Reproductive Health Challenges and Coping Strategies: A Study of Female Construction Workers in India

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This is to certify that the work presented in this dissertation entitled *"Reproductive Health Challenges and Coping Strategies: A Study of Female Construction Workers in India"* by "*Ananya Patra*", Roll Number 510HS303, is a record of original research carried out by her under my supervision and guidance in partial fulfillment of the requirements of the degree of *Doctor of Philosophy* in *Humanities and Social Sciences*. Neither this dissertation nor any part of it has been submitted for any degree or diploma to any institute or university in India or abroad.

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Dedication

This thesis is dedicated to
My parents…

Declaration of Originality

I, Ananya Patra, Roll Number 510HS303 hereby declare that this dissertation entitled *"Reproductive Health Challenges and Coping Strategies: A Study of Female Construction Workers in India"* represents my original work carried out as a doctoral student of NIT Rourkela and, to the best of my knowledge, it contains no material previously published or written by another person, nor any material presented for the award of any other degree or diploma of NIT Rourkela or any other institution. Any contribution made to this research by others, with whom I have worked at NIT, Rourkela or elsewhere, is explicitly acknowledged in this dissertation. Works of other authors cited in this dissertation have been duly acknowledged under the section "Bibliography". I have also submitted my original research records to the scrutiny committee for evaluation of my dissertation.

I am fully aware that in case of any non-compliance detected in future, the Senate of NIT Rourkela may withdraw the degree awarded to me on the basis of the present dissertation.

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Abstract

Reproductive Health (RH) is a key area of focus which can lead towards an overall empowerment of women. Better RH positively contributes in the process of human development and augments the socio-economic welfare of the population. Safe motherhood is a crucial aspect of reproductive health services. Adequate utilization of health care services during pregnancy and delivery ensures a healthy mother. With the rapid increase in construction sector, the number of female construction workers is growing. Prolonged working hours, strenuous work and unhealthy environment exposure among the female workers is making them more vulnerable to the health issues such as lower abdominal pain, irregular periods, prolapsed uterus, miscarriages, reproductive tract infections (RTIs) and sexually transmitted diseases(STDs).This study aims:(i) to explore the various problems related to reproductive health faced by the women workers in the construction sites;(ii) to examine the health seeking behaviour and coping strategies for various reproductive health problems; (iii) to assess the impact of workplace culture on RH problems and; (iv) to explore the impact of women's autonomy and experience of domestic violence on their RH decision making. The study was confined to the major construction sites present in the city of Bhubaneswar, Odisha. A total of 288 sampled respondents were randomly selected from ten different construction sites of the city. The key finding indicates that the prevalence of RTIs/STIs morbidity is widely present among women in the age group of 15-49 years. The nature of harassment reported was more of verbal by nature than physical or sexual. Among the respondents (81%) of women workers reported that generally contractor shouts at them and the behavior is also same towards the other workers also. Moreover, the female workers feel that they do not get sufficient leave while unwell as they have to join the work to sustain their family. Unwillingness to seek treatment, cultural stigmatization was quoted to be the major reasons for not availing health care facilities by these workers. Women's experiences of different forms of domestic violence leading to several levels of emotional and physical trauma were found to significantly diminish their antenatal health. Moreover, availability of social protection mechanism among these female construction workers to a large extent can solve the issue of unmet needs of RH. The findings of the present study will help in addressing the challenges faced by the female construction workers and to cater the growing healthcare needs of this segment of the population.

Keywords: *Construction workers, Reproductive Health, Harassment, Health seeking behavior, Antenatal Care, Autonomy, Domestic Violence*

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List of Acronyms

AFR	African Region
AMR	Region of Americas
ANC	Antenatal Care
BPL	Below Poverty Line
EMR	Eastern Mediterranean Region
ILO	Indian Labour Organisation
MDG	Millennium Development Goals
MMR	Maternal Mortality Rate
NFHS	National Family Health Survey
NGOs	Non-Governmental Organizations
OBC	Other Backward Classes
PNC	Post Natal Care
RH	Reproductive Health
RTIs	Reproductive Tract Infections
SC	Scheduled Caste
SDGs	Sustainable Development Goals
SEAR	South – East Asia Region
ST	Scheduled Tribe
STDs	Sexually Transmitted Diseases
UN	United Nations
WHO	World Health Organization
WPR	Western Pacific Region

Chapter 1

Introduction

1.1 Introduction

Women perform the crucial responsibility of giving birth to a child and therefore have special reproductive health needs. Reproductive health is a state of complete physical, mental and social well-being, and not merely the absence of reproductive disease or infirmity. Reproductive health deals with the reproductive processes, functions and system at all stages of life (WHO, 2002). The International Conference on Population and Development (ICPD) Programme of Action (PoA) states that "reproductive health ... implies that people are able to have a satisfying and safe sex life and that they have the capability to reproduce and the freedom to decide if, when and how often to do so. The burden of poor reproductive health is applicable to women across all age groups, from infancy to old age, in the form of female genital mutilation, infections of the reproductive tract, anaemia, malnutrition, sexual violence, unwanted pregnancies, infertility, cancer, sexually transmitted diseases, etc., all of which might cause heavy suffering in them.

Women undergo varying experiences in relation to their reproductive health, based on numerous factors such as their socioeconomic status, family background and support system and availability and accessibility to fundamental healthcare facilities (Chandra et al., 2005).Despite efforts made by international organisations like the World Health Organisation (WHO) to improve the outlook for women from all economic strata, evidence suggests that many women, especially those who reside in poorer and developing countries are falling victim to inefficient reproductive healthcare systems, sometimes losing their lives in the process (Glasier et al., 2006).

While all women should be able to access the same resources in order to avail of the best care for their reproductive health, the harsh reality is that women often are unable to attain even basic medical assistance for themselves (WHO, 2009). Some women and their families may not be able to afford private medical and hospital facilities, which can become extremely expensive. In these cases, women rely on traditional methods to maintain their reproductive health, including folk cures and remedies as well as the use of

traditional healers and midwives. While such measures have been used for many years, they are often met with variable success and may be detrimental to the health of the woman as well as of her child.

In developing countries, statistics indicate that close to, if not more than half of the female population does not receive formal medical care during childbirth. In such situations, a woman runs the risk of infections, hemorrhaging, losing her child and even death. Given the evidence that supports the need for improved reproductive healthcare for women, especially those in developing nations and from weaker socioeconomic sections of society, the current study sought to examine the reproductive healthcare challenges and the coping strategies used by female construction workers in India.

1.2 Construction sector of India

In India and other developing countries, a majority of labour pool are engaged in the informal sector. Keith Hart was the first person to introduce the term "Informal Sector" in the report on "Informal income opportunities and urban employment in Ghana" in Institute of Development Studies (IDS) in September, 1971. The distinction between formal and informal work was based on whether the activity entailed wage or self-employment (Hart, 1973).Thereby, the concept of informal sector proposed by Hart was narrowed down only to self-employed individual workers. Although the concept had some limitations but it incorporated activities that was previously not included in the theoretical models of development (Swaminathan, 1991).However, in Indian statistical records, there is no official documentation of informal sector (Kalyani, 2015). The unorganized sector was defined by the National Accounts Statistics (NAS) in addition with other partnership enterprises, run by cooperative societies, trust, private and limited companies (Bairagya, 2011).

The majority of the workforce in India and other developing countries work in informal sector. Keith Hart was the first person to introduce the term "Informal Sector" in the report on "Informal income opportunities and urban employment in Ghana" in Institute of Development Studies (IDS) in September, 1971. Hart distinguished formal and informal income opportunities on the basis of whether the activity entailed wage or self-employment (Hart, 1973). Therefore, the concept of informal sector used by Hart was limited to small self-employed individual workers only. Although Hart's concept of

informal sector had some limitations, the introduction of this concept made it possible to incorporate activities that were previously ignored in theoretical models of development and in national economic accounts (Swaminathan, 1991).

In Indian official statistical documentation, there is no mention of informal sector. However, informal/unorganized sector has a predominant place in the Indian economy in terms of its contribution to the GDP and employment (Kalyani, 2015). Later, in a survey conducted by NSSO, the informal sector is defined as the enterprises comprising of all unincorporated proprietary and partnership enterprises (Mitra, 2001). However, National Accounts Statistics (NAS) defines the unorganised sector in addition to the unincorporated proprieties or partnership enterprises, includes enterprises run by cooperative societies, trust, private and limited companies. The informal sector can therefore, be considered as a sub-set of the unorganised sector (Swaminathan, 1991).

Construction workers represent all the labourers, men and women, working for builders, owners, contractors, government and private enterprises, involved in construction, maintenance as well as allied activities (Vaid, 1997). In India, the construction industry forms the second largest (Laskar & Murty, 2004), following the agriculture sector. The construction workers can be categorized into two groups: contract and casual labour, the former being semi-permanent with the latter group being temporary (Pandey, 1998).

1.2.1 Problems of unorganized sector

The unorganised sector has failed to receive many of the advantages that employees who work in the organised jobs obtain. Unorganized labour is frequently marked by its lack of organization, dependency on physical work than machines, long hours, low level of production, unsafe working conditions, non-existent work records, no chances for permanent employment and employment without social security, insurance, pension or any kind of protection (Pandey, 1998; Kabir, 2016). It is noteworthy that a large percentage of the total labour in various parts of the developing countries works for the unorganized sector (Carr & Chen, 2002; Nandal, 2006), especially women, emphasizing the large number of individuals living through the socioeconomic hazards of the unorganized sector. For instance, manipulation of employees and differential wage rates are common among workers of the construction sector. It is not unusual to find workers

of all age groups performing similar tasks under the same conditions, however, for different wages. Construction site workers are also exploited without being offered even the very basic facilities for living such as proper shelter, sanitary facilities, medical facilities, etc. (Thippaiah, 1989;Deshpande, 1999; Pandey, 1998; Sethi, Ghuman & Ukpere, 2010), mostly due to the absence of a proper legislation in place to oversee the proceedings of such unorganized employment sectors.

A distinct problem related to the unorganised sector is that the workers in these jobs remain unseen and unheard. For all practical purposes, these workers become invisible. In fact, even the primary identification and definition of this employment sector becomes a challenge. While the large number of workers who are employed in unorganised jobs indicates that this sector is vital to a nation's economy, the working conditions and problems faced by unorganised workers are often ignored. As a result of this shortcoming of existing research and information, the present study has investigated the issues that are faced by this group of employees, which has contributed to their susceptibility. The problems that workers in the unorganised sector face are discussed in the following section.

a. Job Insecurity

Job insecurity is a significant problem that is faced by workers in the unorganised sector. Evidence suggests that individuals employed in unorganised jobs tend to take up multiple employment opportunities. This propensity to take up more than a single job ensign the uncertainty in the workplace. Unorganised jobs may not result in the same financial yield and income opportunities as formal occupations. For this reason, workers who fall in the unorganised sector tend to undertake more than one job, finding that a single position may not give them sufficient income to survive (Rani & Belser, 2012). The lack of work leads to poverty and can contribute to a shortage of other amenities as well, including sufficient food (Kundu & Srivastava, 2007). This is a clear indication that employment in some unorganised jobs, such as agriculture, jobs are not available throughout the year (National Commission for Women, 2005). According to India's Mahatma Gandhi National Rural Workers Employment Guarantee Act of 2005, to improve the livelihood and socioeconomic scenario of individuals hailing from the economically weaker sections of society, workers who are capable of manual labour are assured a minimum of 100 days of employment (National Commission for Enterprises in the Unorganised Sector, 2006).

However, this has not been realised in the informal sector and employees often find that they are threatened by a potential loss of their livelihood.

b. Problems with Wages

Individuals who are employed in the unorganised labour sector receive their wages on an irregular basis, often getting paid following a day-to-day approach. Workers who employed in the unorganised sector are at the risk of suffering from a lack of protection and smaller income than other groups of employees. A distinctive problem faced by employees among this sector is the absence of a consistent salary organisation in the different states and union territories that make up the nation (Government of India, 2013).

c. Duration of Working hours

Workers who are employed in the unorganised sector often encounter lengthy working hours and schedules, which have a deleterious impact on the lives of these employees. Spending an increased amount of time at work prevents an individual from participating in necessary social activities and bonding with their family members. This broadly affects all workers but specifically harms women employees. Women face difficulties in engaging in community sociocultural events. In fact, they may become so engaged in work-related activities that they are unable to avail of adequate childcare (Patel & Kiran, 1995). Although existing legislation specifies that adult workers in India should not be required to work for more than 48 hours a week, unorganised workers frequently need to work for longer than that time (Mohapatra, 2012).

d. Poverty

Unorganised workers are faced with reduced wages and more poverty when compared to workers employed in formal professions (Kannan, 2012). Therefore, they find it harder to obtain the items that they need in their day to day life. If we look at the rural scenario, the socially defined roles and status of women and men in society, and their relative power play an important role in determining the reproductive health of the two. Socio-cultural factors like poverty, low literacy and lack of awareness among women are also determinants of poor reproductive and child health. They lead to morbidity and mortality among mothers, infants and children (Papp et. al. 2003)

e. Occupational hazards

The unorganised sector is riddled with health risks and occupational hazards that are the result of poor nutrition (owing to the low income) or consistent physical labour. When a worker becomes sick, they often lack the financial resources to fund their own healthcare, causing them to either avoid it in its entirety or amass a large debt as they attempt to pay for the facilities that they need. Using unsafe machinery can lead to bodily injury (Patel & Kiran, 1995) and workers in the unorganised sector often face diseases (National Commission for Enterprises in the Unorganised Sector, 2007).

Workers in such environments often suffer from unhygienic working conditions, sometimes facing an absence of even adequate toilet facilities (Mohapatra, 2012). Workers in this sector may lack provisions for medical insurance and savings that would improve their ability to afford healthcare. Owing to the in-affordability of healthcare measures, workers in the unorganised sectors often struggled to pay for medical necessities and were either unable to pay for them or landed in debt as a result of it (Report of Second National Commission on Labour, 2002; National Commission for Enterprises in the Unorganised Sector, 2006).

f. Other problems

Employees of the unemployed sector face a bevy of difficulties, ranging from no social security to absent relationships between the employer and employee. A principal disadvantage faced by workers in the unorganised sector is the lack of concrete social security options, enabling these individuals to survive in times when they are unable to work. The jobs available in the informal sector do not offer much in terms of job security to older employees. Employment options, such as Provident Funds, may not be available to workers in informal jobs. Additionally some jobs, such as agriculture, require large amounts of physical strength, which are absent in older employees, thus reducing the number of jobs that are available to these individuals. Migrant workers also fall under the unorganised section of employees and they face a large number of problems including reduced rights and a shortage of basic amenities.

Relationships between employers and employees are also strained in such situations. This occurs due to multiple reasons, such as the tendency of one worker to adopt multiple jobs and work for numerous employers (Advani & Saini, 1995). Additionally, many employees opt for work-from-home jobs, as they are more convenient, especially for women. While this frustrates employers, it can also create

tangible problems for the employee as they may fail to receive specific benefits owing to their frequent change of jobs.

1.2.2 Situation of women construction workers in India

Among such unorganized labour, women and children form a vulnerable group facing varied threats of exploitation, owing to several reasons such as their minority, illegal status of immigration, etc. Thippaiah (1989) found that most of the women labourers working in unorganized sectors were migrants who had left their birthplaces due to lack of economic opportunities. Nandal (2006) pointed out that construction sector thrived from such migrant workers and that most of them employed in construction sites were immigrant women. The vulnerable women working as construction workers in India are being exploited at several levels. To begin with, the strenuous work carried out by them in construction sites pose serious health implications (Deshpande, 1999; Singh & Asgher, 2005). Exposure to heavy physical work, poor workplace hygiene, overcrowded living, etc. can lead to reproductive health issues such as irregular periods, miscarriages, prolapsed uterus, infertility, etc. (Nesse & Williams, 2012). However, owing to the fact that these women are migrants and are in a vulnerable state, their health requirements are often ignored by the employers, by the family as well as by themselves.

Adding to the injustice is the fact that in spite of the similar nature of work and extent of hardships experienced by both men and women construction workers, the salary offered to women labourers is often less when compared to their male counterparts (Anker, 1997; Ghothoskar, 2003), just enough to help their sustenance. Sethi et al. (2010) in her study among migrant workers of Patiala city observed that a handful of the workers skipped their meals for the purpose of cutting down on expenses and remitting money back home to their families, in spite of their long working hours.

Due to their financial insecurity, the women working in unorganized sector become more vulnerable to physical harassments, sexual gestures and misbehaviour from contractors and co-workers (Anvekar & Manjunatha, 2014), forcing them to provide sexual favours and endure forced relationships, which apart from emotional trauma, also leads to additional reproductive health challenges such as incidence of sexually transmitted diseases. High levels of poverty among them supplemented with ignorance and illiteracy make them most suitable for mistreatment. Besides, their active role in

remuneration, the women also perform the added responsibility of child bearing and rearing, amidst all the perils of exploitation (Singh& Asgher, 2005).

However, women continue to seek employment as construction workers, mainly due to lack of alternate options as well as lack of transferable skills among them, ultimately resulting in their occupational immobility. Fisher (2007) pointed out that construction workers often begin at bottom levels and move upwards in the hierarchy of workers. The engineers appoint contractors, who in turn hire skilled and semi-skilled labourers to supervise and extract responsibilities from a group of unskilled labourers working at the construction site. While the men construction workers have the opportunity of moving up the hierarchy and eventually gain the position as supervisors, the women labourers continue to serve their roles within the male dominated sector (Baruah, 2010). Ghothoskar (2003) rightfully pointed out that construction industry epitomized the model of male bread winner, denying the right to career growth for women at work. The aim of employers to extricate much work for less pay might also be a reason for such gender discrimination (Basu, 2003). Researchers such as Pandey (1998), Khera & Nayak (2009), etc. pointed out that women continued to work in unorganized sectors, in spite of the gender discrimination and exploitation, to sustain their family.

1.2.3 Construction sector in Odisha

A few studies have been conducted with regard to unorganized women labourers of Odisha. Samal (2008) observed that migrant women working in unorganized sectors were below the poverty line and that the wages received by them did not satisfy the minimum requirements prescribed by the government of Odisha. Tripathy (1996) who assessed women engaged in construction work in Ganjam district of Odisha observed that the women lacked security, facilities, experienced mistreatment, were expected to work for long hours and were worked till maximum physical exertion.

In general, service sector, of which construction sector is a component, contributed about 45% to the total economic activities of Odisha in the financial year 2016-17. Construction sector made a valuable contribution to the overall Gross State Value Addition (GSVA) of Odisha in 2016-17, to the tune of about 7.4 percent, i.e., Rs. 25,73,235 lakhs and a net contribution of Rs. 24,23,566 lakhs, and is expected to contribute about 7.18% to GSVA during 2017-18, i.e., to the tune of 24,41,801 lakhs.

The overall share of the sector in the Gross State Domestic Product (GSDP) is about 8% and it has expanded at a rate of 6 percent during 2016-17, but the growth is expected to be moderate, i.e., around 4.6% during 2016-17. A detailed picture of the construction sector of Odisha has been presented in Table 1.1.

Table 1. 1: Contribution of construction sector of Odisha to GSVA

Indicator	**2012-13**	**2013-14**	**2014-15**	**2015-16**	**2016-17**
Share in GSVA (%)	8.32	8.25	8.11	7.80	7.39
Share in GSVA (Rs. in lakhs)	20,74,164	23,14,669	23,94,151	23,92,253	25,73,235

Source: Economic Survey of Odisha, 2016-17.

At present there are about 18.11 lakh registered construction workers in the state according to the membership details of the Odisha Building and Other Construction Workers Welfare Board which strives for the safeguard of the construction workers' interests; however, the total number of construction workers could be much higher as it is a significantly unorganized sector. This is justified by the observation that as on 2011-12, the number of individuals working in the construction sector of Orissa was 112 individuals out of every 1000 rural and urban people put together, which amounts to about 12% of the total population of the state, which is 41.94 crores according to Census 2011 data. Table 1.2 provides a clear picture of the trend of labor participation in the construction sector, which indicates that the participation of rural people in the construction industry is higher than urban individuals.

