeding practices, duration of breast feeding and supplementary food etc. It is seen that nearly 90 percent mothers give breast feeding to their children. Similarly, 88.3 percent give supplementary foods other than breast feeding to their children. The number of cases who do not breast feed, and do not give supplementary food other than breast feeding are very limited (2 and 3 respectively). Form table 11, we observe that all the mothers provide breast feeding to their children for more than 3 months. The 44.7 percent people give breast feeding up to 9 months of age and 40.3 percent give up to 12 months of age. That is more than 40 percent mothers are giving breast feeding to their child for either nine months or 12 months. Only one family has answered that they breast feed their children up to 6 months only and two families have been seen who breast fed up to the birth of next child. Such type of cases are rare. In addition to the breast feeding they also give some supplementary foods to their children (Table 12). It is seen that 144 people i.e. 48 percent are giving supplementary foods from the age of 8 months and 11 people i.e. 37 percent from the age of 6 months. At the very young age i. e. up to 4 months of age and above 8 months of age, two families have been observed who start giving supplementary food to their children. Hence, it can be conclude that between the age of 6 to 8 months people start giving supplementary foods. In table 13, the frequency distribution of the grains from which the supplementary food is prepared has been given. It can be observed that

Table 11: Frequency distribution of duration(number of months) up to which breast feeding isgiven to children

Duration	Frequency	Percent
NA	42	14.0
3	0	0.0
6	1	0.3
9	134	44.7
12	121	40.3
Till the birth of next child	2	0.7

 Table 12: Frequency distribution of age (in months)

 from which supplementary food is given to children

Age (months)	Frequency	Percent
NA	41	13.7
2	0	0.0
4	2	0.7
6	111	37.0
8	144	48.0
above 8	2	0.7
1 200 G D	1.00	

Mean = 3.08, S. D. = 1.32

 Table 13: Frequency distribution of food grains

 from which this supplementary food is prepared

Grains	Frequency	Percent
NA	34	11.3
Rice	158	52.7
Jowar	198	66.0
Bajra	14	4.7
Dal	39	13.0
Anganwadi food	108	36.0

198 people i.e. 66 percent prepare the supplementary food from Jowar, 158 people i. e. 52.66 percent from Rice and 108 people i.e. 36 percent give their children the food provided by Anganwadi. Also, 39 people i.e. 13 percent prepare their food from Dal and 14 people i.e. 4.66 percent prepare from Bajra. Hence, it can be concluded that the people prepare the supplementary food using Rice, Jowar, Bajra, Dal but the use of Jowar and Rice is very high.

The opinion of respondents regarding awareness of providing medicines to their children and their attitude about going to the hospital themselves for vaccinations, medicines etc. have been noted and we have seen that 96 percent of the total respondents give medicines to their children for not getting sick. That is, most of the people are aware about medicines. To give medicines to their children, 57.3 percent people got to the hospital on their own whereas 41 percent do not go.

The number of children born on last five years, of the respondents families are given in table 14. It is clear that 2 percent families have produced 4 children in a duration of 5 years. Also, the percentage of families who have given birth

 Table 14: Frequency distribution of number of children born in last 5 years in the families

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Grains	Frequency	Percent
NA	141	47.0
1	73	24.3
2	60	20.0
3	20	6.7
4	6	2.0
5	0	0.0

to 3, 2 and 1 children are 6.7,20.0 and 24.3 respectively. Thus, 277 children have taken birth in 300 families in the last 5 years. And, hence the estimated birth of the children in last 5 years is 36,933 in Melghat region. This is the estimated size of population in the age – group of 0-5 years. This implies that there is approximately 7387 live births in one year i. e. The crude birth rate (CBR) can be calculated with the help of the value of total live births in one year and total population which comes out to be 33.23. It is important to note here that this CBR is much higher than CBR of rural Maharashtra which is 21.6 as well as Rural India which is 27.6 (see for details, Report of National Commission on population, Govt. of India, 2001).

The number of deaths that have occurred during the last five years of different ages, from 1 to 5 years as well as still births are given in table 15. The table shows that as age increases the percentage of deaths decreases. The percentage of still births is maximum i.e. 9 percent. We can see that total 43 deaths have occurred except still births during last 5 years in the families of 300 respondents. This gives the total 5733 deaths in 5 years i. e. approximately 1147 children of 0-5 years age -group per year. It can also be seen that 7.6 percent have died within 1 year, 3.0 percent within two years, 1.7 percent within 3 years and 0.67 percent within 5 years of age. The still birth rate is calculated to be 97.46. Now, the age specific i.e. between 0 to 5 years deaths rate can be estimated which is 5.16. Similarly, the infant mortality rate (IMR) can be calculated which is 82.98 whereas the estimated death of infants in a year in the whole region is 613. It is important to note here that the infant mortality in this region is quite high compared to IMR of rural Maharashtra of 1999 which is 58 as well as IMR of rural India which is 75 (see Report of National Commossion on population, Government of India, 2001).

 Table 15: Frequency distribution of number of child deaths in the families in last 5 years according to their ages (years)

Age (Years)	Frequency	Percent
Still birth	27	9.0
0-1	23	7.7
1-2	9	3.0
2-3	5	1.7
3-4	4	1.3
4-5	2	0.7

#### CONCLUSION

The previous analysis of data yields certain conclusions about the population of Melghat Amravati (Maharashtra) which are given here. Most of the people get married at the age of 18 to 20 years and immediately after one year of marriage, they bear a child. This gives them a large span of child bearing age and high probability of producing more number of children. The deliveries are generally not being done in Government hospitals or primary health centers but it takes place at home, Also, at the time of delivery, the presence of a nurse is common irrespective of the place of delivery. The people visit a hospital or primary health center whenever they find it necessary. In this region, most of the people have the knowledge of family planning methods are being used by approximately, only 1/3 of the married couples. Also the knowledge of using it is large. It has also been seen that a large number of persons have avoided to answer the questions related to family planning i. e. the people are shy about such matters.

The average number of children in a family is just above 3. Whenever, children get sick, the treatments are being taken mostly from primary health center. They are aware about the different vaccination programs but they do not give all the necessary vaccines to their children. The vaccine of triple + Polio has been promptly given by them to their children. These vaccines are being given by mostly mobile hospital, and primary health centers are also contributing significantly. Here, the majority of the people eat mixed diet i.e. vegetarian as well as non vegetarian. They mostly eat chickens and goats.

Mothers generally and mostly practice breast feeding to their children up to the age of at least 9 months. Also, they start giving supplementary foods after the age of 6 to 8 months. These supplementary foods are prepared commonly using Jwar, Rice Bajra etc.

Here, people are aware of giving medicine to their children and moderately large population visits hospitals for the treatment of their children on their own. In this region birth rate of children is very high as compared to other parts of the nation which leads to a large number of livebirths every year. Similarly the deaths of children is also high in the age group of 0-5 years. That is the rate of still births, age specific deaths and infant mortality are quite high compared to the other regions of the nation. Hence, it can be concluded that birth rate as well as death rate of children are very high in this region. Also, the problem of malnourishment is very severe.

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