7.1. SUMMARY

The present study was conducted among the Santhals of Seraikea Kharsawan District of Jharkhand, India. Jharkhand shares its borders with Bihar to the north, Uttar Pradesh and Chhattisgarh to the west, Orissa to the south and West Bengal to the east.

Demographic interview schedule containing open ended and close ended questions on personal identification details, age and sex, education, occupation, attitudes, decision making, domestic violence, marital history and overall reproductive history was used. Data was collected from 1000 ever married women who are in reproductive age (15-49 years) from seven different Santhal villages. Data were cross checked by using secondary information for validation. Simple statistical tools were used in the present study.

The Santhals are the third largest tribal community of India after the Gonds and the Bhills respectively, with a population over 4.26 million. They are distributed in the East Indian states of Bihar, West Bengal, Orissa, and Tripura. The Santali language is part of the Austro-Asiatic family, distantly related to Vietnamese and Khmer. A few of the Indian anthropologists also believe that humans first came to India about 65000-55000 years ago. Historians believe that they were the ancestors of the most tribal communities residing in the eastern part of India (excluding hilly portions).

7.1. a. Socio-demographic Profile

The population pyramid of the present study has a broad base with tapering apex representing young and youthful population with high fertility, typical of developing countries. Males outnumbered females at ages 0-14 years and 65 years onwards which may hint gender preference among children and higher life expectancy among males.
Sex ratio of the present study (943.89) is slightly higher than the Indian average (940) but is found to be lower than Jharkhand, rural Jharkhand and rural India.

Dependency ratios of the present population (71.75) suggest that the Santhals are economically more active than the rest of Jharkhand and rural India but are having higher proportion of economically dependent persons than that of the Indian average (65.6).

The present population has a total literacy rate of 48.65 with male literacy rate of 62.25 and female literacy rate of 35.05. Both total literacy and sex-specific literacy levels of the Santhals of Jharkhand are found to be lower than Jharkhand and India. The number of females with primary education is higher than males but at the secondary and higher secondary levels, female literacy is substantially decreased in comparison to males. About 90% of all the female literates in the reproductive ages (15-49 years) have education only up to primary level.

60% of the women in the present study are housewives though their contribution to agriculture is immense. Entrepreneurship among women (0.2%) is very negligible as compared to men (5.60%). It may be inferred that women are expected to stay in the house and look after children and the domestic chores besides assisting their husbands in agricultural activities and animal husbandry, while men are expected to earn a living.

It is seen that the per capita annual income (PCAI) of the Santhals mostly ranges from ₹5000 to above ₹20,000. 57.26% of the total 826 households have income ranging from ₹10,000 to ₹15,000 per annum.

The mean age at marriage for men is ±24 years and that of women is ±18 years. 99.3% of all Santhal women are married by the age of 24 years while 91.5% of all their men are married by the age of 29 years. It has been found that many women (241) were married before the age of 18 years and as many as 39 men were married before the age of 21 years which is below the prescribed age as per the Hindu marriage Act, 1955.
As regards to decision making, women do take decisions in case of household expenditure, celebrations at home and the like but in case of financial matters they are generally not involved. In joint family set up, 52.10% of all decisions are arrived mutually while in nuclear families, 67.75% decisions are taken mutually by husbands and wives.

In the present study, there have been quite a few reported cases of physical, verbal and sexual abuses by husband on their wives. The major reason for such abuses is alcoholism which takes a toll on women’s lives and bear tortures at the expense of their husbands. Of the reported cases of abuses, verbal abuses (3.4%) seem to be the most frequent.

7.1.b. Fertility

The crude birth rate (CBR=35.06), general fertility rate (GFR=161) and total fertility rate (TFR=6.51) of the Santalas were found to be higher than that of rural India (CBR=24.1; GFR=108.6; TFR= 3.29), India (CBR=20.97; GFR=88.0; TFR= 2.62), rural Jharkhand (CBR=28.8; GFR=114.5; TFR= 3.5) and Jharkhand (CBR=26.9; GFR=105.4; TFR= 3.2).