Table 1. 2: Work force participation in construction sector of Odisha

Indicator	**1993-94**	**1999-00**	**2004-05**	**2009-10**	**2011-12**
Rural Work Participation per 1000 people	18	32	55	96	123
Urban Work Participation per 1000 people	57	101	105	134	100

Source: NITI Aayog, Handbook of State Statistics, 2017.

1.3 Review of literature

Women's health in general is very much important for a safe motherhood,

childbearing and issue relating to contraceptive use. The Reproductive behaviour of women is often affected by several factors like education, subsistence, hygiene practices along with their socio-economic environment. In the year 2009, the WHO (2009) reported a worldwide statistic of 100,000 deaths of women per year due inadequate maternity healthcare, suggesting a decrease in the worldwide maternal mortality of women. According to WHO (2018), 830 women die every day from causes related to childbirth that could have been prevented and 99% of these deaths took place in developing counties. It is also shocking that nearly half the deaths that took place among children below five years of age in India encompassed infant death (WHO, 2009), a significant consequence of inadequate postnatal care received by the women. Bandyopadhyay (2009) in their study pointed out that nearly 10% of the infants in India experienced death even before they turned one year old, mostly due to insufficient care during the first few critical hours after birth of the child. Specifically, neonatal infections was found to be the reason for neonatal death in 52% of the cases, asphyxia while birthing in 20% of the cases, critically low weight and other anomalies in 15% and 13% of them respectively (Planning commission, 2002). According to Sinoj & Mishra (2012), based on a statistical report by the Ministry of Health and Family Welfare in 2003, among the 30 million women reported to be pregnant every year, only 27 million achieved live birth of the baby. The 3 million unsuccessful births have been attributed to maternal and new-born mortality.

According to WHO (2018), maternal mortality is enhanced among rural communities. Even though the mortality rate of women related to maternity has reduced by 44% between 1990 and 2015, the number of maternal deaths occurring in the present date is still unacceptably large when compared to the target of the UN to bring about a reduction of 70% in maternal deaths before 2030 (WHO, 2018). This is mainly owing to the negligence of healthcare services prevalent among rural women and even among women from urban areas, which can be attributed to a multitude of social, economic and cultural factors and factors related to decision making, empowerment, autonomy, etc.

The healthcare and facilities that a woman seeks are dependent on several factors, including her socioeconomic status and cultural factors. A woman's reproductive health seeking behaviour can be largely divided into both antenatal and postnatal care, referring to the type of healthcare that is received both during and after pregnancy (Elizabeth, Khan

& Rashid, 2015). Antenatal care (ANC) is the healthcare that an expecting mother receives during the pregnancy period. This can include a number of factors, such as medical advice about nutrition and diet as well as regular examinations about the health of the developing fetus. Postnatal care (PNC) is afforded to a woman after the delivery of her baby and helps to ensure both her and her child's health. Studies indicate that this behaviour is still limited, especially in developing countries, where women's awareness of and access to vital medical facilities are limited. For instance, when the reproductive health measures that were carried out among women in Bangladesh were examined, it was seen that a significant portion of the studied population did not receive basic ANC, did not consume important nutritional supplements and opted for at-home medical care.

A number of factors are found to affect a woman's reproductive health seeking behaviour, such as caste, income and an individual's opinion about the available healthcare facilities. Women who reside in rural communities and societies tend to be less likely to opt for the use of reproductive healthcare facilities. In fact, evidence highlighted a substantial difference in the odds of a woman from a rural household and an urban household seeking reproductive healthcare (Chowdhury et al., 2007). A study focussing on Bangladeshi women and households found that women who hailed from urban households and families, who were educated and who were financially more stable showed an increased tendency to seek reproductive healthcare for themselves.

Additional factors can also play a significant role on women's health-seeking behaviour, including the mindset of the woman's family and cultural factors. Women, especially those living in rural households, have encountered a number of obstacles when they attempted to attain essential reproductive healthcare (Yakong et al., 2010). Responses that were collected from a population of women in Ghana indicated that women often felt intimidated and insulted by the staff in clinics, creating an aversion that impacted their tendency to avail of these services. Some of the key limiting factors included a poor attitude of the clinical staff, inefficient infrastructure and insufficient reproductive healthcare information and knowledge. Such factors had a significant impact on the mindset of rural women and tended to prevent them from actively seeking and availing of reproductive healthcare.

Reproductive health is one of the important aspects of human health and has been accorded considerable attention in global health care discourses (Bloom, 2001). This

issue attains particular significance in the case of women, wherein aspects of reproductive health, such as menstruation, childbearing, post-natal care and infertility are often perceived from a sociological viewpoint in many developing countries of the world (Patel et al., 2006). Unlike that of men, women's reproductive health involves a variety of considerations, such as control of fertility, safe childbearing, pre and post-natal care, infant care, prevention and regulation of reproductive tract infections (Das et al., 2018). Reproductive health can many a times influence the very existence of women and thus needs to be considered with utmost care and objectivity.

Notwithstanding its importance in women's life, reproductive health has not received adequate attention, especially in the developing countries of the world (Ahmed et al., 2006). On average, about 30 percent of female deaths in poor and developing countries occur due to inadequate reproductive health practices, of which a good number die of the reproductive tract and sexually transmitted infections (Elizabeth et al., 2015). On an average, about 25% of the married Indian women suffered from one reproductive ailment or the other, which, if untreated could translate into full-blown infections (Kowsalya & Manoharan, 2017). However, despite the sorry state of female reproductive health, it is disturbing to note that as low as 30% of the women suffering from reproductive diseases try to get required medical care, while the others either ignore or succumb to the ailments (Manna &De, 2011). In this connection, encouraging women to seek medical intervention is as important as ensuring prevention and control of reproductive diseases.

In case of Indian women, the reproductive health care seeking behaviour is more or less a culturally defined phenomenon in spite of being a purely health related issue (Kowsalya & Manoharan, 2017). Several socio-cultural, environmental, economic and personal factors come into play in determining the extent to which Indian women seek medical intervention for their reproductive issues (Patel et al., 2006). While ideally, every expecting mother deserves basic, safe and professional pre and post-natal (pregnancy) care, it is not the case in the real world situation. While the issues related to childbearing are at least discussed in the family, other aspects, such as menstrual hygiene and contraception are conveniently ignored (Mohindra et al., 2006).

The idea of right to equality, self- determination and human dignity forms the base for feminist's while advocating reproductive rights for women (Correa et. al., 2004).

Therefore, the women's right to reproductive freedom is usually based on three fundamental principles which are - liberty that guarantees their freedom of action; utility that advocates moral righteousness; and justice, which gives them equal access to necessary goods and services (Rhode, 1991).

The important aspect of empowerment of women is the ability of women to make decisions that affects their lives. The NFHS -3 (2005-06) reported that about one third of women mostly take the decision about daily household purchases by themselves. Only 27 percent of currently married women make decisions about their own health primarily. In developing countries about one third of women in the age group of 15-44 years are affected by reproductive tract infections, child birth, abortion and other pregnancy related deaths (World Bank, 2003).Poverty, lower social status and negligence about reproductive rights expose women to a high health risks. These health risks results in death of many women's and girls' during reproductive period and only can be avoided by improvement in reproductive health care (Tinker, 2000).

Different developmental concepts of population, health and nutrition are now recognising gender and their social construct roles as one of the determinant of reproductive health of men and women (Vlassoff & Moreno, 2002). Various researches indicate that empowerment of women has a positive influence on reproductive behaviour of women such as knowledge about contraceptive practices, gynaecological disorders and other child health issues (Blanc, 2001). A qualitative analysis from a study on rural Bangladesh highlights the how the perseverance of social norms affects the quality of life as well as health outcomes from one generation to another generation. The conservative idea of women's social position often poses a hindrance for the mobility of women in the male dominated society (Interagency Gender Working Group, 2005).

1.4 Factors influencing reproductive health seeking behaviour of women

1.4.1 Cultural factors

Several cultures, owing to the norms and values preached by the culture, such as seclusion norms, gender bias, superstitions, social taboos, etc., deprive women of their socio-cultural and economic status, making them silent sufferers in the face of hardships.

The quality of life led by these women is often poorer when compared to their men counterparts. Women in such cultures are trained to focus on the satisfaction of male members of their families and to place others' needs such as the needs of their children, elderly family members, etc. before their own. As a result, they often lack the time or willingness to care for their own selves and therefore ignore their health needs. Blanc (2001) emphasized that women, when made powerless in sexual relationships, exhibited more propensity for reproductive ill-health.

Owing to such cultural reasons, the women lack awareness on various health issues and continue to indulge in incorrect reproductive health practices such as adolescent marriage, indifference for family planning, closely spaced pregnancies, resisting professional help during delivery, etc., resulting in maternal morbidity and mortality (Khan et al. , 2008; Lal, 2015). Such women, in spite of healthcare services being available to them, exhibit reluctance in accessing them.

For instance, Akeju et al. (2016), on studying Nigerian women reported a strong faith among these women for traditional medicine. The women were observed to prefer prayer houses and traditional birth attendants over hospital delivery. The researchers also found that these women patronized the traditional providers mainly because of the healthy interpersonal relationships made possible by them and also because of the much reduced expenditure associated with traditional medicine. A similar study conducted by Dako-Gyeke, Aikins & Aryeetey (2013) observed that women of Ghana sometimes feared spiritual attacks during pregnancy, that such attacks might lead to miscarriage, driving them to consult herbalists instead of professional healthcare providers since medicines from the latter were believed to weaken the pregnant women. Another study by Kifle, Azale, Gelaw and Melsew (2017) conducted among women of Ethiopia found that women who were Muslims exhibited severely minimal preference for institutional delivery as well as for postnatal care utilization when compared to women of other religions. These women avoided healthcare institutions in the fear of being attended by male healthcare providers.

Choudhry (1997) conducted an elaborate study on the various traditional practices followed among Indian women related to childbirth. For instance, it was observed that consumption of hot/cold food had its implications on childbirth and nutrition of the child. Most of the women were found to believe in spiritual concepts such as the 'evil eye' and

were found to perform rituals to ward off such spirits. Incorrect reproductive health practices such as preference for male child, for traditional birth, for herbal formulae, isolation of men from matters related to pregnancy, strict confinement of women post-delivery, belief in delayed breast feeding, believes against feeding colostrum, etc. could be observed by the researcher among Indian women.

In a similar research conducted by Wells & Dietsch (2014) among Indian women of Australia observed the following recurrent themes among Indian women: the concept of childbirth was accepted only in the context of marriage; the women altered their diet based on the assumptions of Ayurveda that pregnancy disrupts the energy balance in a person, which can be amended through the consumption of specific herbs; abandonment of placenta and confinement of mother as well as the child as they were considered to be polluted; assumption that colostrum was impure. Bandyopadhyay (2009) also observed that this concept of pollution prolonged breast feeding among women of West Bengal and drove them to introduce supplements for the new-born even before six months of age, thereby indicating poor postnatal care of the new-born due to traditional beliefs.

Therefore, the different sociocultural practices associated with women of different groups can influence their right to utilization of maternal healthcare and thereby have a strong impact on their reproductive well-being.

1.4.2 Socio-economic factors

Researchers on studying the individual perspectives related to reproductive healthcare have emphasized a few social factors and economic factors to be capable of influencing reproductive health of women, such as inequalities in their education, personal income level, decision making autonomy, social capital, social status, race, etc. (Kawachi, Kennedy, Gupta & Prothrow-Stith, 1999; Pillai & Wang, 1999; Driscoll, Biggs, Brindis, &Yankah, 2001; Aggleton & Warwick, 2002; Rani & Lule, 2004; Murthy & Klugman, 2004; Maternowska, 2006; Pillai & Gupta, 2006; Kawachi & Wamala, 2007).

For instance, Kawachi, Kennedy, Gupta & Prothrow-Stith (1999) who observed the political participation, autonomy, income and perceived reproductive rights of women, found that an enhancement in the four indices significantly reduced their maternal mortality and morbidity rates. Pillai & Wang (1999) on studying the reproductive rights exercised by women of developing countries categorized them into

two dimensions: right of women for legal abortion and right for divorce and marriage, emphasizing the role of socioeconomic status of women in enhancing their reproductive health. Driscoll, Biggs, Brindis, & Yankah (2001) conducted a review of literature on the reproductive health of adolescent aged Latino women and observed that socioeconomic standing of the respondents, their nationality of birth, dependency load, ability for acculturation, etc. determined their sexual health aspects and care seeking behaviour.

Rani & Lule (2004) observed that when women's personal income level was low, incidence of unexpected pregnancies were high, however, their awareness of sexually transmitted diseases, inclination to use contraceptives and to seek reproductive healthcare centres was low, leading to serious reproductive health concerns. Murthy &Klugman (2004), studied the influence of community participation of marginalized group of women on their utilization of public health services pertaining to maternity. The researchers highlighted that this group of women were under-represented and suggested establishment of community health structures, financing and decentralization as vital aspects for ensuring enhanced participation of this group of women.

Maternowska (2006) studied inequalities in reproduction of women and identified a multitude of factors affecting factors such as uptake of contraceptive, healthcare utilization, etc. For instance, the researcher attributed selection of contraceptive methods to the extent of knowledge of the women. Haitian women's indulgence in transactional sex was attributed to their employment needs by the researcher. Power plays related to gender were identified as a barrier affecting reproductive healthcare utilization of women. It was also identified as a reason for incidence of sexually transmitted diseases as the masculinity of men was associated with their sexuality encouraging relationship of men with multiple partners. The social hardships undergone by the women and their economic insecurities were also found to influence the care received by the new-born, such as their nutrition, vaccination, etc.

Pillai &Gupta (2006) proposed a reproductive health model at international level and established that enhancement in human rights, gender equality, personal rights for reproduction and right for abortion among women resulted in better reproductive health in terms of better maternity benefits, overall fertility rate of women, mortality rate of women and infants, etc. and ultimately, their overall reproductive health. In a similar context, Ensor & Cooper (2004), Saleem & Bobak (2005), Panda & Agarwal (2005), Finer

&Henshaw (2006), etc., found that when women were given the opportunity of education, their utilization of maternal care, contraceptives, etc., tendency to seek healthcare related information and successful reproductive outcomes increased while undesired consequences of vulnerability such as unintended pregnancies, victimization through domestic violence, etc. reduced. Such enhancements can be attributed to their increased willingness to seek personal goals and to seek a better quality of life (Pillai & Wang, 1999). Researchers, apart from conducting such micro studies, also examined the macro level socioeconomic perspectives related to reproductive health of women, at population level, to understand the adequacy of health policies, social policies, awareness of human rights among vulnerable women, etc. (Becker, 1996; Aggletion & Warwick, 2002; Pillai & Gupta, 2006).

Researchers such as Sen (1999), Pillai &Wang (1999), Datta & Misra (2000), etc., pointed out that women's reproductive health, especially among women of developing countries, was majorly dependent on their level of empowerment, i.e., their power struggle in the male dominant society, their availability and accessibility of personal resources can be major determinants of the gender inequality prevalent in healthcare utilization. Kawachi & Wamala (2007) studied globalization as a factor influencing women's reproductive health in positive as well as negative ways. The researcher emphasizes health to be an important criterion while examining the impact of globalization with factors such as gender equity, labour policies for women, etc. identified as significant predictors of their health.

The key themes that emerged from these studies were that favourable economic situation of women, gender equality, improvements in literacy and better awareness of their rights can have a positive influence on their reproductive healthcare seeking behaviour and outcomes.

1.5 Achievement of millennium development goals

According to a report published by the UN (2015), eight Millennium Development Goals (MDGs) were proposed with the aim of achieving them before 2015. Among the goals, the focus of MDG 4 was to minimize mortality of children less than five years old and the MDG 5 was to achieve better maternal health among women. The MDG 5 goal was defined with the help of two sub-goals, namely, reduction in maternal mortality rate and

enhancing access to maternal health facilities among women. The report pointed out that in 2012, only a little over half the women from across the world (64%) used contraceptive devices. The number of women exhibiting at least four antenatal visits was also found to be of concern (64%). The MDG 6 also pertained to reproductive health, which proposed to combat the spread of HIV/AIDS as well as ensure healthcare access to HIV/AIDS victims from across the world.

The status of achievement of these goals as observed by World Health Statistics (2015) exhibited that the MDG 4, to bring about two-third minimization in infant mortality rate, was achieved only in Region of the Americas (AMR) and Western Pacific Region (WPR), while it had made substantial progress in the other regions. However, the aim of MDG 4 to enhance measles immunity coverage among infants was not achieved in African region (AFR), South-East Asia Region (SEAR) as well as Eastern Mediterranean region (EMR). The MDG 5 target to bring about a three quarter reduction in maternal mortality rate did not exhibit any improvement in the AMR while substantial progress was exhibited by the other regions, however, the goal was not achieved by any region. It is noteworthy that the aim of MDG5 to enhance the attendance of skilled personnel during delivery did not make any progress globally as well as in AFR, SEAR and EMR. Enhancement in antenatal coverage exhibited significant progress but was not achieved globally, with AFR, SEAR and EMR exhibiting no progress. An improvement in contraceptive use was also not met globally with the same countries exhibiting no progress. However, the reduction in HIV/AIDS incidence was achieved globally.

1.6 Sustainable development goals and reproductive health targets

The UN (2018) formulated seventeen Sustainable Development Goals (SDGs) of which the goals related to reproductive health of women are as follows: SDG 3 proposed to promote health across individuals of all ages with special focus on maternal mortality, under-5 years mortality and adolescent pregnancy; SDG 5 aimed to eliminate gender inequalities and promote women empowerment with respect to sexual violence, age of marriage, incorrect practices such as genital mutilation, etc. Therefore, acknowledging the urgency in understanding and enhancing access to reproductive health among women, the present study places focus on women working in unorganized sector, especially

construction sites of Odisha, with the aim of identifying the factors governing their healthcare seeking behaviour.

1.7 Current status and issues regarding the reproductive health of Indian women

Indian women, especially economically backward families endure variety of reproductive health related issues, such as unwanted conception, maternal and infant mortality, exposure of sexually transmitted infections, stigma related to menstrual cycle and lack of menstrual hygiene, etc. (Das et al., 2018). Further, while a woman's reproductive duties are glorified, her sexual rights and health care necessities are given the least importance (Mathew &Francis, 2018). Maintaining reproductive health is necessary to ensure safe childbirths and promote maternal health (Banerjee et al., 2015). Ideally, men and women should have equal rights over their reproductive health which is should be ensured by the availability of safe ways of regulating fertility and adequate health care amenities (Jacobson, 2018). However, in the Indian context, women are not as privileged as their male counterparts with regard to either reproductive rights or reproductive health care facilities (Gill et al., 2017). Indian women, especially those in the rural areas, face a lot of challenges to their reproductive health, which need to be invariable addressed in order to ensure better female health and longevity (Mani et al., 2013). Some of the important concerns have been discussed in the ensuing paragraphs.

A majority of the pregnancies in India is either unintended or unwanted and this occurrence is the highest in Indian villages. On an average, about 20% of the pregnancies occurring in India are unwanted (Kowsalya & Manoharan, 2017). This is mainly due to the lack of family planning initiatives in the country, i.e., a majority of Indian couples do not find it necessary to plan or time childbirth and this is high in the case of the illiterates and the poor (Banerjee et al., 2015) . As a result, a majority of women, who are not physically or mentally ready for child bearing, are forced to undergo pre- and post-natal health care challenges, which eventually impacts their overall well-being (Dharmalingam & Morgan, 1996).

Indian women experience unusually high maternal mortality, i.e., death at childbirth, which is as high as 230 mothers dying out of 1,00,000 deliveries. India accounts for about 18% of annual global maternal deaths, owing to the lack of pre-natal

health care facilities (CSSS, 2011). One among every 70 pregnant women in India is exposed to maternal deaths and many women die of post-natal fatalities (Kowsalya & Manoharan, 2017). Inadequate health and sanitation practices, lack of proper nutrition and neglect by the family play an important role in the occurrence of maternal deaths (Mistry et al., 2009).

