Infant Health Status of Bastar - A case study of Dhurwa Tribe

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Abstract

The study aims to explore the infant health status in 'Dhurwa' a tribe of Bastar district in Chhattisgarh. Central India, which constitutes mainly of Chhattisgarh area, holds 31.1% tribal population of the country. The study also reveal that total fertility rate (per women), Sex ratio, Birth rate and Death rate are also very poor i.e. 2.26, 990, 27.4, 7.7. It's also fact that Infant mortality rate is very poor i.e. 60 per 1000 live birth. On the basis of these facts the present study conducted in Kamanar village of Darbha Block of Chhattisgarh. The Kamanar village is 32 km. away from the district headquarter Jagdalpur. The total population of these village is 1005 including Dhurwa and other population, but main population is Dhurwa. Information on all live births of ever married women (fertility history), demographic data and maternal and child health care was collected through structured scheduled. The average age at first birth was 16.2 years. Most of Dhurwa tribe women are illiterate, and almost all deliveries are conducted at home and untrained personnel and about half of these are assisted by trained personnel. Maternal age and education have substantial negative effect on infant mortality. The study showed a manifest association of demographic factors with infant mortality. The poor health delivery care systems remain an important barrier in tribal setting due to lack of means of transport and distance to medical facilities. Social, cultural, economic and environmental factors also affect infant health, especially during the post-neonatal period.

Key Words: Health, Infant, Dhurwa Tribe, Bastar, Chhattisgarh

Introduction

Infant and child survival is important parameters of health and development which are influenced by the socio-economic development and quality of life of population. It is also an outcome indicator of the utilization and effectiveness healthcare services. Worldwide about 8 million infants die annually before their first birthday (Population Reference Bureau, 2006).

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Each year, 10.7 million children under the age of five years die, out of them 4 million die during the first month of life. In the less developed countries, this account for 98 percent of reported neonatal deaths (Zupan, 2005). Vital indicators in India like crude birth rate (25.4), fertility rate (3.1) and infant mortality rate (61.47) has remained high as compared to developed countries and many developing countries (Sample Registration Bulletin, 2001).

In India infant mortality rate is 50 (rural 55, urban 34), and in state Chhattisgarh it is 54 (rural 55, urban 47). According to SRS Bulletin, Volume 45 No. January 2011, about 31.1% of Chhattisgarh was tribal population. Studies on various primitive tribes of the state have shown high crude birth rate, total fertility rate and infant mortality rates are found in Chhattisgarh (WHO, 2003; Census of India, 2001; Tiwari, 1984).

The infant mortality rate steadily declined from 26.0 per 1,000 live births in 1960 to 6.9 per 1,000 live births in 2000. But Chhattisgarh states has been facing great problem in reducing it due to poor socio-economic conditions. Socio-economic and environmental factors such as education, income, occupation, sanitation, supply of potable water, safe cooking fuel, type of house, crowding, separate room as kitchen etc and maternal and child health care factors affects utilization of maternal and child health services. The study aims to examine the socio-economic status and delivery care practices and their effect on infant mortality in Dhurwa tribe.

Material and Methods

A survey was carried out in Kamanar village of Dhurwa tribes scattered throughout in Darbha blocks of Bastar district, Chhattisgarh. A village was selected through Probability Proportion to Size (PPS) sampling procedure. Over all 100 households were surveyed in this village covering a population of 1005. The data was collected through structured scheduled in year 2011. The present study is based on a sample of 100 eligible Dhurwa women. Ever married women (including divorced, separated, widowed) in the age group 15-49 years from samples household were interviewed.

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Study Area

For the present study the field work is done in Kamanar village of Darbha Block, Bastar, Chhattisgarh.

Result and Discussion

The health of the mother and safe delivery, while being important in them, are also very important for health of the child. Maternal health has received much attention in Chhattisgarh. One of the important factors which has effect on the fertility level of women, at a greater extent in the literacy of the woman.

This is evident universally and India is not in the exception. It has been documented that earlier the age at first birth of a women, higher is the fertility level of the woman. Therefore, rising the female age at marriage which would lead to late age at first birth, make shortening reproductive span and lowering fertility level of a woman being considered as a major policy intervention to reduce the birth rates and also reduce the risks of maternal and infant mortality of a woman in a nation or a state.

The level of infant and child survival is one of the key indicators of the improvement of the quality of life and population stabilization. It has generally been assumed that factors that affect fetal and neo-natal death are primarily endogenous (i.e. biological or demographic), while those which affect post-neonatal deaths are primarily exogenous (i.e. socioeconomic).

Findings of survey show that maternal age playing significant role in infant survival.