In the present study infecundity is 2.7% and is highest in the age group of 30-34 years. It may be noted that both men and women can either be responsible for infecundity. As expected, the mean live birth is highest among those women who were married at ages 15-19 years, and the mean live birth gradually decreased with an increase in the age at marriage.

Maximum age at first conceptions are seen among women between 15-19 years (72.64%) followed by age group of 20-24 years (22.81%). The mean live birth is highest among women whose age at first conception was less than 15 years followed by those whose age at first conception was 20-24 years.

It is also seen that most number of successful conception has occurred in the age cohort of 20-24 years (98.83%) followed by 15-19 years (97.40%). The overall percentage of successful conception is 97.61%.
Summary and Conclusion

The 7th, 8th and 9th orders of pregnancies have the highest successful conception although the numbers of conceptions in these orders are very less. It can be inferred from the present study that the third order of pregnancy is most at risk followed by the first order for prenatal mortality while the subsequent orders of pregnancy appears to be more favourable for fertility.

The mean age at menarche is ±13.33 years. Menarche do not seem to have influence on fertility in the present study. The mean live birth is highest among women who had menarche at the age of 14 years and least among those who have attained menarche at 16 years.

Contraceptive methods are not popular among the Santhal. Only 1.2 % of the women were found to have used birth control measures (BCM) among whom the mean live birth is found to be higher.

The differential fertility between the literate and illiterate women can be clearly seen wherein 90% of all live births occurred to the illiterates whose population comprises about 65% of the total ever-married women. The mean live birth of illiterate women is 3.53, women with primary education is 0.95, with secondary education is 0.93 and higher secondary education is 1.0 showing clear inverse relationship between fertility and education.

60% of all ever-married women in the present population are housewives. Except for two women who are in business the average children born were highest (2.93) among the housewives.

The mean live birth is highest (4.35) among women whose PCAI ranges from ₹5001 to ₹10,000 followed by those in PCAI group of ₹15001 to ₹20000 (3.31). The mean live birth is subsequently decreased as the PCAI is enhanced with few exceptions in some income groups.

More than half of all Santhal women are found to be consuming alcohol. Among them, 27.4 percent reported consumption of alcohol even during their pregnancy. It is found that the mean live birth is highest (5.09) among those who are non-consumers of alcohol as compared to the consumers (0.98). Alcoholism thus has greatly reduced
fertility of the Santhal women and it has shown a strong negative relationship with fertility.

Smoking habit and tobacco consumption among Santhal women is high and the most common type of smoking is *bidi*. Mean live birth is much higher (3.06) among those women who are non-smokers, showing adverse effect of smoking on fertility.

Women who suffered verbal, physical and sexual abuses at the hands of their husbands have shown lower mean live birth (0.93 to 2.50) as compared to those women who did not face any kind of abuse (2.82). It is also observed that the mean live birth (6.12) is higher among couples where husbands are decision makers when compared to wives (5.25) who took major decisions.

Multivariate analysis has shown that the present age of mother has 45.9 percent influences on fertility. 4.5 percent variance of number of live births can be explained by age at first conception, 0.9 percent variance can be explained by age at marriage, 0.4 percent by smoking habit and 0.1 percent by age at menarche. These five variables are also found to be having statistically significant influence on fertility of the Santhals of Jharkhand.

### 7.1.e. Mortality

The crude death rate (CDR=6.10) and child mortality rate (CMR=6.21) of the Santhals are found to be lower while their infant mortality rate (IMR=62.11) and neonatal mortality rate (NMR=62.11) are found to be higher than the compared populations, i.e. rural India (CDR=7.8; IMR=55; CMR= 19; NMR=49), India (CDR=7.3; IMR=50; CMR= 18; NMR=44), rural Jharkhand (CDR=7.4; IMR=46; CMR= 15.2) and Jharkhand (CDR=7.0; IMR=44; CMR= 14.2; NMR=49).