Reproductive tract and sexually transmitted infections are also very high among Indian women, which is due to the lack of awareness and unavailability of health care facilities. However, most of the women who get infected do not prefer to disclose the matter and thus do not actively obtain medical help (Bhanderi and Kannan, 2010). While reproductive tract infections (RTIs) expose women to fatal health risk, they also face the problem of anaemia, which eventually leads to heavy menstrual bleeding, resulting weakness and sometimes death. Further, anaemia causes about 20% of the total maternal deaths in India (Elizabeth et al., 2015). Particularly, a majority of Indian rural women tend to ignore the occurrence of RTIs and are reluctant to obtain medical help (Gill et al., 2017). Further, most women seek home remedies to RTIs and STIs, which most often only suppress the symptoms for the time being. As a result, women often carry a fatal infection, which ultimately affects their health seriously (Mani et al., 2013).

A majority of women in rural areas marry at a very young age, which is immediately followed by pregnancy, i.e., when they are physically incapable of mothering a child (Kotecha et al., 2012). Despite adequate legislations, more than half of the rural female population bears children by the time they are seventeen years old, which results in several health complications, such as miscarriages, and maternal and infant deaths (Das et al., 2018). Interestingly, rural women also lack awareness regarding sexual health, pregnancy, contraception and abortion. Another issue pertaining to the reproductive health is the proliferation of considerable stigma around sexual and reproductive practices; as a result, several such ailments go unreported or mistreated (Mohindra et al., 2006). Besides, women usually do not have a say in the matters of childbearing and conception; hence do not actively seek health care facilities (Ahmed et al., 2006). Further, the food intake of rural women is much lower than what is recommended (Merchant and Kurz, 2018) which also affects their reproductive health, such as low birth-weight of infants and underdeveloped foetus (CSSS, 2011). The severity of reproductive ailments can be assessed by the fact that pregnant women are

1.68 times more prone to health hazards compared to the others. Therefore, on an average, most of the rural Indian women had one reproductive health ailment or the other (Bhanderi & Kannan, 2010).

Despite the large number of reproductive ailments faced by Indian women, not many of them preferred to seek medical help. Most of the reproductive ailments either go untreated or are under-treated in the houses (Bloom, 2001). There could be many reasons why women do not seek medical intervention for their ailments, most of which are social and economic. Caste, type of family, literacy and economic status play an important role in the health care seeking behaviour of Indian women (Gill et al., 2017). Besides, this behaviour is also impacted by other factors, such as availability of pre- and post-natal care in the villages, support and cooperation from the family, especially the husbands, etc (Manna and De, 2011; Adjiwanou et al., 2018).

One of the most important determinants of the extent to which women seek reproductive health care facilities is their socioeconomic status, such as their caste and economic background (Mohindra et al., 2006). However, the unavailability of adequate, good quality health care facility in Indian villages is also one of the factors, which discourages women from availing medical facilities (Balamurugan & Bendigeri). Further, in some cases, women do not avail medical help in times of need as they perceive reductive healthcare facilities as unaffordable and refer to treat it by themselves instead (Ahmed et al., 2006)

Further, social stigma associated with reproductive health is another issue owing to which women do not avail healthcare facilities. Besides, men are more socially mobile compared to women, because of which they can easily avail health care services as and when required, while it is not the case with women (Banerjee et al., 2015). Further, the lack economic autonomy also forces women to refrain from visiting the gynaecologist. Besides, rural women are in general hesitant to discuss the matters of reproductive health with doctors, and prefer to keep these issues to themselves (Das et al., 2018). Further, proliferation of religious superstitions and the associated stigma regarding the matters of sexual and reproductive health in the rural areas also act as hurdles to women seeking medical facilities (Dandappanavar & Khan, 2014) and this is especially applicable in case of pre- and post-pregnancy care.

Not just the rural women, but urban women belonging to lower socioeconomic strata, especially those involved in hard physical labour neglect their health as such (Nandal, 2006) are also hesitant with regard to obtaining health care facilities for reproductive health. Several studies have indicated that about a quarter of slum dwelling urban women does not avail health check-up facilities during pregnancy owing to physical distance and lack of awareness (Kotecha et al., 2012). However, it is encouraging to note that about 75% of the pregnant women from the urban slums readily avail health care facilities and are well aware of relevant medical check-ups.

The issue of hesitation to avail reproductive health care facilities is not without a solution. As indicated by Dharmalingam & Morgan (2010), increasing the social and economic autonomy of women is one of the means through which their access to health care facilities can be improved. Providing education and gainful employment opportunities to the poor women of rural and urban India can play a key role in encouraging them to access reproductive health care facilities, such as the use of contraceptives, family planning and pregnancy care (Mistry et al., 2009).

The central and state governments should also play a major role in ensuring every woman avails health care facilities. Despite a good number of women's health initiatives, the state of hospitals and health centres in Indian villages is far from satisfactory (Anant et al., 2012). As confirmed by the observations of Kotecha et al. (2012), a majority of women living in slum areas of Vadodara prefer to go to private hospitals during their pregnancy. Similarly, (Prusty & Unnisa, 2013) also noted that although private hospitals are considered expensive, more than 50 percent of the rural and urban poor women are forced prefer private hospitals as government hospitals as perceive to be of lower quality. Thus, it is the responsibility of the government to ensure the provision of good quality and safe health care facilities, even in the remote corners of the country in order to ensure that the Indian women lead healthy lives (Dharmalingam & Morgan, 1996).

A careful observation regarding the reproductive health care seeking behaviour of Indian women, especially those from lower socioeconomic levels reveals that a majority of women do not avail reproductive health care facilities on account of a variety reasons, ranging from social stigma and lack of awareness to unavailability of quality health care. However, an objective review of the research studies conducted in this regard indicates a limitation of research studies on specific reasons owing to which women do not avail

reproductive health care. Further, it was observed, that a majority of research studies look at the matter from an entirely socioeconomic angle and do not explore whether the country has provided adequate, good quality infrastructure to ensure the sexual and reproductive health of Indian women. Besides, it would be interesting to understand how the reproductive health care seeking behaviour is different among urban and rural working women of the country.

1.8 Status of reproductive health in Odisha

Socially and economically backward Indian women suffer from a variety of reproductive health related issues, such as unwanted conception, maternal mortality and morbidity, sexually transmitted infections, lack of hygiene, etc (Das et al., 2018), which impacts their overall well-being. The state of women's reproductive health in India has been presented in the tables below.

Table 1. 3: Vital Indicators of Maternal Health in India

Indicators	**Rural**	**Urban**	**Total**
Crude birth rate	22.4	17.3	20.8
General fertility rate	83.8	60.8	76.2
Gross reproduction rate	1.2	0.8	1.1
General marital fertility rate	123.8	92	113.4
Mean age at marriage for women	22.1	21.6	23.0
Births in government hospitals	51.5	55.5	52.6
Births in private hospitals	22.7	38	26.7
Births in homes through untrained practitioners	12.9	1.2	9.8

Source: Women and Men in India, 2017, Ministry of Statistics and Programme Implementation

Retrieved from: http://www.mospi.gov.in/publication/women-and-men-india-2017

It can be observed from reproduction and fertility rates that in general rural women conceive more than their urban counterparts, which could be attributed to the ignorance towards family planning and contraception in rural areas with higher emphasis on the reproductive duties of women. However, it can also be observed that compared to urban women, lesser rural women receive professional medical care during childbirth and there is a lower, yet significant (13%) prevalence of informal and untrained medical practitioners in rural areas during deliveries, which presumably occur in the women's homes.

In line with the reproductive health issues faced by the women of India, the women from the state of Odisha too have been enduring a number of disadvantages. In general, rural women conceive more than their urban counterparts; however, the volume of infant deaths is also higher in rural areas.

Table 1. 4: General Reproductive Health of Women in Odisha

Indicators	Rural	Urban	Total
Infant Mortality Rates	46	34	44
Under five Mortality Rate	59	37	56

Source: Women and Men in India, 2017, Ministry of Statistics and Programme Implementation

Retrieved from: http://www.mospi.gov.in/publication/women-and-men-india-2017

However, the maternal mortality ratio (MMR) has been decreasing in the state during the twelve-year period between 2001 and 2016, i.e., MMR went from 358 to 222 during this period 2013-14. This could be attributed to the improvement in the availability of medical care, hospitals and certified professionals.

Table 1. 5: Trend in maternal mortality ratio of Odisha

Period	2001-03	2004-06	2007-09	2010-12	2011-13	2014-16
MMR	358	303	258	235	222	180

Source: Sample Registration System, (Various Years).

Similarly, a majority of expecting mothers from the state received maternity care, with about 855 of them delivering at hospitals and about 86% delivering under the supervision of a professional practitioner (Table 1.6).

Table 1. 6: Maternity Care Received by Women in Odisha

Particulars	Percentage
Mothers who had full antenatal care (%)	23.1
Mothers who received postnatal care from a doctor/nurse/LHV/ ANM/midwife/ other health personnel within 2 days of delivery (%)	73.3
Institutional births (%)	85.4
% Home delivery conducted by skilled health personnel	3.3
% Births assisted by a doctor/ nurse/LHV/ ANM/Other health personnel	86.6

Source: Women and Men in India, 2017, Ministry of Statistics and Programme Implementation

Retrieved from: http://www.mospi.gov.in/publication/women-and-men-india-2017

1.9 Significance of the study

Studying reproductive healthcare seeking behaviour is important as it is the first step towards curing reproductive illnesses. However, this health seeking behaviour is deep rooted in the context of various social, economic, biological and cultural factors as well as the interrelationships between these factors, in the end resulting in differential utilization of healthcare services (Price & Hawkins, 2007). Women's neglect of maternity healthcare utilization and the barriers preventing them from seeking professional assistance before, during and after childbirth have been found to be the major reasons for the high rate of maternal morbidity and mortality (Haque et al., 1997). The likelihood of receiving antenatal advice from doctors, giving birth at a healthcare facility, receiving postnatal care from trained providers, etc., significantly reduce pregnancy related complications. Considering the high rate of maternal morbidity, mortality and infant mortality still prevalent in various parts of the country, especially among the low income groups, it is essential to identify the factors leading to reproductive healthcare utilization among this group of women and thereby address the issues through appropriate policy interventions.

1.10 Statement of problem

In spite of the significant process achieved globally with respect to reduction in maternal morbidity and mortality, the Millennium Development Goal 5 (MDG 5) target of the UN for 2015 could not be achieved among developing countries (UN, 2008). A crucial step towards achieving this goal would be to enhance the maternal as well as perinatal healthcare access and utilization among low and middle income group women, which is currently limited. For instance, nearly half of the women from middle income groups and over 65% of the women from low income groups still do not seek postnatal care within the initial two days of childbirth (WHO, 2014). One such low income group of women, construction workers of Odisha, was studied by the researcher in the present study with the aim of uncovering the reproductive health challenges encountered by them and the factors responsible for the same. Out of the total employment of 45.9 crores observed between 2004 and 2005, only 2.6 crores accounted for organized sector while a vast majority of 43.3 crores worked for unorganized sectors. Among the latter group, 2.6

crores of workers were involved in construction related activities (National Sample Survey, 2004). According to a statistical report published in 2001, 80% of the working women were employed as unorganized labourers, involved in petty trades, construction work, etc. (Chakrabarthy, 2006). Considering the large population represented by women working in unorganized sector and considering the fact that healthcare seeking behaviour was poorest among them when compared to women from other demographic segments, it is crucial to assess the scenario prevalent among these women, identify the determining factors and design policy interventions accordingly to achieve equality in reproductive healthcare utilization.

1.11 Research questions

The present study will focus on the following questions:

- What is the socioeconomic profile of women construction workers working in Odisha?
- What is their workplace culture? What is the kind of support received by them from the contractors during their pregnancy? Does it affect their reproductive health? Do they experience sexual harassment from contractors and co-workers? If so, what are their coping strategies?
- What is their status of reproductive health? Do they seek treatment?
- What is the level of reproductive healthcare utilized by them before, during and post-delivery? What factors govern their extent of reproductive healthcare utilization?
- What is their level of autonomy? Does it affect their reproductive healthcare seeking behaviour?
- Do the women construction workers of Odisha experience of domestic violence?

What are the cultural beliefs held by women construction workers of Odisha related to maternity? Does culture have any impact on their reproductive health seeking behaviour?

1.12 Objectives of the Study

The present study broadly examines reproductive health challenges and coping strategies of women construction workers in Odisha. Specifically, the objectives are:

- To explore the various problems relating to reproductive health faced by the women workers in the construction sector.
- To find out the health seeking behaviour or the coping strategies for various reproductive health problems.
- To access the impact of workplace culture on reproductive health problems.
- To explore the impact of women's autonomy and experience of domestic violence on their reproductive health care decision making.

1.13 Chapter layout

The first chapter, Introduction, describes the reproductive health scenario of women in India, different dimensions of reproductive health such as morbidity and mortality and the factors contributing to negligence of health among women. As the next step, the construction sector of India, working conditions of women in construction sector and other unorganized sectors followed by their reproductive health seeking behaviours were discussed. Finally, the rationale behind the present study, research questions asked and the objectives studied were listed.

The second chapter, Data and Methods, briefly describes the research philosophy, research design, research methodology, operationalization of variables, research instrument used, sampling and data collection procedures employed by the researcher for carrying out the study.

The third chapter, Socioeconomic and Demographic profile of the respondents, highlights important social and economic characteristics of the study participants such as their age, income level, community, etc. In addition, details related to the nature of their household, ownership of assets such as land, livestock, etc., dependency load, parity, etc. were also described in this chapter using frequency and percentage analysis.

The fourth chapter, Work culture: Issues and challenges, deals with aspects related to nature of their work, wages earned, relationship with colleagues, issues with contractors, facilities offered at workplace, hours of work, etc. to gain deeper insights into the women's everyday life at work as a construction worker.

The fifth chapter, Patterns of gynaecological morbidity, deals with identification of conditions of morbidity prevalent among the construction works and to extract patterns based on their sociocultural profile.

The sixth chapter, Sociocultural dimensions of reproductive health care, examines a set of social, economic and cultural factors as well as their effects on antenatal and postnatal healthcare seeking behaviour of women construction workers of Odisha.

The seventh chapter, Identifying and measuring autonomy on the reproductive healthcare decision making of women, assesses the level of autonomy enjoyed by women construction workers of Odisha and verifies if autonomy plays a role in influencing their reproductive healthcare seeking patterns.

The eighth chapter, Summary and conclusion, summarizes all the findings of the study, answers the objectives, lists the limitations of the study, identifies scope for future work and suggests policy implications.

Chapter 2

Research Design & Methodology

2.1 Introduction

This chapter highlights the research design and methodology followed in this study. The research design indicates the type of study undertaken, while the methods indicate the steps taken, tools and techniques used an implemented to complete the study. The current study has used a strong qualitative approach along with different elements of quantitative methods.

2.2 Research Process

The present study includes the following research process while selecting the sample as well as area of study.

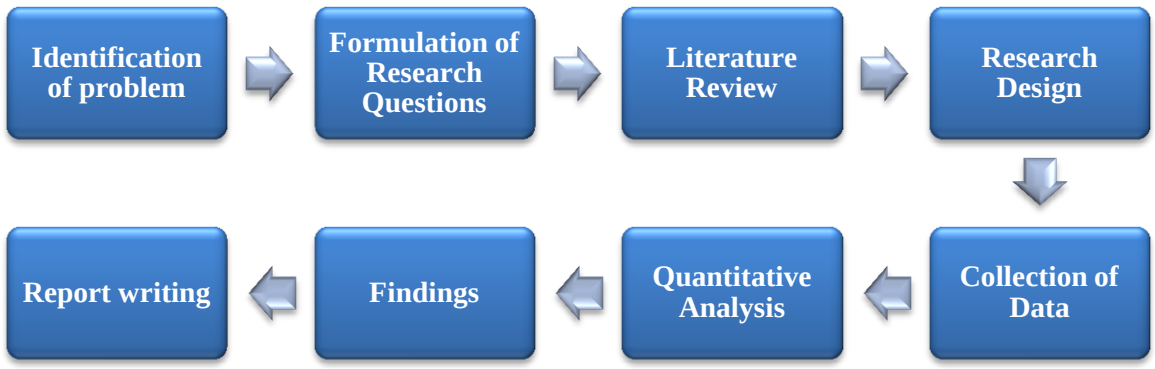

Figure 2. 1: Research process of the study

2.3 Study area

The study is undertaken among the migrant construction workers in the Khorda district of Odisha, India. It lies in between 84º55” to 86º5” East longitude and 19º40” to 20º25” North latitude covering geographical area of 2813 square kilometers which comprises 1.81 percent of the state area. It is one of the developed districts of the state and houses the state capital at Bhubaneswar. The district is bounded by Cuttack district in the north, Ganjam district in the south, Puri district in the east and Nayagarh district in the west. Its

bioclimatology is much influenced due to the short radial distance from the Bay of Bengal and presences of a huge water body like the Chilika Lake. It is situated in the East & Southeastern coastal plain and the agro-climatic zone blessed with sandy-loam, Lome, clay-lome and clayey soil in varied agro-eco system. Khordha is divided into two district sub-regions; one is deltaic alluvium sub-region which comprises of 3 blocks Balianta, Balipatna and Chilika, whereas Banpur, Begunia. Bhubaneswar, Bolagarh, Jatni, Khordha & Tangi belong to lateritic sub-region. The demographic profile of the district is as follows:

Table 2. 1: Demographic profile of Khorda district

Population	**N**
Total	22551673
Male	1167137
Female	1084536
Households	N
No. of House Holds	4,94,212
No. of House Holds (Rural)	2,47,304 (54.04%)
No. of House Holds (Urban)	2,46,908 (49.96%)
Population	N
No. of Females per 1000 Males	929
Child Populations (0-6) Years	2,37,394
Child Populations (0-6) Years, Male	1,23,879 (52.18%)
Child Populations (0-6) Years, Female	1,13,515 (47.82%)
Population Density	800 /Sq.Km
Literacy	
Literacy Rate	86.90%
Literacy Rate (Rural)	83%
Literacy Rate (Urban)	91%
Workers	N
Main Workers	6,32,625
Marginal Workers	1,59,568
Total Workers	7,92,193
Social Groups	N
Hindu	21,47,632
Muslim	84,060
Christian	12,527
Buddhist	1264

Sikh	475
Jain	476
Other	434
Religion not stated	4805

Source: Census of India, 2011.