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Demographic Profile of Chhattisgarh

Indicators	India				Chhattisgarh			
	2000	2005	2008	2010	2000	2005	2008	2010
IMR Total	**68**	**58**	**55**	**53**	**79**	**63**	**59**	**57**
IMR Rural	74	64	61	58	95	65	61	59
IMR Urban	44	40	37	36	49	52	49	48
Birth Rate Total	**25.8**	**23.8**	**23.1**	**22.8**	**26.7**	**27.2**	**26.5**	**26.1**
Birth Rate Rural	27.6	25.6	24.7	24.4	29.2	29	28	27.6
Birth Rate Urban	20.7	19.1	18.6	18.5	22.8	20	19.9	19.3
Death Rate Total	**8.5**	**7.6**	**7.4**	**7.4**	**9.6**	**8.1**	**8.5**	**8.1**
Death Rate Rural	9.3	8.1	8	8	11.2	8.4	8.5	8.5
Death Rate Urban	6.3	6	6	5.9	7.1	6.9	6.5	6.4

The Total Fertility Rate of the Chhattisgarh is 3.4 a little high above the National level of 2.9. The Infant Mortality Rate for the Chhattisgarh has come down currently to 57(2010) from previous figure of 59 (2008). In comparison with India infant mortality rate is 53(2010) and 55 in 2008 which shows in Chhattisgarh IMR is higher than India. However, total birth rate in 2010 is 26.1 in Chhattisgarh and 22.8 in India. The Maternal Mortality Ratio of 335 is slightly higher than the National average.

Distribution of Socio-Economic status of Study population

Characteristic of Household	Percentage
Nuclear	88%
Joint	12%
Average household size	4.9
Average age at marriage women	16 yrs

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Characteristic of Women	
Illiterate	54%
Literate up to primary	33%
Literate up to secondary	23%

Above table reveals that total numbers of nuclear family in study area are 88%, however joint families are 12%. The average family size is 4.9. It is also observed that from the above table the average age at marriage of women is very low i.e.16yrs. It is found that only 46% women are literate in which only 23% are got secondary level education and 33% got primary level education. Most of studied women population are illiterate i.e. is 54%.

Distance from the nearest Educational facility

Educational facility	Distance from the village			
	Within village	Within 3 Km	Within 5 KM	Above 10 Km
Primary School	✓			
Middle School	✓			
Secondary School			✓	
Higher Secondary School				✓
College				✓

In Kamanar village education facilities are not very good because only primary and middle school is in the village. And if the students want to secondary school education then they go outside of the village and that distance is about 5 Km. However higher secondary education and college level educational institutes are about 30 Km. those are far away from the study village

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and due to this region girls students have facing more problem for getting higher level of education.

Distance from nearest health facility

Health facility	Within village	Within 3 KM	Within 5Km	Within 10 Km	More than 10 Km
Anganbari (Community health centre)	✓				
Sub-Centre			✓		
Primary health centre					✓
Dist /Gov. hospital					✓
Private clinic		✓			
Private hospitals		✓			
Others		✓			

It is observed from above table that only anganbari centre is available in the village and sub-centre is away from 5 KM. The primary health centre (PHC) is in the Darbha which is 13 KM. away from the study village. However, a district government hospital is in the Jagdalpur city which is 20 KM. away from the village. Only unqualified private practitioners are available within 3 KM. which are first approaches for the villagers.

Mothers Health status

Age of Mother at the time of child birth			No. of alive child at present	No. of dead child	Total sample
17-21	22-25	25-above			
68	17	15	86	14	100

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In the study village mother health status are not well. 68 % mothers' age at the time of child birth is 17-22 yrs; only 15% mothers get birth at the age of 25& above. Out of 100 live births only 86 are alive at 2009-2010 (Source-sub centre, Neganar). Due to Mal Nutrition, Malaria, fever and other diseases 14 child are death before completing age at 5 yrs.

Causes of Death

Diseases					Total no. of dead child
Fever	Mal nutrition	Malaria	Major diseases	Other	
2	8	1	2	1	14

Total numbers of death children in Kamanar village in 2009-10 are 14. In which three are died from fever, two are mal nutrition, 3 are malaria, two are died due to major diseases and three are died to the other reasons like mothers drinking habits. This shows that about 14 % infant are died before completing age of 5 yrs.

Awareness about tetanus /folic Acid

You know about	If yes have you taken injection		Place
	Yes	No	PHC/Angabari
Tetanus	88	12	Anganbari
Folic acid	84	16	Anganbari

Mothers of study village are aware about their health and have sufficient knowledge about tetanus and folic acid. Anganbari and PHC play an important role to create awareness. In the studied village 88% women have taken tetanus injection and 84% women have taken folic acid

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tablets during pregnancy. Only those women are not taken any tetanus injection and folic acid tablets that go outside of the village or unaware about benefit of tetanus and folic acid.

Precaution taken /diet during pregnancy

Food taken in excess	Simple food taken	Green vegetables	Taken rest	Avoid hard work	Other if specify	Total sample
5	61	13	7	14	-	100

During the pregnancy most of the women of the study area are taken simple foods (61) which are easily available. Only those mothers take nutritional diets that are much aware about their health and nutrition during pregnancy. Most of the mothers are engaged in agricultural work so they do not take nutritional diets during pregnancy.

Conclusion

Demographic and socio-economic characteristics have a substantial negative effect on infant mortality. Poor socio-economic status, and their unique ways of understanding illness and health care. Communities can play an important role in this effort by encouraging pregnant women to seek prenatal care in the first trimester, which will ensure a better birth outcome. Efforts should be also made to increase the age at marriage, awareness of maternal and child health for reducing the infant mortality and improve demographic and socio-economic conditions of dhurwa families for reducing the infant mortality.

The health and nutritional education components required priority attention, message must be simple, locally relevant and convincing so that they are easily understood and accepted by all the tribals especially the women. An effective educational components would not only help to build up the capabilities of mothers to look after the health of their children, but also to break away from the traditional practices which continue to dominate the treatment and prevention of childhood diseases, antenatal care and breast feeding behaviour.

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