In the present study, out of the total number of 88 reproductive wastages, 68 (2.32%) are prenatal deaths, 1 (0.03%) is neonatal death, 9 (0.32) are infant deaths, 6 (0.21%) are early child deaths and 4 (0.14%) are late child deaths.

Neonatal mortality is seen only in first order of birth. Higher proportions of postnatal deaths have been observed in the 2nd and 3rd order of pregnancies and no postnatal deaths are seen from 5th order of birth onwards. It has been observed that both
Summary and Conclusion

Prenatal and postnatal deaths occur only among mothers in the age group of 15-34 years.

Highest prenatal mortality is seen among women who conceive in age group of 25-29 years (2.78%) followed by those women whose age at conception was in the age group of 30-34 years (2.73%). There has been no case of induced abortion in the present study because of a cultural taboo among the Santhals who believe that children are like god. Neonatal mortality (0.09%) is seen in one of the conception which occurred in the age group of 20-24 years and infant mortality (1.75%) is highest among women whose age at first conception is between 30-34 years and no mortality is seen in women whose age of conception is above 34 years. However, there is an increase in the infant mortality with an increase in maternal age from 20 years onwards up to 34 years.

Among Santhals of Jharkhand 71.56% of all mothers who have given birth were illiterates who accounted for 87.15% of all conceptions and 61.76% of all prenatal mortality. Out of 20 cases of postnatal mortality, about 55% of it occurred to women who have primary education.

Prenatal and infant mortalities appeared to be higher among women whose income fall in low PCAI group of ₹5000-₹10000. Although no concrete pattern of influence of socio-economic status on prenatal mortality has been observed, postnatal mortality appears to have inverse relationship with PCAI.

In the present study prenatal mortality is found to be highest (9.52%) among those women who are in government service followed by daily wagers (4.84%) while the least is seen among those women who are cultivators (2%). Postnatal mortality figures are higher among women in government service and labourers and lesser among housewives and cultivators.

Among the Santhals, about 97% of all child deliveries took place in their homes. Normally locally trained dais and midwives assisted these deliveries. Santhal women availed modern medical facilities only in cases of pregnancy complicacies. This probably is the reason for higher proportion of postnatal mortality among hospital
born children. It may be noted that all 9 cases of infant mortality in the present study occurred among those deliveries conducted by dais and midwives. It is also found that 99.13% of all live births are outcome of normal delivery.

The general influence of morbidity on postnatal mortality among the Santhals of Jharkhand shows that malaria (35%) is the most common cause of death followed by a local disease known as horna (20%) and diarrhoea (15%). Fever, jaundice and other diseases accounted for 22% of all postnatal mortality.

It has been found that 50% of all postnatal deaths occurred among those children who have not been vaccinated at all. Postnatal mortality also appeared to have increased as the child vaccination status goes from complete to partial vaccination showing clear inverse relationship between vaccination status and mortality.

53.94% of women in the present study consume alcohol. It is seen that 73.52% of all prenatal deaths occurred to mothers who are regular consumers of alcohol. This suggests that prenatal mortality rates can be brought down if the alcohol consumption by the women and expectant mothers is reduced.

The Santhal women seem to use a lot of tobacco products like smoking bidis, chewing tobacco and others. Among 14.16% of the users 12.21% of the smokers have consumed tobacco even during their pregnancies. Prenatal and infant mortalities are found to be much higher among women who are smokers and users of tobacco.

31.25% of all conceptions to women who had undergone physical abuse and 10% of all conceptions to women who experienced verbal abuse by their husbands during pregnancy resulted in prenatal loss.