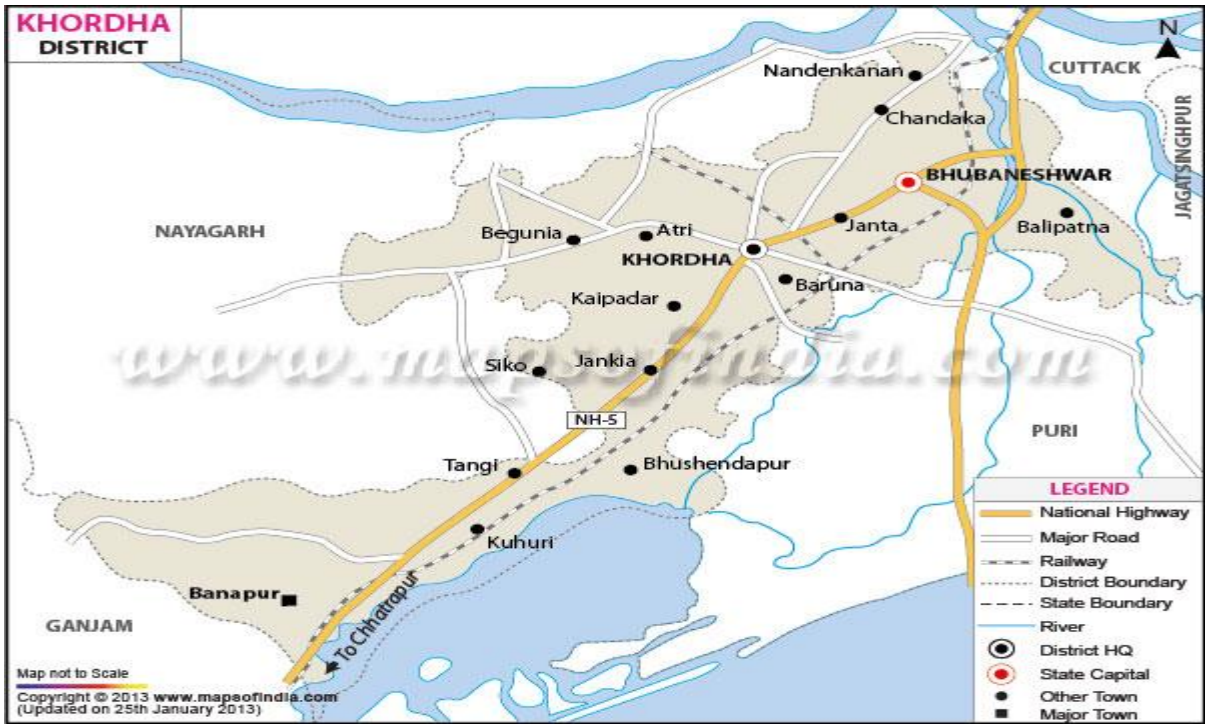

Figure 2. 2: Map of Khordha district

Source: Government of Odisha, 2011

2.4 Universe of present study

The entire study was carried out in the city of Bhubaneswar. The present day Bhuabneswar, the ancient temple town, Odisha has a hoary past which gets back to Ashokan period. It was confined to land between Choudwargarh , Chodaganga and Sarangagada and only approach road to Puri, the royal seat of Kalinga kingdom. With the independence of India, it was decided to be the capital of Odisha and over the years it has got expansion from another city of quarter in the north, Puri in the south and Khordha in the west. The vast stretch of land mainly arable lands, in habited by the residents of sub-urban village people has undergone a sea change over the last three decades, which has witnessed building activities on large scale. A great semi-skilled and unskilled labour force has come into existence on wake up these huge activities. Bhubaneswar being the

urban city with different facilities, the real estate business recently is booming up and ultimately attracting the people to settle down. And as of which result the city is growing fast and a lot of construction work is taking place. Simultaneously, socio-economic problems associated with the lives and lifestyles of these workforce has been on the social front, which makes it a significant and interesting study for social scientist and students. The present study titled "Reproductive Health challenges and Coping Strategies: A case study on female construction workers of Odisha, India" is an offshoot of this phenomena.

The city of Bhubaneswar governed by Municipal Corporation, comes under Bhubaneswar Metropolitan Region (Census,2011). The general Bhubaneswar Metropolitan profile is given below.

Table 2. 2: Bhubaneswar Metropolitan Profile

Bhubaneswar Metropolitan	Total	Male	Female
Population	886,397	468,577	417,820
Literates	733,689	400,235	333,454
Children (0-6)	86,509	45,386	41,123
Average Literacy (%)	91.72%	94.58%	88.52%
Sexratio	892		
Child Sex ratio	906		

Source: Census of India, 2011.

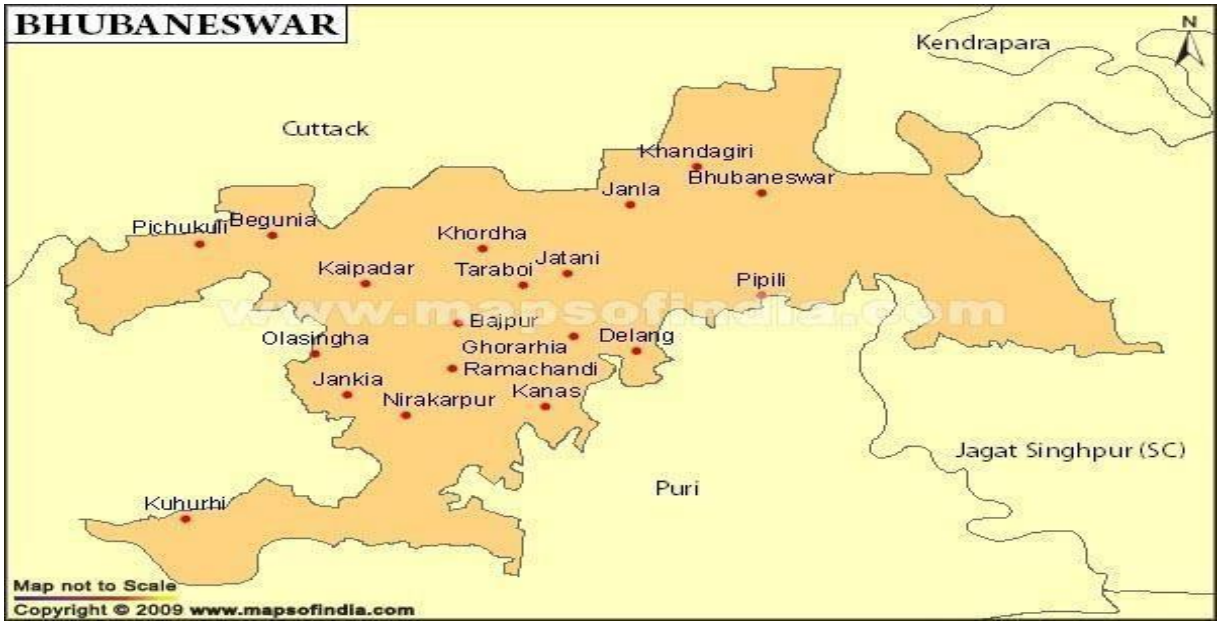

Figure 2. 3: Map of the study site, Bhubaneswar

2.5 Research design

A descriptive research design has been adopted to carry out the study. This design was quite appropriate in mapping out the important variables involved in the study and significant in finding out the relationship between different variables. Using the convenient sampling technique the female construction workers were selected from different construction sites as well as their place of residence i.e. scattered settlements present in Bhubaneswar. Keeping in view the ethical concern, the verbal consent was taken to maintain the anonymity of the respondents before conducting the interview. Due permission was taken from the respondents to use the case studies for academic purposes. To initiate the study, establishing rapport with the respondents and getting permission from the employers to interview the workers at the site was a major challenge.

2.6 Sampling

Various studies indicate that reproductive health of a women has become a public health problem. There is a need to focus on the health aspects of women in reference to reproductive health. Hence it is necessary to gain insight into women's perception regarding reproductive health and well-being in the present context and circumstances. As per the initial review of literature, we came across various studies, which have already provided the qualitative synthesis about the condition of reproductive health conditions of the construction workers. We thought to initially start with the quantitative analysis and evidence generation to explore the present scenarios so that some data can be provided for any future research. Existing studies have highlighted that even though the big cities are demographically developed, the prevalence of self-reported reproductive health complications was found to be higher (Sogarwal et al., 2006). A study conducted by the Indian Statistical Institute, Kolkata, pointed out that women in metro cities are also at higher risk of reproductive health problems and there is a need, to investigate these issues in detail (Sadhu et al., 2001). Later on the authors has further tried to fill this gaps in collected data i.e. quantitative methods by supplementing it with qualitative evidence generation. So, the present study has used the mix method approach to address the problem in concern.

The study was conducted among ever married female construction workers in the age group of 15-49 years, those who have given at least one birth 3 years prior to the

survey. The sampled respondents were selected from ten major construction sites from the periphery of city - Hi-tech, Rasulgarh, Patia, Bhusandpur, Kalinga Nagar, Gangotri Nagar, Patrapada, Barakuda, Raghunathpur and Balianta where construction of building work takes throughout the year. The above sites were selected purposively. It was decided to select 10 respondents from each site. So, the targeted sample size was 300 but response from 288 women workers could be only collected. The response rate was 96%. Structured questionnaire with open ended questions was used to collect the quantitative data from the respondents. Along with it 12 in- depth interviews were done to know different gynecological problems in detail.

2.6.1. Pre test

In order to test the validity and reliability of the questions in the interview schedule, a pilot study of ten women construction workers was carried out. After pre-test necessary correction was done in the final questionnaire.

2.6.2 Period of study

The field survey was done during September, 2013 to March, 2014, especially when the construction activity is at peak in the city.

2.6.3 Sources of data collection

The method adopted for the data collection in the study is primary. The primary data was collected through face to face interview with the help of a questionnaire from the women construction workers. The questionnaire is given at Appendix-I. The workers were interviewed in the local language (Odia) and the responses were noted in the schedule. This was pre-tested by conducting a pilot study where the data was collected from seventy respondents. Analysis was done and the changes were made in the questionnaire to overcome the errors.

The questionnaire consists of eight sections. Section 1 & 2 deals with the identification particulars and personal details respectively. Section-3 highlights the socio-demographic factors of the respondents. Section-4 of the study deals with housing and other amenities along with a sub-section on dependency load of the family members. The details of the workplace conditions, challenges and issues faced by these workers are dealt

in Section -6. Questions pertaining to gynecological and reproductive morbidities were mentioned at Section 6(A), while the questions on ante-natal and postnatal care taken by these sampled respondents were formulated in Section -6 (B) & (C) respectively . Section-7 deals with the decision making capacity of the women and the last section i.e. Section -8 is based on the questions focusing on the experience of domestic violence by the women construction workers. The secondary data were collected from sources like government reports, articles, books, journals, other published documents and websites.

2.7 Process of data collection

At first, the literature review was done to find out the gaps in the study reproductive health challenges faced by the women, particularly in the construction sector. The various attributes and tools were finalized to access the issues & challenges relating to reproductive health problems and challenges faced at the worksite were finalized. A structured questionnaire was prepared to capture all the information required to conduct the study. After the finalization of the questionnaire, a pilot testing was done at the study area to check the consistency of the questionnaire. In the pilot study, the construction sites present in the city of Bhubaneswar were listed and finalized. Moreover, the congregation point where the labourers were picked up was also visited in order to collect the information about the workers employed at different construction sites from the contractor. The in-depth interview and case studies was conducted both at their place of work as well as their place of residence. Fig 2.3 highlights the steps involved in collection of data.

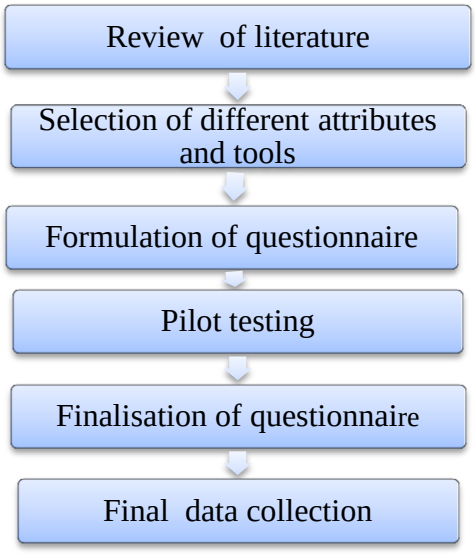

Figure 2. 4: Process of data collection

2.8 Analysis of data

The data collected from the field was analyzed using SPSS 20. Simple statistical analysis like was done based on the tabulations obtained from the field data. Statistical tools like chi-square, logistic regression were used to examine the above said objectives. Qualitative methods were adopted to capture the evidences through in-depth interviews..

2.9 Conceptual framework

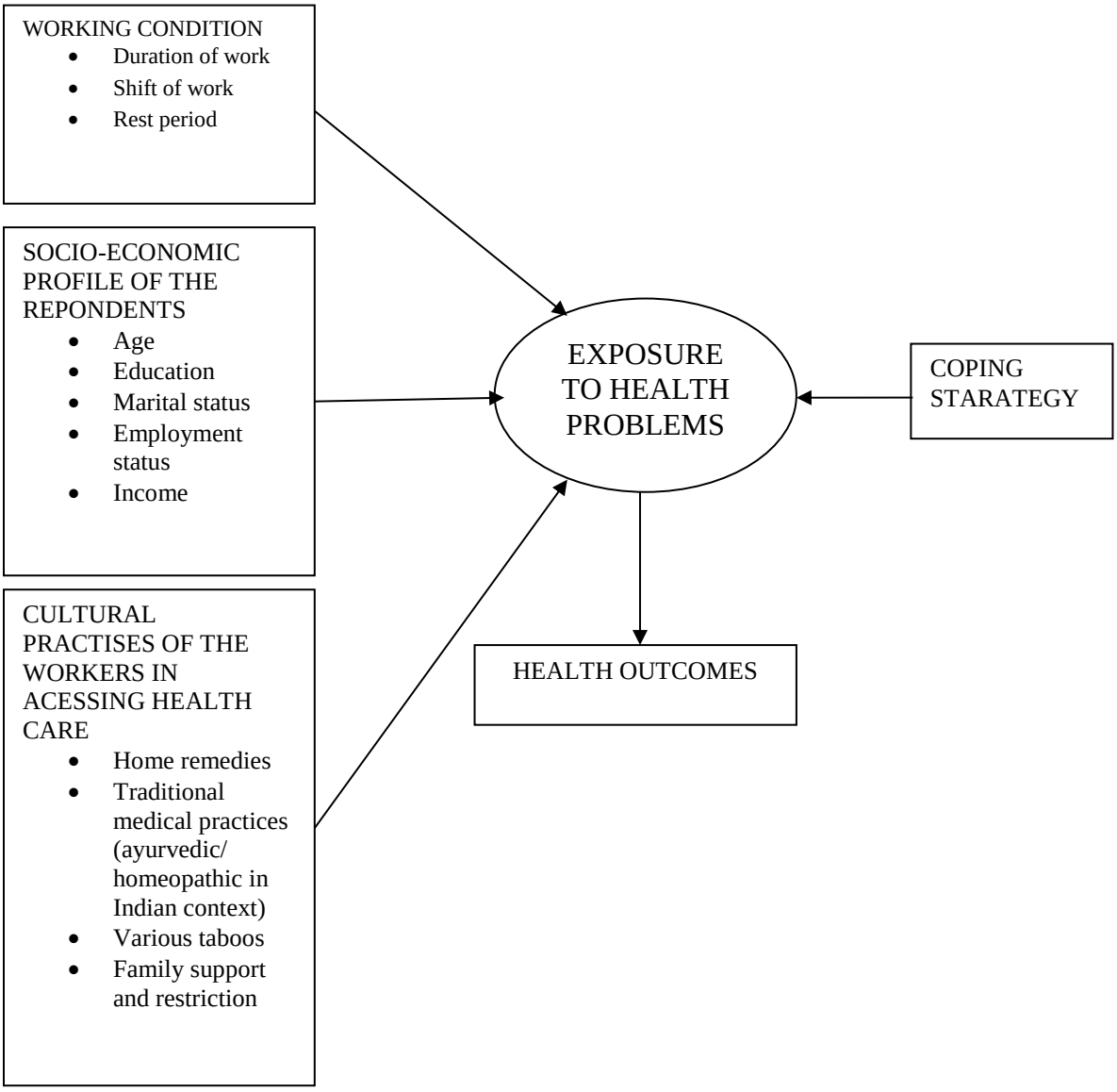

Figure 2. 5: Conceptual Framework

Good sexual and reproductive health is important for women's general health and

wellbeing. It is central to their ability to make choices and decisions about their lives, including when, or whether, to consider having children (Malhotra et. al, 2005). Women working in the construction sites are vulnerable to several factors like heavy workload, exposure to the substances at the workplace, stress, etc. Such work situations may cause workers to experience abnormalities in their reproductive health. Moreover, the health problems emanating due to exposure to working environment are never addressed by these construction workers and at times are considered to be casual. Their lack of decision making also affects their health as it becomes a constraint to access the health care facilities. Disease, injury and illness to one organ will affect the body as a whole. In this way, it is important to understand that an illness to the reproductive health of a woman can have a deleterious effect on the complete health and wellbeing of a woman. When examining the reproductive health of women, it is vital to look beyond the physical signs and symptoms, instead gaining a comprehensive view of the entire situation. Keeping in view these above facts the above conceptual framework has been developed to carry out the study. This framework discuses how the socio-economic factors, workplace conditions and cultural practices adhered by the women has a significant effect on the reproductive health of these women workers. What are outcomes of these problems and how do they cope with these challenges? The purpose of the study is to highlight the reproductive problems faced by these workers in detail and the factors affecting the health seeking behaviour of these women workers.

2.10 Analytical and theoretical framework for the study

The objectives wise the theoretical framework and other variables used to carry out the study is given below.

Table 2. 3: Theoretical framework

Objectives	**Theoretical Framework**	**Methods used**	**Variables Used**
To explore various problems relating to RH faced by women construction workers	---	-Descriptive statistics (Quantitative data) - In-depth interviews (Qualitative data)	-Gynecological morbidities - Socio-cultural dimension of RH -Cultural practices
To find the health	Health Behaviour	-Descriptive	-ANC

seeking behaviour for various RH problems	Model (Bhatia & Cleland,1995)	statistics (Quantitative data) -In-depth interviews (Qualitative data)	-Delivery care -Postnatal care -Expenditure on health care - Knowledge on contraceptive practices
To assess the impact of Workplace culture on reproductive health of women	----	-Descriptive statistics -In-depth interviews (Qualitative data)	-Migration status -Wage differentiation - Sanitation & Hygiene practices
To explore the impact of women's autonomy and experiences of domestic violence on reproductive health care decision making	----	-Descriptive statistics Logistic regression analysis	-Control over finance -Freedom of movement -Reproductive health care decision making

2.11 Logistic regression

It can be used to predict a dependent variable on the basis of independents, and to determine the percent of the variance in the dependent variable explained by the independents; to rank the relative importance of independents; to understand the impact of covariates (Pradhan et al., 2017; Banjare &Pradhan, 2014). So, logistic regression estimates the probability of certain event, whether occurring or not. The multiple logistic models can be noted as:

$$\ln\left(\frac{p}{1-p}\right) = \alpha + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \ldots \beta_i x_i + e$$

Where, p is the probability of occurrence of particular health indicator, p (y=1); β_1 β_2, β_3,… β_i refer to the beta coefficients; x_1 x_2 x_3 …. x_i refer to the independent variables and e is the error term.

Chapter 3

Socio-economic & Demographic Profile

3.1 Introduction

This chapter gives the background characteristics of the study area which was covered during the study and elaborates the socio-demographic characteristics of the respondents who participated in the research. The chapter covers four components like the housing characteristics which includes (i) type of house, source of drinking water, lightning, sanitation facilities, cooking fuel, (ii) Possession of household assets,(iii) household with BPL cards, (iv) dependency load along with the social profile like age, education, religion of the respondents.

Table 3. 1: Socio-demographic profile of the respondents

Covariates	**%**	**N=288**
Age of the respondents		
15-20 years	19.8	57
21-24 years	39.6	114
25-49 years	40.6	117
Caste		
ST/SC	39.2	113
OBC/General	60.8	175
Educational status of respondents		
Illiterate	89.2	257
Literate	10.8	31
Family structure		
Joint family	21.9	63
Nuclear	78.1	225

The above table represents the socio-economic and demographic profile of the respondents. All the 300 respondents interviewed were female. The age of the respondents shows that 40.6% belong to the age group of 25-49 years followed by 39.6% in the age group of 21-24 years and 19.8 % in the age group of 15-20 years. Education is considered to be the most important tool for the productive development of an individual. It helps in acquiring knowledge, skill and information and aids in personal development. But surprisingly, the results shows that near about 90% of the sampled respondents had no

education at all and only 10% had education till the primary level.

They neither go to a school to attain education nor get a study environment at home. Though 10.8% of respondents completed the primary school but couldn't continue their study due to lack of money and later they joined in the workforce to earn money. The caste category depicts that 60.8% of respondents belong to the General caste followed by Scheduled caste and scheduled tribe with 39.2%. Majority of the respondents (78.1%) lived in a nuclear family, and 21.9% were from joint family. Those families where the respondents along with their spouse and children reside in the same household was categorized as nuclear family, and the families where along with mother in law and father in law, if other relatives such as brother in law also reside in the same household, then the family was categorized as joint family.

3.2 Housing characteristics

Housing is one of the important determinants of health-it is a medium through which the socio-economic status is deliberated and enhances the determinants of health (Dunn et al., 2006). Besides providing physical security and protection, it also plays an important role in determining individual's physical and social environment. It not only provides a source of identity but also fosters social relations which are very integral to an individual in a society. Living conditions of an individual affect their physical, mental, and social health in some way or the other (Marmot et al., 2008).

Table 3. 2: Housing characteristics of the respondents

Housing characteristics	**%**	**N=288**
Type of house		
Semi-Pucca/Asbestos	69.1	199
Pucca	13.2	38
Hut	17.7	51
No. of rooms		
One	89.9	259
Two	10.1	29
Separate room for kitchen		
Yes	9.7	28
No	90.3	260
Source of drinking water		

Tube well	7.6	22
Open well Tanker/truck	51.0 41.3	147 119
Sanitation facilities		
Yes	11.8	34
No	88.2	254
Main source of lighting		
Electricity	8.0	23
Kerosene	92.0	265
Main source of cooking		
Wood	56.6	163
Kerosene	43.4	125

The above table shows that 69.1% of the respondents live in semi-pucca or asbestos house followed by 17.7% in hut and rest of the 13.2% are living in the pucca house. It clearly shows that more than half of the respondents basically reside in the asbestos house. Among them, about 89.9% have one room while the other 10.1% have two rooms only. Around 90.3% of respondents didn't have separate room for kitchen. The results also give indication that only 8.0% have electricity in their house while 92.0% use kerosene lamps as the source of electricity. Usually they cook food outside the room of the house or in the room itself. They reportedly use kerosene and wood as the source for cooking. About 43.4% of them use kerosene for the purpose of cooking while 56.6% depend on wood. Drinking water along with the sanitation is the necessity of life as well as prerequisite for a healthy life. Here the results indicate that 51.0% of the people use open well for drinking as well as for cooking purposes, while 7.6% respondents use tube wells as the source of drinking water. Looking at the results of sanitation facilities it depicts that 88.2% of the respondents do not have any access sanitation facility and only 11.8% avail such facilities. This kind of poor sanitation and unsafe drinking water from unauthorized and unhygienic sources can lead to various kinds of infections as well as water-borne diseases. Studies indicate that health problems that have been associated with poor housing include the infectious diseases, non-infectious respiratory diseases such as asthma, and social and psychological problems (Dunn, 2000).

3.3 Possession of assets

In order to assess the living standards of the sample household, information on possession of 33 key household assets was collected by using Demographic Health Survey (DHS)

guidelines. Out of the key household, the ownership of the following assets by the respondents are outlined. Possession of assets refers to the ownership of any material that is owned by the person himself only. To access their standard of living of the sample households, data was collected on the ownership of assets by the respondents.

Table 3. 3: Possession of household assets (N=288)

Household assets	**%**
Electricity	6.9
Mattress	99.3
Table	8.7
Cot/bed	85.4
Chair	77.4
Electric fan	3.8
Colour TV	5.9
Mobile phone	63.5
Bicycle	22.9
Motorcycle/scooter	2.1
Pressure cooker	3.1

From the above table it can be depicted that 99.3% of the respondents owned mattress followed by 85.4% of respondents who have cots/bed. Majority of the households had chair i.e. 77.4% and8.75% had table. Result shows that6.9% household had electrification, only 3.8% owned electric fan and 5.9% had color TV. Apart from it, 63.5% respondents had mobile phones, 22.9% owned bicycle, 2.1% owned motorcycle and 3.1% owned pressure cooker.

3.4 Household with BPL Cards /Ration cards

Respondents were asked if they own a Below Poverty Line (BPL) card, issued by the government to those household who are below the poverty line. But they reportedly didn't have any BPL Card rather they were given ration cards from which they got food items like cereals and kerosene at a subsidized rate in every month. Everyone have their own card number on the basis of which they are identified. As reported by the respondents 19.2% availed the benefits of the ration cards given to them while 80 % reported that they didn't have the ration cards.

Table 3. 4: Possession of ration cards

Status of Ration cards		
Availing benefits	**%**	**N=288**
Yes	19.1	55
No	80.9	233

3.5 Migration profile of the respondents

The movement of people from one place to another is generally called as migration. Migration of population is a natural phenomenon and there is a increasing trend of migration of population/people from underdeveloped to developed nations in search of better opportunities, career and to raise their standard of living. Human beings change often their places of residence from one geographical boundary to another, mainly with the aim of satisfying their economic needs (Brown & Perkins, 1992). The construction sector is always dominated by migrant workers, who come in search of work from different parts of the State.

The process of this migration may be inter- state or intra-state in nature as the pattern and the nature of migration is always determined by the interplay of labour demand and supply in a given area. Employment is the main reason for migration of people, so as to likely increase the income level and thereby the standard of living of people. Due to the advent of industrializations, urbanization and expansion of cities, Bhubaneswar has been marked with influx of migrant construction workers from different parts of the State. The migrants generally get into the city for employment reason an immediately take up a job perhaps the unmindful of the wage that is offered. Most of the workers engaged before entering the construction industry were engaged in family agriculture work and other small petty business. Most of the construction workers have basically migrated from the districts of Kalahandi, Bolangir, Baripada , Berhampur and Mayurbhanj. Majority of the respondents who had migrated to the city earn around Rs 3750-4000 per month. With this meagre income, they live in a very pathetic condition in the scattered settlements in the city.

Lack of employment, low wage payment, impoverished conditions are some of the factors behind the concentration of migrant workers in the cities. These migrant construction workers lead a very miserable life because of the absence of job security as

well as opportunity for better jobs.

In India there are 30 million people have been identified as seasonal migrant labourers. Out of that Odisha has 2.5 million. A total of 1,01,012 labourers from different districts were given permission through 1975 licensed contractors to go to the outside States for work in 2016. They include highest of 67,137 workers from Balangir district followed by 13,605 from Nuapara, 6827 from Sambalpur, 5026 from Ganjam, 3,173 from Puri and 1153 from Nayagarh district(Odisha State Migration Profile, July 2014). Around 41.79 % of the State's population belongs to workers' class. The State Government has not conducted any survey to know the number of people going to other States in search of work; but gathers information on migrant labourers only through the licensed worker-contractors.

Moreover, the workers are not registered and the absence of documentary evidence restrains them from accessing measures for social security, pension and insurance from the Construction Welfare Board etc. Within a very limited income they don't have any savings, investments and remittance as a result of which they are being deprived of basic amenities like sanitation, clean drinking water, electricity, shelter and a safe environment. Both the women and children face additional vulnerabilities in relation to health, safety, nutrition and hygiene. Basically, the impact is seen on the children as due to seasonal migration, they are being deprived of education, exposed to the risky work environment and significantly limits the overall development of the child, disallowing them a better future than their parents. Unfortunately, no attention has been paid to the plight of the migrant workers despite the prevalence of these inequities.

Table 3. 5: Migration status of the respondents

Migration status	**%**	**N=288**
Ever Migrated	82.6	238
Place of Migration		
Native Place	16.0	46
Current Place of Residence	84.0	242
Period of Migration		
6 Months	47.9	138
More than 6 Months	52.1	150

Table 3.5 presents the migration profile of the sampled respondents. Among the respondents, 83 % of the women construction workers have migrated with family for work

and only 17% of women are staying in their native place. The reasons for migration is basically the better opportunity of work and seasonal employment. The period of migration shows that around 52.1% women usually migrate for more than six months and 47.9% for six months in search of work.

In the process of migration, the most affected section of the society are the women and children. The migration experience itself is highly gendered, particularly in relation to social and family relationships and employment experiences (Ho, 2006). Traditionally, most of the women migrant workers were joining with their husband at work and support the family financially. But the unavailability of proper environment and exposure unhygienic surrounding often affects the health of the women as well as children. Due to illiteracy and lack of awareness they lose out better opportunities in the urban areas and lead a very miserable life. The issues and challenges faced by these female workers have been highlighted further in the study. The migration status of the sampled respondents has been given in details below.

3.6 Dependency of family members

The family in Indian society is an institution by itself and a typical symbol of collective culture. The joint family system or an extended family is an important feature of Indian culture, till a blend of urbanization and western influence, began to affect in home and health (Gore, 1990). With the changing time, nuclear families have become prevailing custom of the society. It can aptly be said that the socio-economic factors play a major role in the dilution of joint family system in India. In the present study an attempt has been made to look out for the dependency rate of the family members on the working women workers.

Table 3. 6: Dependency of family members

Status of dependency	**%**	**N**
Total no. of family members		
Three	22.6	65
Four or more	77.4	223
No. of full time earners		
None	15.6	45
Only one	65.6	189

Two	18.8	54
Total no. dependents		
Only one	37.8	109
Two	51.4	148
More than two	10.8	31
No. of dependents below 14 years		
Only one	47.9	138
Two	46.9	135
More than two	5.2	15
No. of dependents above 60 years		
One	15.6	45
None	84.4	243

The size of a family reveals the actual number of people are presently residing in the household. It is very much related to the economic structure of the population. As per the family composition of the sample population or the female construction workers are concerned, it shows a different picture. It is largely nuclear by nature as majority of the respondents are migrants, who have settled in the city in search of work. Looking at the number of full time earners it can be said that 65.6 %, more than half have only one full time earner and only18.8% who have two full time earning members. About 47.9% respondents had only one member, below 14 years who are dependent on them followed by 46.9% who had only 2 members to depend on and only 5.2 % had more than two members in the same age group as a dependent member. While looking at the dependency of elderly people or people above 60 years, it is found that 84.4% of the respondents didn't have any old age people residing with them, ass the workers have migrated and settled randomly. Basically, they tend to have nuclear family. Only 15.6% had only one member as aged persons in the family, dependent on them. This gives a picture that the sample workers had more than two members fully dependent on them and they have to sustain the family within the limited income, as they are being paid very less.

3.7 Summary

The above chapter focuses on the fact that majority of the respondents belonged to the General/OBC category followed by SC/ST category. About 70% of the respondents lived in semi-pucca or asbestos houses as they were migrants and did not have any house of

their own and majority of them had nuclear families. They did not have any separate room for kitchen and the results also indicates that only 8% of the respondents have electricity in their own house while 92% do not have any electricity and they depend on other sources like kerosene lamps as the source of electricity. The details on possession of assets show that more than half of the respondents have no basic material requirements at the households. As majority of the respondents did not have any electrification in the house, so influence of mass communication was found to be absent. They were also unaware of the different schemes & policy regulations made by the government for their betterment. Most of the respondents were found to be ignorant of the things happening around the world. Drinking water as well as sanitation is the necessity of life as well as prerequisite for a healthy life. But it was found that more than 50% of the respondents use open well for the purpose of both drinking and cooking, which was common for everyone in their community. Moreover, they had no access to toilet facilities and they used to go to bushes, field and railway tracks for their daily ablutions. This kind of poor sanitation and unsafe drinking water from unauthorized and unhygienic sources can lead to various kinds of infections as well as water borne diseases. Looking at the status of dependency of family members on the female construction workers, it is found that more than 40% of them have two members, below 14 years who are dependent on them. While looking at the dependency of elderly people it was found the respondents didn't have any old age people residing with them. The findings suggests that higher proportion of the household were living in scattered places with unhygienic surrounding and living conditions which add extra burden to the overall health of the workers.

Chapter 4

Workplace Culture: Issues & Challenges

4.1 Introduction

The term Construction workers defined by K.N. Vaid, refers to all those men and women who are employed by the contractors, builders, owners, Government agencies and other enterprises to perform a various task at a premises where construction and other maintenance works were carried out. Construction sector forms the second largest sector providing employment after agriculture. Due to the nature of work and frequent mobility they are considered to be a migratory group. The construction sector deals with the entire construction process which is labour intensive and very risky also. The nature of work, supply of labour, skill and the process of wage differentiation altogether determines the entire labour dynamic of the construction sector.

Women workers are equally employed in this sector especially in unskilled category for manual works. They are working at various construction and project sites that are highly dangerous in nature and thus face several issues and challenges. Their major hardships are related to health, the work-life balance, safety at work. In spite of these constraints, the construction sectors engage women workers. They are neither promoted nor their skills are upgraded, so they remain as unskilled workers in the construction industry.

Moreover, wage differential has been prevalent in the Indian labour market for many years. It is found to be very dominant in the unorganized sector. Wage differentiation refers to the varying wages rates at different places of work depending upon the type of work and amount of work done. Even though having skills, they are never treated at par with the skilled male workers. Migration is especially higher in the urban areas as they look out for different employment opportunities for their sustenance. Kumar (2013) in his study of Vijayawada district of Andhra Pradesh and Pune, Maharastra tries to identify the gender discrimination by the means of empowering the women construction workers. It highlights that majority of women workers are illiterate, earning member of their family and belong to lower income families as compared to the

male workers. There is prevalence of wage differentials among the workers as well as no promotion in the nature of work which reflects the unskilled nature of work. Therefore, they are unable to upgrade their skills and work as masons. He is of the opinion that if trained properly, the women workers can become competent enough to do other works like that of masons. He concluded that the conditions of the workers are very execrable in nature. Neither the legislation nor the contractors have mercy on this segment of population.

4.2 Nature & Duration of Work

Table 4. 1: Nature of work and working hours

Covariates	**%**	**N=288**
Currently employed as Unskilled worker	96.9	279
Skilled Worker	3.1	9
Duration of work		
Less than 1 year	41.3	119
Above 1 year	58.7	169
No. of working days		
15-20	44.4	128
20-25	39.9	115
25-30	15.6	45
Working anywhere before		
Yes	65.3	188
No	34.7	100
Working at own will		
Yes	81.6	235
No	18.4	53
Forced to work		
By Friends	7.5	4
Family	67.9	36
By relatives	13.2	7
Other reasons	11.3	6
Accompanied to work by		
Spouse	70.1	202
Friends	29.9	86

Table 4.1 represents the nature and duration of work of the respondents. Among the respondents, 96.9% of women are currently engaged as unskilled worker, whereas only 3.1% are skilled workers. The tasks performed by the women workers at the site involved carrying of bricks in head, helping the masons in laying the bricks , carrying

cement and water, piling up the sand and cleaning the site. Jhabvala & Kanbur(2004); Baruah,(2010) are of the opinion that even if they have worked for number of years, still they are not promoted from unskilled workers to skilled workers like the male workers. They continue the same monotonous work like carrying bricks, mortar, cleaning building sites, etc. And gradually, this paves the way for discrimination among the male & female workers in terms of allocation of work as well as wage distribution (Suchitra & Rajsekhar, 2006). The above picture states that 58.7% of women are engaged in the construction work above one year and 41.3% women less than one year. Among the respondents 65.3% of women who are currently working, were engaged in any other places before it and only 34.7% of respondent were not engaged in anywhere before. Moreover, 81.6% of women have joined the construction sector due to their own interest while only 18.4% have been forced to work to meet the needs of the family. Among all the respondent, 67.9% of the respondents said that they have been forced to join work by the family whereas 7.5% and 13.2% of the respondents ended up working at construction site while accompanying their friends and relatives respectively to the working site. As the table depicts about 71% of respondents are accompanied by their spouse to the site followed by 29% of women who are accompanied by their friends.

4.3 Wage Rates & Income of workers

Table 4. 2: Wage Rates & Income of workers

Covariates	**%**	**N=288**
Wage per day		
Rs 200-250	12.2	35
Rs 250-300	87.8	253
Monthly income		
Less than 5000	13.2	38
More than 5000	86.8	250
Wage Difference between male & female workers		
Paid same as male workers	21.5	62
Paid less than other female co-worker	13.9	40
Reasons for low wage payment than female workers		
Unable to complete the work	45.0	18
Paid on the amount of work done	45.0	18
Don't know	10.0	4
Ever complained about the discrepancy		
Yes	22.5	9
No	77.5	31

Table 4.2 represents the difference in wages among the construction workers. Among the respondents, 12.2% of women get payment between Rs. 200- 250 per day, while 87.8% get Rs 250-300 which is considered to be very less as compared to male co-workers. The mean wage of the women workers was Rs 250. 13.9% of women reported that they are being paid less than the female co-workers and 21.5%are receiving same as the male worker. One-fourth of the respondent's women reported that there is a difference of wages between them and the male workers which is reported to be ranging around Rs 100-150 only. Unaware of the differentials in wages they are always behind the male workers. Even some of them choose to remain silent in this matter knowingly in fear of losing the work. When asked for being paid low 45% of the workers said that they are based on the amount of work done by them and 10% of the respondents are ignorant of this discrepancy. Moreover, 77.5% of women have never complained about this discrepancy to the contractor or the person who hires them whereas only 22.5% of women have complained regarding discrepancy.

4.4 Harassment at Workplace

Table 4.3 reveals the harassment faced by the women at the workplace. The study results that there is prevalence of harassment at the worksite. Sexual harassment by co-workers or contractors is one of the major problem faced by the women workers at the worksite.

Table 4. 3: Harassment at Workplace

Covariates	**%**	**N=288**
Relationship with Contractor		
Shouts at respondent	80.6	232
Behaves badly	8.0	23
Good	11.5	33
Nature of harassment		
Personal threatening	28.8	17
Slapped	71.2	42
Behavior with Co-workers		
Same	82.3	237
Not the same	17.7	51
Faced physical harassment by contractor/male worker		
Yes	20.5	59
No	79.5	229
Ever informed to anyone		

Yes	28.8	17
No	71.2	42
Details of harassment shared with		
Parents	23.5	4
Female co-workers	76.5	13
Reasons for not informing		
Feeling embarrassed	28.6	12
Ignored it	71.4	30

According to Rai & Sarkar (2012) the insecure nature of job itself creates a trap in which the unmarried girls and women are bound to please the contractor and sometimes co-workers in order to get work. The above table reveals the nature of harassment being more of verbal by nature than physical or sexual. Among the respondents about 81% of women workers reported that generally contractor shouts at them and the behavior is also same towards the other workers; 28.8 % of women reported that they are affected by personal threatening while 71.2 % reported they were sometimes threatened to be slapped by the male workers. When asked if they have reported about the same to anyone, 71.2% have not reported to anyone while 28.8% of women have reportedly informed. 71.4% of women stated to have ignored it and only 28.6% of women feeling embarrassed to discuss with anyone.

4.5 Facilities for Women Construction Workers

The following table presents the facilities availed by the women workers at the construction site. Among the respondents, 76.0% do not come to work when they are unwell while 24.0% of workers come to work while unwell; as they are daily workers, the contractor becomes reluctant to grant them leave.

Table 4. 4: Facilities for Women Construction Workers

Covariates	**%**	**N=288**
Get leave when unwell		
Yes	76.0	219
No	24.0	69
Leaves are sufficent/insufficient		
Sufficient	79.9	175
Insufficient	20.1	44
Work while unwell		
Yes	27.5	19
No	72.5	50
Contractor reluctant to grant leave		

Yes	54.9	158
No	45.1	130
Get extra money while unwell		
Not at all	67.7	195
Sometimes	32.3	93
Take children to work		
Yes	52.8	152
No	47.2	136
Do the children help in work		
Yes	10.5	16
No	89.5	136
Nature of work done by children		
Carrying brick	62.5	10
Carrying water	37.5	6

About 54.9% of women reported that the contractor sometimes does not allow availing them to leave if there is shortage of workers while20.1% of workers feel that they do not get sufficient leave while unwell as they have to join the work to sustain their family. Moreover, 67.7% of women reported that they do not get any extra remuneration while unwell or in case of any mishaps while 32.3 % of them sometimes get the extra money from the person who has hired them instead of the contractor. The table shows that 52.8% of women take their children to the worksite and around 10.5% of women agreed that their children help them at work site. They help them in carrying brick (62.5%) and carrying water (37.5%). Even though, 89.5 % of women reported that the children do no help in work, still they are exposed to the harsh working conditions at the construction site as there are no crèche or day care facilities available at the worksites.

4.6 Sanitation & Hygiene

Majority of the sample respondents stated that they have no toilet facilities at the workplace (Table 4.5). With no toilet facilities, most of them make to do with open defecation; as such they have to go outside from the site as they are left with no option.

Table 4. 5: Sanitation facilities for Women Construction Workers

Covariates	**%**	**N=288**
Sanitation facility available		
Yes	2.1	6
No	97.9	282
Canteen/other facility for taking food		
Yes	8.3	24

No	91.7	264

Among the respondents, 91.7% reported that they have no canteen or cooking facility at the workplace so they bring their food from home while coming to work whereas only 8.3% women depend on nearby hotels or canteens for food. Moreover the exposure to dust at the workplace also adds to the unhygienic condition.

4.7 Safety Measures

Results from the following table depicts the precautions or safety measures available at the work site. As all of them are brick carriers they never got an opportunity to learn other skilled works.