37.83% of 925 Santhal women believe in traditional medication and prefer to go to a shaman instead of a doctor. Occurrence of prenatal mortality among women who availed traditional treatment (shamanism) is almost five times more than those women who do not believe in shamans.
7.1.d. Maternal Health

Improper intake of IFA doses among Santhal women is probably due to the lack of awareness of the benefits of dietary supplements. 37.83% of Santhal women reported regular intake of IFA tablets during pregnancy. Women who occasionally took IFA tablets have reported some pregnancy related problems (32.14%) and post delivery problems (42.85%).

It has been found that 17.50% women who had problems during pregnancy, 22.72% women with problems during delivery and 4.54% of women who had post delivery problems have never undergone for any antenatal check-up during the entire pregnancy period. Women who regularly went for ANC had lesser problems during their delivery and apparently did not have any post delivery problems.

58.48% of women had never received any dosage of tetanus vaccine during their pregnancies while the rest received either complete (at least two doses) or partial (one dose) Tetanus vaccination. It appears that women who had received full doses of TT injections suffered most during their pregnancy and delivery than the rest. This however, is because most pregnant mothers seek medical treatments only in case of certain complications as there are no proper medical amenities within their reach.

In the present study, 64.21% of the women had never used any health care services during their entire pregnancy period. 15.78% women went to government hospitals during their pregnancies and 11.67% went to private clinics. 7.45% of the women went to the local vaid who is an RMP (regular medical practitioner) without an MBBS degree.

Basing on the reported health seeking behaviour data for last and last but one pregnancy maternal health of the Santhals appears to be quite grim as 86.37% of women have some or the other problems during their pregnancies. 49.4% of women in the present study reported to be anaemic during their pregnancy. General weakness and headache (12%) is the next common problem during pregnancy followed by swelling of hands and feet (5.94%) and joint pain (4.32%). This may be because intake of IFA tablets and antenatal care is very low among them owing to limited accessibility of health care services in the area.
Smokers and tobacco users were found to have encountered much more complications during their pregnancy and delivery than the non-users. A direct relationship between smoking and tobacco chewing and pregnancy related problems are observed among Santhal mothers. Among the users of alcohol, 30.51% women reported some pregnancy related and 28.16% reported delivery related problems.

There is an old traditional belief among the Santhals that honey, water or gripe water should be fed to the newborns. However, 89.37% of all live born infants were given mothers’s milk as the first feed. One-third of all Santhal infants received exclusive breastfeeding for at least six months which is the normally the prescribed duration by modern standards.

7.2. CONCLUSION

Fertility and mortality measures considered in the present study indicate an upward trend in fertility as most fertility indicators are higher than the national average while CDR is kept lower than the later. Promoting the levels of education of the Santhal women would prolong their age at marriage and further facilitate attainment of an adequate and sustainable family size. Lack of economic resources underpins women’s vulnerability to violence and their difficulty in extricating themselves from a violent relationship. Advocacy of contraceptive methods among the Santhals may control fertility levels to an extent which is commensurate to their socio-economic standards.

The family structure and its consequences for power and decision-making, domestic violence, alcoholism and smoking habit are the major socio-cultural factors affecting fertility. While the socio-cultural determinants of fertility have relevance for policy makers the change in these variables does not necessarily change fertility levels. The biological determinants, on the other hand, influence fertility directly. The change in one or more of these variables changes fertility unless another variable offsets the effect. This calls for an in-depth policy oriented demographic research for durable economic planning and family welfare.

The role of local traditional healers, priests and shamans in the society may be monitored in order to know their structural position and develop guidelines so as to
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curb common maladies and create a connection between traditional medication and modern medicine. Mortality among Santhals can be monitored by curbing the prevalence of common diseases like malaria and *horna* and by improving the sanitary habits. Accessibility, availability and utilization of health care services in the area are very poor. Maternal health in the present population needs to be promoted for providing basic and essential health amenities especially, infrastructure for ANC and PNC. On the whole, there is an urgent need to improvise health facilities in the area along with promulgation of health awareness and importance of education to ensure elevation of overall living standard of the Santhals.