Table 4. 6: Safety measures at the worksite

Covariates	**%**	**N=288**
Safety measures**		
Taken	12.5	36
Not taken	87.5	252
Remunerated on mishaps/accidents		
Sometimes	10.8	31
Not at all	89.2	257
Facility of First – Aid		
Yes	12.8	37
No	87.2	251
** Protective Apparel / Safety Nets /Fencing & Preventive wires.		

Among the respondents, 87.5% of women responded that no safety measures were taken at the work site and only 12.5% said that safety nets were present only where high altitude buildings were constructed. 87.2% of the respondents reported that there are no first aid facility at the worksite while only 12.8% sometimes avail the facility at the site. In case of accidents also they were not remunerated. 89.2% of women workers said that they never get remuneration from the contractors while only 10.8% are sometimes remunerated by the people who have hired them.

4.8 Qualitative insights from the study

Case Study 1- Rukuni Gudi (name changed), 28 years from Bhandari Pokhari, Bhadrakh along with her husband came to Bhubaneswar in search of work. Both of them started

work at the construction site near Raghunathpur of Bhubaneswar as daily laborers. However, she lost her husband to brain fever. Left without any choice, she continued to work there for her livelihood. She earned around Rs 230-250 per day depending on the work done. One day while carrying bricks on her head she fell down from the bamboo constructed ladder. She was seriously injured and sustained injuries on her head, leg and back for which she had to discontinue her work for two weeks or more. At the worksite, first aid was not available and neither she was paid for her treatment. She had to borrow money from her relatives to meet the medical expenses. After recovering, she was unable to work at the construction site and was removed from the work by the contractor. In her replacement her mother-in-law was hired to complete the work. Now, she is working as a domestic help to make her both ends meet. The case study represents the fact that there is no availability of safeguards as well as first- aid for the workers working at the site. There is no job security and the nature of job is very casual for them as they can be removed any time from the work.

Case study 2- Shayamalata Naik (name changed), 36 years from Ramagiri of Ganjam, came to Bhubaneswar with both her daughters after his husband settled at one of the slums in the city. After coming to Bhubaneswar she also started working along with her husband at the same construction site. She often took both her girls to the worksite as they were too young to be left alone at the home. They were left at the worksite with the other children of workers. Usually she left for work at around 8.30 am and came back by 6.30 pm. Despite the presence of her husband, she was exposed to lewd comments made by the co-workers and sometimes by the passerby. As per her statement she was not happy at the worksite as the work was very strenuous and the wage insufficient. Moreover, there was no sanitation facility and everyone used the open space for urination. They also used the tank water for drinking purpose which was also not clean. But as there was no other way, they were bound to drink that tank water only.

Case study 3- Lipika Murmu (name changed),27 years from Keonjhar is a daily worker engaged at the construction site, as her husband is idle and is not engaged in any kind of activity. She is usually accompanied by her mother -in-law and her one-year child who is often kept at the shade with the children of other workers at the construction site. As said by her “I worked till the eighth month of my pregnancy, the work usually involves carrying water, mixing up of the sand and cement and carrying it up to the masons, cleaning the site, helping other women in carrying the bricks.” Although her work

required standing and walking continuously for a long time, she hardly took any rest. When asked about any health problems she faced during this period, she stated that she regularly had backache, swelling and pain in legs due to long standing hours. Sometimes she had vaginal discharge accompanied by pain during urination but had not taken any treatment for these symptoms. She believed that these symptoms were normal and would go away with the passage of time. As revealed by her she had frequent fever and cold during pregnancy for which she took medicines from the local medicine store. Moreover, due to the contact with the cement particles at the worksite, her hands and legs had contaminated with fungal infection. Even after taking medications, it has episodes of reoccurrence.

4.9 Summary

In India, migration of workers is mainly influenced by social structures and pattern of uneven development. Most of the migrants are generally poor belonging to the lower rank of the society and from economically backward regions. Usually, the workers migrate from one place to another in search of better job opportunities and improve their standard of living. In the present study an attempt has been made to look at the issues and challenges faced by these migrant women workers engaged in the construction sector. It is observed that wage discrimination based on gender has been a significant problem since decades. The present study reflects the working condition and the wage discrimination among the male and female workers. Women who are engaged in the construction work are found to be working more than ten hours per day including the household chores and work at site. The mean wage was found to be Rs 250.The wage difference is glaring in the construction sector as it is found that the male worker earns Rs 350-400 per day, whereas the women workers earn between Rs 250-300 and sometimes less than that. Due to lack of awareness of wages differentials, they are always a step behind the male workers. Even some of them choose to remain silent in this matter knowingly in fear of losing their work. This fact is undeniable from the previous empirical studies in India which shows that the wages of the women workers have been significantly low in the construction sector (Anand, 1998).Women workers agree that they face harassment but suffer in silence as they are too scared to let the matter come out in open. They are exposed to verbal abuse by the male co-workers, contractors as well as other persons working at the construction site but they tend to remain silent in this matter and they get used to it. Moodley (2012) also

stated that the construction workers are open to different forms of violence in form abuse from co-workers, extra marital relationship as they are poor. A study by Bhattacharya & Bengal (2013) reveals that insecure nature of job itself creates a trap in which the unmarried girls and women are bound to please the contractor and sometimes co-workers in order to get work.

The evidence from the field highlight that they were not remunerated in case of any injury or accidents. The unsafe working condition in the absence of social security, no remuneration in case of accidents or death, absence of facilities like safe drinking water and sanitation, absence of first- aid are some of the negative externality of the construction sector. About 90% of the respondents reported about the absence of safety measures and first–aid facilities at the construction site. They are hired by the contractor but are devoid of basic facilities which are sanctioned by the labour laws. Neither they are befitted by the contractor nor are they aware of their rights which add to their woes. As reported by them, the contractor was reluctant to grant leave to them while unwell and 32.3% of the workers sometimes got remuneration from the contractor when they were not well. The qualitative insight from the field also reveals that most of them who have reported to suffer from major ill health were in debt and had to borrow money for treatment.

The construction sector as an industry supports migration in developing countries both in terms of skilled as well as unskilled laborers. Especially the women migrants have to undergo difficulties in the form of abuse as well as are exploited in the hands of contractor and co- workers. Thereby, this becomes in-dispensable to explore the conditions of women engaged in construction work. Their situation needs to be improved especially in housing, care for children, safe environment, accessing health care facilities and lead a life where they can at least avail bare necessities. Moreover, proper rules and regulations should be in place so that the women workers can be protected from exploitation and have their dignity of labour intact. Along with this, the basic amenities like access to safe drinking water, separate toilets for men and women, safety measures, remuneration in case of injury should also be ensured for the women workers.

Chapter 5

Patterns of Gynaecological Morbidity and Healthcare Utilization

5.1 Introduction

From the past decade it has been seen that, there is a growing concern with women's health in developing countries as evidenced by the safe-motherhood initiatives, and by the adoption of women's health perspectives in strategies addressing child survival, family planning and women-in-development issues. This concern has created a demand for information that can provide a diagnosis of women's health needs in developing countries. In this situation of scarcity, the search for information on women's health has come to rest on the most negative indicator, namely, the maternal-mortality ratio. This ratio suffers from inaccuracy and from lack of coverage in many developing countries. Nevertheless, the figures available for developing countries indicate rates of maternal mortality that are almost ten times higher than in developed countries (Zahr &Royston, 1991). This is alarming in its implications, but presents only the tip of the iceberg where women's health is concerned. In fact, a realistic diagnosis of this condition can be made from development of a much wider representation of women's health that reflects the real magnitude of the problem.

The available information is inadequate partly because of problems related to two main potential sources of information. First, statistics from health institutions in developing countries generally suffer from the problems of incomplete coverage. This problem is particularly severe where women's health is concerned because of the lack of support for women to visit health services and of the 'culture of silence' among them regarding their health (Dixon-Mueller &Wasserheit, 1991; Khattab, 1992). Secondly, most population based surveys directed at women in developing countries have largely concentrated on other issues than women's health such as fertility, contraceptive prevalence and child health.

Various conceptualizations of reproductive health consider reproductive morbidity

as inclusive of conditions of physical ill-health related to 'successful childbearing' and 'freedom from gynecological disease and risk' (Zurayk, H., Khattab, H., Younis, N., El-Mouelhy, M., & Fadle, M. ,1993). In line with these conceptualizations, we define reproductive morbidity to encompass obstetric morbidity including conditions during pregnancy, delivery and the post-partum period; and gynecological morbidity including conditions of the reproductive tract not associated with a particular pregnancy such as reproductive-tract infections, cervical cell changes, prolapse and infertility. In addition, an interest in reproductive morbidity is also considered to encompass related morbidity including such conditions as urinary-tract infections, anemia, high blood pressure, obesity and syphilis as a systemic condition. Obviously this framework of reproductive morbidity is based on a biomedical model of health.

Reproductive morbidity ascribes the health problems related to reproductive organs and functions, including and outside of childbearing (Martin,2001). It includes both gynecological and obstetric morbidity as well as related morbidity, such as urinary tract infections, anemia, high blood pressure and obesity. Gynecological morbidity includes reproductive health problems other than pregnancy, like Reproductive tract infections (RTIs), menstrual problems, cervical ectopy (erosion), infertility, prolapse and problems with intercourse. Obstetric morbidity refers to ill health in relation to pregnancy. Research in India shows that poor women carry a heavy burden of reproductive morbidity. A significant component of such morbidity is unrelated to pregnancy and is due to RTIs, many of which are sexually transmitted. These reproductive illnesses among women are invisible because of the culture of silence that surrounds them and women do not have access to health care for these illnesses. As past programmers recognized women only as mothers, many women were not treated and many reproductive health problems were not addressed (Pachauri, 1994).

Most of the studies available on reproductive morbidity reflect the information received from the records maintained by the hospitals and clinics but in reality, a considerable proportion of women do not avail the facilities and thus the results do not give the actual picture (Bhatia &Cleland, 1995). In the past, the usefulness of data on self-reported morbidity had been questioned as it accounts for over reporting of symptoms that in turn do not match with the recorded clinical examinations. In the Indian society, women bear the symptoms of these morbidity conditions silently without seeking any health care,

which may reflect lack of awareness and fatalistic approach. Self-reported symptoms have its relevance and utility. In the present study, one limitation of studying reproductive morbidity is that we consider only symptomatic women with the assumption that asymptomatic women are uninfected. This assumption is generally not always true. And also almost all the symptoms tend to overestimate the true prevalence.

Within the framework of World Health Organization (WHO), Reproductive health has been defined as "people have the ability to reproduce and regulate their fertility; women are able to go through pregnancy and child birth safely, the outcome of pregnancy is successful in terms of maternal and infant survival and well-being; and couples are able to have sexual relations free of the fear of pregnancy and contract diseases. The Reproductive and Child Health programmes include the components covered under the child survival and safe motherhood programme and include additional components related to sexually transmitted disease (STD) and reproductive tract infection (RTI).The control of reproductive tract infections (RTIs), especially sexually transmitted infections (STIs), is an urgent health priority in many countries. Globally WHO estimates that reproductive ill health accounts for 36.6% of the total disease burden in women as compared to 12.3% for men of the same age group (Laanpere, 2015).

Although early detection and treatment of STDs can prevent complications and minimize the severity of long-term sequel, many infections go untreated. Cultural barriers as well as poor understanding of the significance of symptoms may also reduce care-seeking by women (Pradhan,2013). Considerably, a large proportion of women suffer from different gynecological morbidities but are reluctant to seek treatment because of social taboos and inhibitions, they suffer in silence. Therefore, it becomes a problem to assess the magnitude of the problem. Ultimately this leads to a very complicated situation, making the condition even worse. RTI/STI as a community health problem needs exploration in different strata and risk areas to understand the extent, pattern and community behavior of the disorder. Generally, reproductive health is prejudged by the existing socio-economic condition of the society in which individual resides. The determinants are inter-related. Their relative importance varies for different health conditions (WHO, 1992). The dimensions of morbidity include – severity of the condition, duration of illness, time of onset, accumulation and consequences, demographic behaviour, behavioral and other risk factors.

In our society the status of women has an impact on her reproductive health. An individual's behaviour or lifestyle is an important determinant of his or her health. When the woman's 'value' is based on the number of children she has; their ability to regulate and control fertility is regulated. Women's central role in nuptiality, fertility, fecundity and other reproductive health issues affect their quality of life. The centrality of social and cultural norms around women influence their reproductive health and well-being. Moreover, the susceptibility to ill-health occurs in all phases of life cycle from childhood, adolescence, marriage, child bearing to old age. These factors compel to study the social background and patterns of gynecological morbidity.

In general, educated women use health care services much more than illiterate women which implies that attainment of education promotes better reproductive health along with the survival of the infant. Rathore M. et al. (2006) found that 29.5% women with RTI/STI were of illiterate group, while only 7.3% were having secondary & higher secondary education. Higher prevalence is found in women who were illiterate (42.9%) as compared to women educated up to middle level (4.6%).

5.2 Conceptual framework for Health Seeking Behavior

Health or care seeking behaviour has been defined as any action undertaken by the individuals who perceive a health problem or to be ill for the purpose finding an appropriate remedy. It is a term widely used to explain the pattern of health care utilization among any population group. Health seeking behaviour as a concept has gradually emerged with time and has basically become a tool for the people to understand and approach health care systems irrespective of socio-cultural, economic and geographical circumstances. Moreover, according to Tipping & Segall (1995) there are variety of factors like age, social status, severity of illness, and perceived quality of services that influences to access a particular health care system.

According to Conner &Norman (1996) the impact of human behaviour on health is basically dependent on the fact that large populations suffer from mortality and morbidity is basically due to their socio-cultural behaviours and secondly, these behaviours can be modified. All these behaviors can be classified at various institutional levels: family, community and access to health care services. Thus, it becomes important to study the

impact of the determinants like age, ethnicity, education, gender, lifestyle, role of community, etc. to understand the health seeking behaviour, particularly in a community (Caldwell &Caldwell, 1993).But there is still a lack of availability of information regarding how livelihood of a people is affected when the earning member of the family falls sick; how the family members cope with this situation; how their community or social networks help and what are the patterns of health care seeking (Marmot,2005).Taking these reviews into consideration, the conceptual framework has been outlined for the study to look into the pattern of health care seeking of women especially who are working in the construction sector.

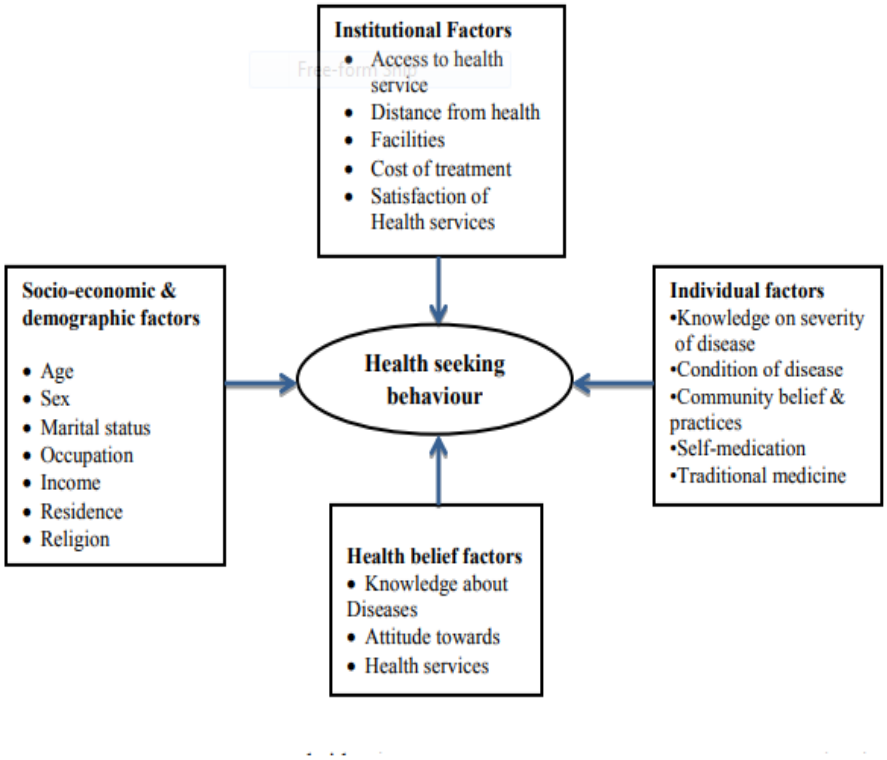

Figure 5. 1: Health Behaviour Model

Source: Health Behaviour Model, Bhatia & Cleland, 1992

This conceptual framework identifies the four major factors that mainly aid the individual to access health seeking facilities. These are namely: the socio-economic and demographic factors like respondent's age, sex, religion, marital status, etc.; health belief factors that implies the respondent's knowledge about a particular disease and recommended behaviour to reduce the health issue; the individual factors include the individual sense of well-being, traditional methods of medicine, cultural belief and

practices; and the institutional factor which includes the distance or physical proximity to health access, the health service, cost of treatment and satisfaction after receiving the treatment.

In India, various ethnographic studies reflect on the fact that women generally are reluctant to avail treatment, especially for gynecological health issues as they are shy of disclosing the facts and suffer in silence. While interacting with respondents, they also perceived the gynecological problems as a normal phenomenon in the life of women, until they face severity of the problem. The frequently reported illness by the women workers were irregular and painful menstruation, urinary inconsistencies, white discharge, itch in vaginal area followed by other gynecological morbidities. As per the view of respondents, apart from visiting government hospitals for treatment they alternatively use home remedial measures to cure the diseases. Especially, the quacks play an important part of their life, while seeking for treatment.

Some of the home remedial measures followed by the respondents for treating various gynecological problems are like taking paste of fennel seeds and dry dates with milk or water, eating flesh of birds like bats and pigeons to produce heat in the body for treatment of irregular periods and painful periods; while flowers and leaves of hibiscus are boiled and taken to prevent excessive vaginal discharge and other skin diseases. As reported by the respondents, they felt that abnormal vaginal discharge is due to their husband's drinking habits, multiple pregnancies and exposure to workplace environment.

5.3 Patterns of Morbidity

In Odisha, studies on reproductive morbidity are not very extensive and are limited. This chapter intends to clarify the objective that is to identify the reproductive morbidities prevalent among the construction workers; and then to analyze the socio-economic covariates of these morbidities. Some of the gynecological problems reported by the respondents are discussed below.

Table 5. 1: Distribution of respondents according to Gynecological morbidities (N= 288)

Gynecological Morbidities	**%***	**N**

Irregular menstruation	41.3	119
Painful menstruation	46.9	135
Excessive bleeding during menstruation	11.5	33
Absence of menstruation	5.9	17
Excessive white discharge	3.5	10
Foul Smelling discharge	15.6	45
Itch in Vaginal area	34.0	98
Pain during intercourse	25.3	73
Sepsis in vagina	4.5	13
Protepse of Uterus	10.1	29
Burning/ sensation during urination	36.8	106
Pain during urination	19.1	55
Pus in urine	3.5	10
Urinary inconsistency	37.5	108
Genital ulcers	5.9	17

*The respondents reported more than one gynecological morbidities.

The above table represents the ubiquity of different reported gynecological morbidities among the women construction workers. The mean gynecological morbidity was found to be 2.72%. Painful menstruation (46.9%) was the most common gynecological morbidity followed by irregular menstruation (41.3%) and urinary inconsistency (37.5%) among the respondents. Regarding the other gynecological morbidities 36.8% women reported to have burning sensation during urination, 10.1% had protepse of uterus, 19.1% suffered from pain during urination, 15.6% complained about foul smelling discharge, 34.0% reported itch in vaginal area, 11.5% had excessive bleeding during menstruation, 4.5% reported sepsis in vagina, 5.9%absence of menstruation,3.5% pus in urine,5.9% genital ulcers and only 3.5% reported excessive white discharge.

Discussion with the respondents indicates that they perceive these kinds of disorders as a process of sexual maturation for women and consider it as normal. Most of the respondents reported that they ignore these morbidities as they think it is a natural process for a woman and some avoided contacting the medical practitioner as they were too shy to open up on all these matters. For instance, while discussing menstruation problems and white discharge one of the respondents said that “like every tree has flowers, every woman will have discharge except it’s not soothing like a flower.” The respondents commonly used different terms to refer to different types of discharge. In terms of severity, most of the women in general reported irregular and painful menstruation as the most severe illness, while some other reported different forms of discharge. They also

linked other illnesses like general weakness and backache along with these diseases and refrained from discussing these matters with doctors as they felt shy and embarrassed. Respondents also reported to have clusters of symptoms that they reported together because they experienced them simultaneously.

5.3.1 Pattern of multi-morbidity prevalence

Result from figure 5.2 suggest that about 81% of the respondents are experiencing multi-morbidity (2 or more morbidity). About 4% of the respondents have reported that they have never experienced any episode of morbidity during last 1 year.

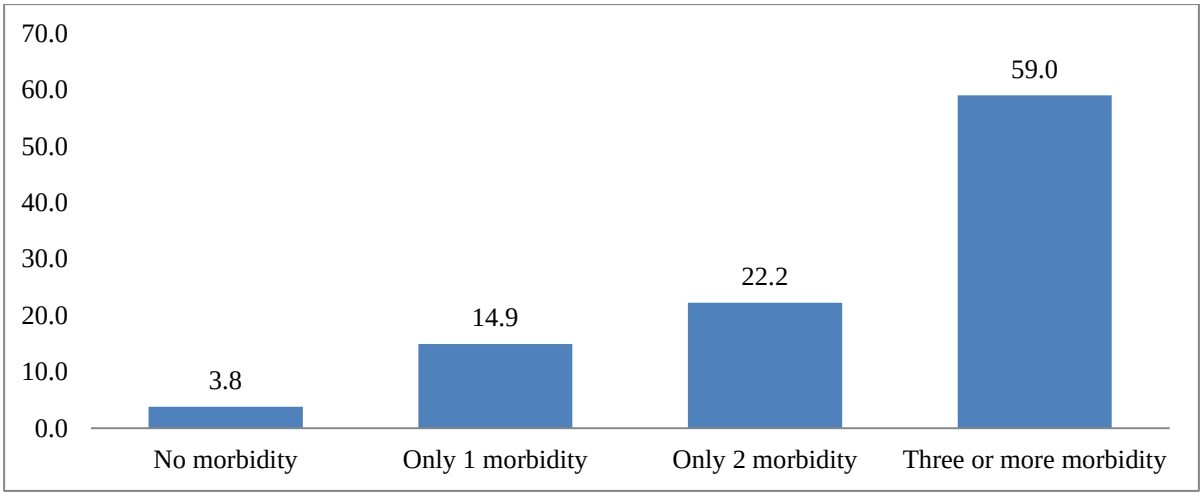

Figure 5. 2: Pattern of multi-morbidity prevalence

5.3.2 Socio-economic differentials in Multi-morbidity

Several backdrops also influence the reproductive morbidity conditions of these workers. Here we relate the socio-cultural problems with the gynecological problem of women. Although the problems are more of biological in nature but social and cultural factors were found to have some influence in the occurrence of these problems, so we have highlighted the socio-cultural dimensions in which the problems occurred.

Table 5. 2: Prevalence of morbidity by selected socio-economic covariates

Socio-economic covariates	No morbidity	Only One morbidity	Only 2 morbidity	3 or more morbidity	N
Age					

15-19 years	5.3	7.0	12.3	75.4	57
20-24 years	1.8	16.7	24.6	57.0	114
25-49 years	5.1	17.1	24.8	53.0	117
Caste					
SC/ST	3.5	12.4	29.2	54.9	113
OBC/General	4.0	16.6	17.7	61.7	175
Education					
Literate	3.2	25.8	16.1	54.8	31
Illiterate	3.9	13.6	23.0	59.5	257
Total	3.8	14.9	22.2	59.0	288

Table 5.2 depicts the prevalence of gynaecological morbidity across socio-economic covariates. When gynaecological problems of the respondents were asked with respect to the different age groups, it was found that 75.4% of the respondents in the age group of 15-19 years were having more than three gynaecological morbidity while only 5.3% of respondent have reported no gynaecological morbidity. Similarly 57% and 53% of the respondents were suffering from multimorbidity (≥2 gynaecological diseases) in the age group of 20-24 years and 25-49 years respectively. While looking at the morbidity profile of the respondents who have suffered from only one type of gynaecological morbidity, it reflects that 17.1% of women in the age group 25-49 years have suffered from one type of morbidity followed by 16.7% in the age group of 20-24 years. This shows that the prevalence of gynecological problems is higher in the adolescent stage. This may be due to the fact that the lack of awareness about the menstrual disorder as well as the unhygienic condition among the adolescents and respondents in the reproductive age face various types of disorders combined with the lack of postnatal care and rest which might have resulted in such problems. In a study by Parashar A. et al. (1999) in Shimla, they found, the prevalence of RTIs was significantly high ($p<0.001$) in those who were using any type of cloth whether clean or unclean.

When the gynecological problems of the respondents were analyzed with respect to different categories it was found that majority of the respondents, near about 62% in the general category were reported to have more than three gynecological morbidities followed by 55% of respondents in the SC/ST category. And 29.2% of respondents belong to the ST/SC category who were reported to have only two morbidities followed by 12.4% of them who had witnessed only one kind of gynecological morbidity. When compared to the respondents of OBC/general category, it was found that16.6% had witnessed one and

17.7% witnessed two types of gynaecological morbidity.

The educational status of the respondents shows that most of the respondents are illiterate, and multimorbidity (≥2 gynaecological morbidity) is more in case of illiterate than the literate respondent. About 59.5% women were having three or more than three gynaecological morbidity in case of illiterate while it was 54.8% in literate women. Similarly, 23% of illiterate women had witnessed only one kind of morbidity against 16.1% women in literate category. And only 3.2% and 3.9% women had reported no morbidity in both literate and illiterate respectively.

The prevalence of higher percentage of RTI among the respondents indicates the negligence of the social and cultural dimensions of reproductive health. More than 90% of the respondents use cotton clothes to absorb the bleeding during menstruation and reuse it for several times. Although they use to wash and replace these clothes frequently, however dry it in unhygienic surroundings. These unhygienic conditions pave the way for different reproductive tract infections (RTIs) as well as other infections. It's a major cause of various problems among the adolescent girls who are not sexually active and are unaware of the consequences. Due to lack of awareness about the RTIs and other infections they tend to suffer and thus don't seek treatment for RTIs.

5.4 Results from logistic regression analysis

An effort has been made to look at the adjusted effect of various socio-economic and demographic covariates on the morbidity pattern. Binary logistic regression has been employed to examine the adjusted effect of various covariates viz. age, age at marriage, caste, education, family type, type of house, availability of kitchen, source of lighting, and availability of sanitation facility. The dependent variable is the occurrence of multi-morbidity (having 2 or more morbidity=1; Otherwise=0)

Table 5. 3: Results from Logistic regression analysis

	B	Sig.	Exp(B)
Age at marriage			
15-19®		.532	1.000
20-24	.455	.287	1.577
25-30	.434	.325	1.543

Current age			
15-19®		.453	1.000
20-24	-.465	.319	0.628
25-49	-.584	.212	0.558
Caste			
SC/ST®			1.000
OBC/General	-.218	.003	0.804
Education			
Literate®			1.000
Illiterate	.534	.005	1.706
Family Type			
Nuclear®			1.000
Joint	-.640	.163	0.527
Type of house			
Pucca®		.099	1.000
Semipucca	-.452	.419	0.636
Hut	.859	.001	2.362
Having separate Kitchen			
Yes®			1.000
No	.789	.002	2.201
Source of light			
Electricity ®			1.000
Others	.790	.000	2.203
Availability of toilet facility			
No®			1.000
Yes	-.397	.022	0.672
Constant	1.926	.049	6.863

Results from above table shows that, there is a significant association between various socio-economic covariates like caste, education and the prevalence of gynecological morbidity. The occurrence of gynaecological morbidity is 1.7 times higher in case of illiterate than the literate women. Similarly, the prevalence of morbidity is 2.3 times higher in case of people who are living in a hut rather than living in a pucca house.

5.5 Treatment seeking behavior

In Indian context, women generally respond slowly to attend their own medical needs as they are habituated to suffer in silence and think that they would get better with the passage of time. Moreover, their economic status and prevailing cultural factors also

curtails the ability of women to take decision for availing health care. To abstain themselves from their work and normal household duties increases their responsibilities as well as make the situation difficult for them as they have to think about their family first and then for themselves. It becomes difficult for them to manage family as well as work. Lack of time, tiring work and different duties are also the restraining factors for which the women remain devoid of accessing health care seeking for them. The traditional set up of the society accustoms the women to think of their family first and they are forced to discharge the duties enjoined upon them as wives, mother-in-law and mother; and in the end they remain silent on matters relating to health.

Health of a person is largely dependent on both individual and household level characteristics. Other than the social and economic factors, obstacles include the cultural and self-approach factor which includes their beliefs, religious misconceptions. For example, some women usually attach health problems to destiny, as they lack scientific reason behind the occurrence of the diseases. And in many cases family and customs of the society also debar the women from taking decisions for them relating to their health. It demarcates the purview within which the women are granted to seek health care. As far as health of a woman is concerned, her husband and mother- in-law are usually the prime decision makers in accessing the health care services. They consider that attention to a women's health should be given only during the pregnancy and child birth. This differentiation makes the women to accept the reproductive behaviour as it is and thus have no control on their bodies.

As reported by the respondents, they are also reluctant to seek health care for different gynecological morbidities are basically out of fear and embarrassment. Like, Satyaraj Dalei (name changed) aged 32, a construction worker engaged in building and construction site said "I was having pain and had developed genital ulcers and went for treatment with my husband to the government hospital but when they said that to get admitted to treat the ulcers as it had pus; and asked conduct some other tests…I simply came back to home with my husband as I was afraid to undergo the use of equipment's and the doctor was also a male…..it would have been very embarrassing for me…I will get better with those prescribed medicines."

Thereby, it is perceivable that women's health is shaped by different socio-

economic, cultural and behavioural factors and seeking care for health is a very dexterous problem and needs attention.

5.6 Culture & Health beliefs

Culture is an integral part of our existence. It varies from people to people. Tylor (1871) defined culture as "that complex whole which includes knowledge, beliefs, art, morals, laws, customs, and any other capabilities and habits acquired by a man as a member of society." Pati (2003) clearly states that "Cultural stigmatization of in-depth sexual knowledge in many countries prevents women from identifying reproductive ill –health. Ignorance about sex and low level of knowledge of sex related concerns are viewed as virtue. This cultural value has restricted women in conservative communities to acquire appropriate knowledge on reproductive ill-health. Therefore, they consider many symptoms of STIs as normal features of womanhood. They are restricted by cultural stigmatization and thus get devoid of further diagnosis and treatment."

Every culture has its own set of health beliefs which explains the cause of illness and how can it be treated or cured and the people who should be involved in the process (Helman, 2007). Like, if an endemic disease occurs, people tend to believe that it occurs due to possession of supernatural powers. Similarly, people who are educated have also cultural relevance for them as it has a thorough effect on their acquisition of information provided on health issues and their compliance to use it. They view disease as a result of scientific phenomenon and approach services for treatment of these diseases. The cultural difference also regulates the patient's behaviour towards medical care, and their efficacy in understanding the problem and effectively coping with the illness and ultimately availing the medical treatment.

In actual practice, the respondents preferred using homemade medicine or visited a local medicine shop to get medicines rather than preferring modern health care system. In terms of Sexually Transmitted Disease (STDs) symptoms, preferential treatment seeking is preferred by the respondents rather than going for traditional healer. Besides self-treatment, there are some other situations like lack of physical accessibility to the modern health care providers, time and cost factors etc. play a very major role in the treatment seeking behaviour of the respondents.

Table 5. 4: Treatment taken by respondents

Gynecological Morbidities	**%**	**Treatment taken (N)**
Irregular menstruation	54.6	65
Painful menstruation	11.9	16
Excessive bleeding during menstruation	75.8	25
Absence of menstruation	11.8	2
Excessive white discharge	30.0	3
Foul Smelling discharge	35.6	16
Itch in Vaginal area	11.2	11
Pain during intercourse	17.8	13
Sepsis in vagina	30.8	4
Protepse of Uterus	3.4	1
Burning/ sensation during urination	14.2	15
Pain during urination	-	-
Pus in urine	20.0	2
Urinary incontinence	5.6	6
Genital ulcers	17.6	3

(*Respondents who went for treatment are only recorded.)

The above table represents the treatment seeking behaviour of the respondents. Out of the 288 respondents, 182 of the women workers availed the treatment for different diseases, which also indicates that they are very much aware of the available health care services and their interest in seeking treatment for their health. Looking at the treatment seeking pattern it is found that about 75.8% of women took treatment for excessive bleeding during menstruation; one of the highly reported problems followed by 54.6% for irregular menstruation and 35.6% for foul smelling discharge. Around 11.8% and 11.2% of women reportedly have taken treatment for absence of menstruation and itch in vaginal area respectively.

Table 5. 5: Place of treatment

Place of Treatment	**N**	**%**
Govt. Hospital	65	46.18
Private Clinic	8	5.73
Local Medicine store	60	42.75
Self –Medication	8	5.34
N*	141	100

(*Respondents who went for treatment are only recorded.)

The above table represents the preferred place of treatment by the respondents. Out of the 182 respondents who availed treatment are only considered in this chapter. About 46.18% of respondents visited government hospital to seek treatment for the reported morbidities and 42.75% respondents visited local medicine stores to seek treatment for the reported morbidities. The respondents also reported that visiting charges for private hospital for general diseases like fever, cold and flu was very much costly for them. So, consciously they preferred not to visit private clinic in fearing the cost of treatment as well as medicines and other tests. They said that they would ask the person in the local medicine store to give them medicines by telling the symptoms of the problem only as they considered the disease not to be serious and can be cured by taking medicines only. Some reported that they were unable to visit the hospital as they had to leave for during the morning and while returning they just bring the medicines from the local stores. Moreover, some of the respondents said that they felt shy to report the gynecological problems to the male doctors, and they asked the male members of the family to bring medicines for the reported problems from the store. As reported, only 5.73% of women said that they preferred private clinic to seek treatment as they don't have to wait for long hours in the govt. hospitals. About 5.34% of women preferred self –medication to treat their health problems. They followed different home remedies, different herbs like turmeric roots, barley grass, basil leaves, leaves of moringa (sajana saga), fennel seeds, ginger, horse radish roots, lemon peel, licorice roots (yatshimadhu), water cress (kalama saga), ajwain, rice water with black peppercorn, etc.

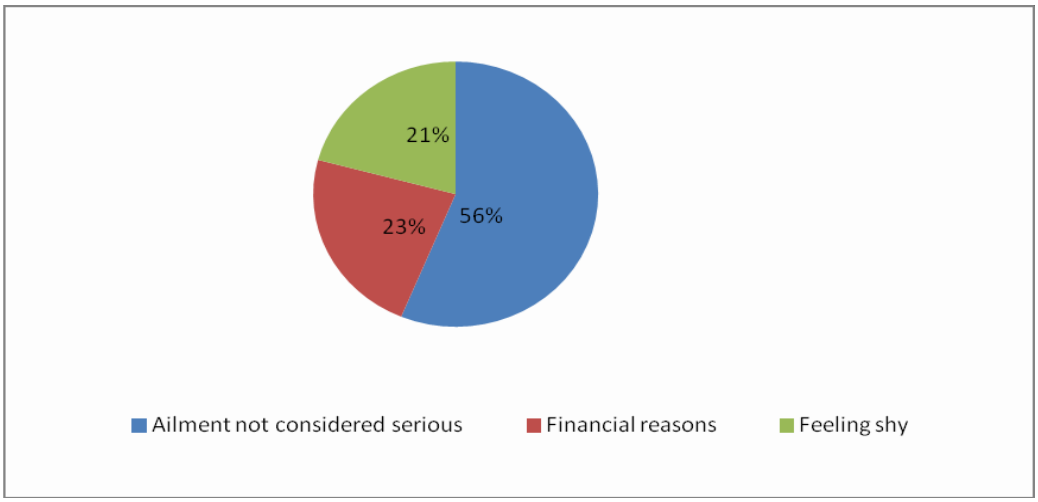

Figure 5. 3: Reasons for not taking treatment

The above figure represents the reasons for not taking treatment. Out of the 288 respondents only 147 of the respondents reportedly didn't take treatment for the reported gynecological problems. Around 56%, workers considered the ailment not to be serious in nature followed by 23% of women who said that their financial condition prohibited them to access the health care facilities for them and 21% considered that they are feeling shy to report the problems in front of a doctor. They preferred self -medication instead of visiting doctor to treat the problem. When asked to one of the respondents suffering from urinary inconsistence for more than a month…what if the problem gets serious? She answered that "this is not a severe problem. It happens to all the ladies at this age… will visit the doctor if the problem persists, but would prefer remedial measures at home." This shows the behavioral attitude and negligence of the problem of the women towards seeking treatment for different gynecological problems.

5.7 Qualitative insights from the study

Case study 1: Observations made from the case study reveals that mainly the adolescent girls were reluctant to speak the problem about these diseases due to the social stigma attached to these reproductive health problems which is one of the reasons for non – utilization of health services. They often don't talk about menstrual problems as well as about white discharge due to embarrassment. 15 year old Reena Kundu (name changed), migrant worker from Kendrapara said "nobody talks about these types of illness like other general problems and it is embarrassing to go for treatment."

Case study 2: 22 year old Rukmani Sahoo (name changed), from Gadhakana, Bhubaneswar was suffering from lower abdominal pain and irregular menstruation from the last 3 years but she didn't disclose this to anyone and considered it as a natural process for any women. However, when the pain persisted she discussed this with her mother-in-law but did not receive any treatment. Her mother–in-law reportedly said that "you are suffering this pain due to cold and habit of untimely eating, take some fennel seeds with hot water you will feel better."

Case study 3: Shantilata Majhi 18 years old(name changed), a migrant worker from Kantabanji, Balangir had foul smelling vaginal discharge along with itch in vaginal area

for last eight months, she assumed that the illness would be cured and out of embarrassment she didn't inform anyone. But informed her mother when she started to have blisters near the vaginal area. Her mother not aware of the severity of the illness and statedthat"the ailment will get cured by taking roots of turmeric and will take her to doctor next month after getting enough money."

5.8 Summary

When the gynecological problems were analyzed with their age, about 53% of the women reported of having three or more gynecological morbidities followed by 24.8% and 17.1% who had only two and one gynecological morbidities respectively in the age group 25-49 years. The present study highlights the fact that the girl/women in the adolescent period suffered more from different gynecological morbidities. More than half of the respondents in this age, near about 75.4% reportedly stated that they had more than three gynecological morbidities followed by 57% respondents in the age group of 20-24 years and 53% in the age group of 25-49 years. More or less, the respondents reported to have suffered from either two or more than three gynecological morbidities. These findings are similar to the study made by Rathore etal. (2000), where women in this age group reportedly had higher prevalence of RTIs. In our study, the respondents were mainly the unskilled workers who are engaged in the construction sites. Similar findings were seen in the studies conducted by (Samanta et al., 2011; Hawkes et al., 1995), where the prevalence of RTI/STI prevalence was maximum in case of women working outside the home and homemakers.

The present study also reflects the ubiquity of different gynecological morbidities reported by the respondents. The mean gynecological morbidity was found to be 2.72%. Painful menstruation (46.9%) followed by irregular menstruation (41.3%) and urinary inconsistency (37.5%) were some of the most reported problems of the respondents. Apart from it, other reported morbidities prevalent among the workers were protepse of uterus, pain during urination, foul smelling discharge, etc. Discussion with the respondents suggests that they perceive these kinds of disorders as a process of sexual maturation for women and consider it as normal. Similar studies are done by (Balmurugan SS etal., 2012&Ray et al. 2008;, where it has been reflected that most common symptoms among women was vaginal discharge, lower abdominal pain and genital ulceration. The health

care seeking pattern in the study reflects that about 46.18% women visited Government hospitals for these reported gynecological morbidities and around 43% of the respondents preferred medicines from the local medicine stores for treatment. This highlights the fact that even after the availability of resources and medical facilities, the respondents still lack consciousness in availing facilities. The qualitative insights from the study also suggests that they prefer home remedial measures rather than clinical practices as they considered the ailment not to be serious, feel embarrassed in reporting the problem and sometimes financial condition prohibited them to access the health care facilities.

It can be inferred that due to cultural stigmatization they consider these reproductive ill –health as part of womanhood and remain ignorant; thus reflecting in prevalence of reproductive morbidity among these women construction workers. It is therefore necessary to increase awareness among women regarding symptoms and the consequences of these reproductive tract infections and STIs through education and information. This would help in reducing reproductive morbidity to some extent among the women workers.

Chapter 6

Socio-cultural Dimensions of Reproductive Healthcare

6.1 Introduction

Death related to pregnancy and childbirth is the most direct indicator of reproductive health care. But mortality statistics tell us only a part of the story. For every woman who dies, many more suffer from serious illness (Pachauri, 1998). By some estimates, better care during labour and delivery could prevent 50-80 percent of maternal deaths. If obstetric complications are handled effectively, mortality can be substantially reduced (Pachauri,1999). Adequate utilization of health care services during pregnancy and delivery forms the solution to this problem and ensures a healthy mother. It is essential to treat pregnancy as a condition requiring special treatment and ensure to avail antenatal as well as postnatal medical care during pregnancy.

Starink and Bruin (2001) emphasized that assessing reproductive health seeking behaviour based on individual factors such as their motivation and behaviour cannot be effective in understanding the existing scenario. Similarly, extensive research on managing supply of healthcare, factors affecting quality of healthcare, etc., is also not helpful when no attention is given to the barriers and motivating factors associated with consumption of healthcare (Mulder, 2011) such as the socioeconomic and demographic profile of the users. The level of reproductive care a woman gets before, during and after her delivery can significantly vary based on their socio-cultural background. Cunningham (2009) rightfully quoted that “cultural barriers present the most complicated challenge because there is little understanding of the social and cultural factors deriving from the knowledge, attitudes and practices in health of the indigenous peoples”. The cultural freedom of pregnant women to choose their individual treatment options, in spite of the traditions and values can significantly affect their healthcare utilization. Therefore, a reality check was carried out in the present study by assessing the differences in both antenatal as well as postnatal healthcare seeking behaviour of women based on demographic factors such as their age at marriage, educational qualification, community,

monthly income, etc., economic profile such as source of funds for treatment, expenses associated with delivery, etc. and cultural aspects such as their belief in folk medicine, other rituals, etc.

Therefore, the objective of the present chapter is:

- To examine the different socio-cultural factors affecting reproductive healthcare seeking behaviour of women construction workers of Odisha

To avoid complications during pregnancy and to ensure the health of the pregnant woman, it is important that they schedule periodic consultations with a doctor even during early stages of their pregnancy. The extent of antenatal care received by women has been found to have a strong direct influence on their reproductive health status and outcomes (Cumber et al., 2016).Even though private health facilities are often inaccessible or expensive for rural women (Devkota, 2018), it is essential to seek other options such as government hospitals and public health centres during their pregnancy. However, their choice and extent of utilization of such healthcare services is often determined by a number of social, economic and cultural factors. For instance, a woman without adequate income might choose to treat herself with the resources available to her and therefore not seek professional help. Such a decision might also be powered by the innate cultural values of her society because of which she might be expected to priorities family and children over her personal health. Similarly, age can also lead to disparity in allocation of healthcare resources to women while they are pregnant owing to multiple reasons (Singh, Rai, Alagarajan & Singh, 2012). Therefore, assessing background characteristics of women such as their social, economic and cultural factors in acting as determinants of their antenatal care utilisation can have valuable policy implications. This led to the following hypothesis that

Hypothesis 1: No significant differences existed in antenatal care seeking behaviour of women based on their socio-economic profile

Similar to antenatal care, natal and postnatal care of the mothers as well as the newborns are equally important to reduce the risk of infections and other complications that might have serious implications on the life of both the mother as well as the newborn. The quality of natal and postnatal care received can vastly depend on factors such as the

place of delivery, i.e., if it was an institutional delivery supervised by a professional or a home delivery (Sudinaraset, Beyeler, Barge & Diamond-Smith, 2016). Based on the Indian culture, institutional culture is considered to be the safest mode of childbirth; however, it is common among rural women to prefer home delivery for an array of reasons such as saving expenses, better faith in folk medicine, traditions, support from kin, etc. (Vellakkal, Reddy & Gupta et al., 2017). Incidence of postnatal complications in the mother such as vaginal bleeding, health precautions for the newborn such vaccination procedures, health precautions for the mother such as the use of contraceptives, etc. post-delivery also act as important elements of postnatal care, the utilization of all of which can dependent on the sociocultural profile of women (Mulder, 2011). For instance, illiterate women might not understand the importance of administering colostrum or vaccines to their newborns (Vijayalakshmi, Patil & Datta, 2014). In addition, the women sometimes have to settle for the healthcare services affordable to them, in spite of their lack of faith in it, suggesting their income to be a possible determinant (Balarajan, Selvaraj & Subramanian, 2011). Therefore, understanding the role of such sociocultural factors in influencing postnatal care utilisation can help to ensure safe delivery and healthy children among rural women leading to the hypothesis that:

Hypothesis 2: No significant differences existed in postnatal care seeking behaviour of women based on their sociocultural profile.

6.2 Variables under study

To assess the sociocultural differences in antenatal care availed by the women, the number of antenatal visits made by them, antenatal medical and nutritive care received, their choice of healthcare centre during last 3 months of pregnancy and antenatal complications experienced were studied. Differences in postnatal care received by women were also studied at four levels: Place of delivery chosen by the women, reasons for not choosing institutional delivery, postnatal complications experienced by mother and postnatal healthcare received by the newborn. Finally, preference for folk medicine, reasons and consequences of such a preference were examined.

The sociocultural aspects based on which differences in healthcare utilization were studied included: age, age at marriage, Caste, educational qualification, and monthly

income of women.

6.3 Results

Differences in antenatal care utilization

Selected factors associated with antenatal care utilization were examined and differences based on sociocultural profile assessed by carrying out chi-square statistics using SPSS.

6.3.1 Socio-economic differentials in the ANC visit

According to the obstetricians, it is healthy for pregnant women to time their antenatal visits once every month till 28th week of pregnancy, once every two weeks till 36th week and once a week till 40th week (NCPD, 1999). Therefore, it is ideal that all the women should visit at least for four ante-natal care during the entire pregnancy period. However, the ability of rural women to do so and the sociocultural influences of the same have been discussed in the subsequent sections.

Table 6. 1: Percentage of Ante-natal & Post-natal care Indicators

	Percentage receiving ANC from skilled provider*	**Percentage of deliveries with a post-natal check for mother in the first two days of birth***
India	79.3	65.1
Odisha	82.9	78.5
Present Study	54.8	71.1

Source : National Family Health Survey -4, 2015-16

The above table reveals the percentage of women who have received Ante-natal care and Post-natal care for the mother. It reveals that the percentage of women who have received the ANC from a skilled provider at all India level is 79.3% while these figures at state level were 83% and the present study shows 55% out of the total sampled population have received ANC. Regarding the percentage of deliveries with a post- natal check up for the mother in the first two days of birth at National level it was 65% and in Odisha it is 78.5%.Though our study indicates that around 71% have received post-natal check up within two days of delivery.

The results are indicative of the fact that female construction workers are well aware with the Post-natal care, though the scenario is bit varying in terms of ANC as comparative to all India and state figures. The percentage is bit lower which can be improved.

6.3.1.1 Based on age at marriage

It is frequent among Indians to perceive the age of marriage of women as the initiation of their sexual activity. The number of antenatal visits made by the respondents based on their marriage age revealed statistically significant differences (Chi-square: 6.632, p=0.007). Majority of the respondents were married between 15-19 years of age (N=127) with nearly 58% of these women exhibiting 4 to 6 and 10.2% exhibiting 1 to 3 antenatal visits during their pregnancy. And 32.3% of them who made no antenatal visits to the doctor. Similarly, 61.3% respondents in the age group 20-24 years, have made four or more antenatal visits and 17% of them made one to three antenatal visits. In the case of respondents married at relatively older ages i.e more than 25 years, almost equal number of respondents made antenatal visits ranging from 1 to 3 times (16.4%) and 4 to 6 times (65.5%). If we see the respondents who did not go for any antenatal visits during their pregnancy, it is found to be highest in the age group of 15-19 years (32.3%) followed by 20-24 years age groups (21.7%). And it is also observed that the number of antenatal visits reduces as the age group increases.

Table 6. 2: Number of antenatal visits based on age at marriage

Age at marriage	**No ANC visit**	**1-3 visits**	**4 or more visits**	**N**
15-19 Years	32.3	10.2	57.5	127
20-24 years	21.7	17.0	61.3	106
25+ years	18.2	16.4	65.5	55
Total	25.7	13.9	60.4	288
Chi-square: 6.632, p=0.007				

6.3.1.2 Based on Caste

Table 6.2 explains the number of antenatal checkups made by the respondent based on their community. Here it was found that 61.7% women belongs to OBC/General category has gone for four or more antenatal visits, which is highest as compare to the women

belongs to SC/ST category (58.4%). While in other two cases SC/ST respondents are in superior as compare to the general category. Because 18.6% of the respondents belongs to SC/ST community have gone for 1-3 times antenatal visits, while only 10.9% respondents of general category have gone for the same. Similarly more respondents from the general category, nearly 28%and 23% respondents from SC/ST category do not go for any antenatal visits. The differences were also found to be statistically significant (Chi-square: 3.598, p=0.065).

Table 6. 3: Number of antenatal visits based on community

Caste	**No ANC visit**	**1-3 visits**	**4 or more visits**	**N**
SC/ST	23.0	18.6	58.4	113
OBC/General	27.4	10.9	61.7	175
Total	25.7	13.9	60.4	288
Chi-square: 3.598, p=0.065				

6.3.1.3 Based on monthly income of women

The number no antenatal visits based on monthly income was assessed. It can be seen from the table that out of total respondents 288, majority of the women earned a monthly income of more than 6000 (N=137) and moderate income of 5000-6000 (N= 113), while a few of them earned very less income of <5000 (N=38). In all income groups, most of the women were gone for four or more antenatal visits than 1-3 visits. About 63.5% women belongs to higher income category exhibited four or more antenatal visits while the trend was also observed in case of income groups of 5000-6000 with 62%. However, nearly 28% of women did not go for any antenatal visits from higher income category and 22.1% from moderate income category. Similarly, if we see the antenatal visits of lower income category women, it was found that 44.7% respondent reported antenatal visits of 4 or more times and 26.3% of them reported 1 to 3 times visits. Besides this there were nearly 29% respondent in the lower income category(less than 5000), who did not go for any antenatal visits. Results from the chi-square analysis suggest that there is a significant association between ANC visit and income of the respondent (Chi-square: 9.021, p=0.003).

Table 6. 4: Number of antenatal visits based on monthly income

Monthly income of the women	**No ANC visit**	**1-3 visits**	**4 or more visits**	**N**

Less than 5000	28.9	26.3	44.7	38
5000-6000	22.1	15.9	61.9	113
More than 6000	27.7	8.8	63.5	137
Total	25.7	13.9	60.4	288
Chi-square: 9.021, p=0.003				

6.3.2 Antenatal medical and nutritive care

Antenatal medical care for pregnant women is an important concept, which might not be available among rural women. For instance, in spite of programmes such as 'anaemia prophylaxis' implemented by the government and policies mandating free supply of iron and folic acid supplements for a period of 3 months to pregnant women, anaemia among several rural women goes unnoticed. Therefore, it is important to identify the several factors determining the level of antenatal medical care received by the women.

6.3.2.1 Based on age at marriage

From Table 6.4, it is evident that the percentage of women who have taken iron and folic acid supplements increases with increase in age. Generally, 7.9% of women are taking IFA tablets in the age group of 15-19 years which increases to 8.5% when age increases to 20-24 years. Similarly, most of the women are taking vaccines i.e, 52.7% in more than 25 years age group followed by 49.6% in the age group of 15-19 years. The women belong to 20-24 years age group are taking less vaccine but more IFA consumptions as compare to other age groups. 8.5% of them are preferred to take IFA tablets, while 46.2% of them taking vaccine. However it is observed from the above analysis that there is a significant relationship between age and IFA consumption (Chi-square: 6.632, p: 0.057).

Table 6. 5: Antenatal medical care based on age at marriage

Age at marriage	**Percentage who took IFA for at least 100 days**	**Percentage who received two or more TT injections during the last pregnancy**	**N**
15-19 Years	7.9	49.6	127
20-24 years	8.5	46.2	106
25+ years	7.3	52.7	55

Total	8.0	49.0	288
	Chi-square: 6.632, p=0.057	Chi-square: 0.651, p=0.722	

6.3.2.2 Based on monthly income of women

Income has a very significant role in influencing the consumption of antenatal medical care. Administration of supplements, and vaccines was also found to significantly differ based on the monthly income of the respondents. It is evident from Table 6.5 that most of the women whose income is above 6000, they are spending more on IFA and TT as compare to the lower income groups. With the income between 5000-6000, 7.1% and 44.2% women are taking IFA and vaccine respectively which increases to 10.2% and 51.1% with the increase in income. Women having income less than 5000 are spending less on medical care because of their unaffordability of tetanus vaccine. The result of chi-square shows a significant relationship between income and IFA consumption (Ch-sq: 4.539, P:0.081).

Table 6. 6: Antenatal medical care based on monthly income

Income	**Percentage who took IFA for at least 100 days**	**Percentage who received two or more TT injections during the last pregnancy**	**N**
less than 5000	2.6	55.3	38
5000-6000	7.1	44.2	113
6000+	10.2	51.1	137
Total	8.0	49.0	288
	Chi-square: 4.539, p=0.081	Chi-square: 1.858, p=0.395	

6.3.2.3 Based on Caste

Consumption of antenatal medical care varies among different community. It is observed from the table that OBC/general class people take more IFA tablets i.e., 8.6 % (N=175) during pregnancy as compare to the SC/ST category who takes 7.1%. Accordingly, it can be seen that while 55.8% of the SC/ST women receive TT vaccine, the percentage reduced under the general category to 44.6%. However there is a significant relationship is noticed

among social groups and vaccinations (chi-square: 3.435, P: 0.064).

Table 6. 7: Antenatal medical care based on community

Caste	Percentage who took IFA for at least 100 days	Percentage who received two or more TT injections during the last pregnancy	N
SC/ST	7.1	55.8	113
OBC /General	8.6	44.6	175
Total	8.0	49.0	288
	Chi-square: 0.208, p=0.648	Chi-square: 3.435, p=0.064	

6.3.3 Choice of healthcare centre

The choice of healthcare centres for women in their third trimester of pregnancy is an important aspect as it directly influences the delivery and postnatal experiences of the pregnant women. This can be attributed to differences in numerous factors between various care providers with respect to their level of knowledge, effectiveness, individual attention given, expenses, etc. Since the choice of a healthcare centre majorly influences pregnancy outcomes, the sociocultural factors associated with selection of a healthcare centre by rural women was studied in the following sections.

6.3.3.1 Based on monthly income of women

Monthly income of the women was found to be a significant factor affecting their selection of healthcare provider (Chi-square: 4.724, p=0.317). It can be observed from Table 6.7 that even though very few respondents were from the income category less than 5000 (N=27), their choice was unanimously the government hospital. Majority of the women from the next level of income (5000 to 6000) also chose the government hospital (76.1%), followed by Anganwadis (20.5%) and ASHA (3.4%). However, when their income increased even further to 6000 and more, the percentage of women who went to Anganwadis increased (21.2%) and instead the percentage that chose government hospital decreased (73.7%) suggesting their better affordability. It is noteworthy that the percentage that chose ASHA also decreased with increasing incomes between 5000 and

6000. However, similar patterns could not be observed in the case of 6000+ income group where a considerable number of women were found to prefer Anganwadis (22.9%) as well as ASHA (4.7%) along with government hospitals (72.4%).

Table 6. 8: Choice of healthcare centre based on monthly income

Income	Govt. hospital	Anganwadi workers	ASHA workers	N
less than 5000	55.6	37.0	7.4	27
5000-6000	76.1	20.5	3.4	88
6000+	73.7	21.2	5.1	99
Total	72.4	22.9	4.7	214
Chi-square: 4.724, p=0.317				

6.3.3.2 Based on age at marriage

When the same analysis was performed based on their age of marriage, it could be interestingly observed that as the age of the pregnant women increased, their preference for government hospital decreased, while their choice of Anganwadi increased (Chi-square: 5.974, p=0.201). 75.6% of the respondents between the age group 15-19 years were taken to the government hospitals for consultation while it came down to 74.7% and 62.2% among respondents with age group of 20-24 and more than 25 years respectively. Similarly the preference for Anganwadi increased from 17.4% in the age group 15-19 years to 22.9% and 33.3% in 20-24 years and more than 25 years respectively. The preference for ASHA was found to be reduced from 7% to 2.4%, while it further increases to 4.4% as the marriage age increases to more than 25.

Table 6. 9: Choice of healthcare centre based on age at marriage

Age at marriage	Govt. hospital	Anganwadi workers	ASHA workers	N
15-19 Years	75.6	17.4	7.0	86
20-24 years	74.7	22.9	2.4	83
25+ years	62.2	33.3	4.4	45
Total	72.4	22.9	4.7	214
Chi-square: 5.974, p=0.201				

6.3.3.3 Based on community

The choice of healthcare center also varies across different social groups. In this study it has been found that more women belong to SC/ST groups are prefer to go to the government hospital and none of them are interested to go to ASHA workers during their pregnancy. About 72% of them prefer a government hospital and only 28.7% of them go to anganwadi workers. Similarly, if we see the preference of general class women, a significant part of them usually prefer government hospital, while 18.9% and 7% do prefer for anganwadi and ASHA workers respectively.

Table 6. 10: Choice of healthcare centre based on Caste

Caste	Govt. hospital	Anganwadi workers	ASHA workers	N
SC/ST	71.3	28.7	0.0	87
OBC/General	73.2	18.9	7.9	127
Total	72.4	22.9	4.7	214
Chi-square: 9.060, p=0.011				

6.3.4 Antenatal complications

The incidence of antenatal complications in women such as swelling of the body, bleeding, and sociocultural factors as a determinants of such complications was examined by the researcher.

6.3.4.1 Based on choice of healthcare during last 3 months of pregnancy

Table 6.10 exhibits the researchers' assessment of whether the choice of healthcare centre during the final stages of pregnancy makes a difference to the antenatal complications experienced by the pregnant women. It can be observed that a few of the women (3.2%) experienced massive vaginal bleeding. But a major part of them experienced excessive fatigue and excessive swelling i.e., 60.6% and 67.1% respectively, while nearly 48.1% of the respondents experienced both during their antenatal period in case of government hospital. A Majority of the women who experienced swelling (65.3%), fatigue (32.7%) as well as both (22.4%) had chosen Anganwadi workers for their antenatal consultations. Very few respondents experienced vaginal bleeding in all healthcare centre. Following

the government hospital, the second majority of the respondents with antenatal complications are found in Anganwadi workers. A very less number of women treated under ASHA workers and they faced only one complication that is swelling of body. The differences were found to be statistically insignificant.

Table 6. 11: Antenatal complications based on choice of healthcare centre

Healthcare Centre	**Swelling of body parts**	**Feeling excessive fatigue**	**Massive vaginal bleeding**	**Experienced both swelling of body and feeling excessive fatigue**	**Experienced Vaginal bleeding with swelling of body and feeling excessive fatigue**	**N**
Govt. hospital	67.1	60.6	3.2	48.4	2.6	155
Anganwadi workers	65.3	32.7	0.0	22.4	0.0	49
ASHA workers	50.0	0.0	0.0	0.0	0.0	10
Total	65.9	51.4	2.3	40.2	1.9	214
	Chi-square: 1.231, p=0.540	Chi-square: 22.773, p=0.000	Chi-square: 1.949, p=0.377	Chi-square: 17.469, p=0.000	Chi-square: 1.552, p=0.460	

6.3.4.2 Based on age at marriage

The incidence of antenatal complications in women varies, depending on their age of marriage. It is noteworthy that majority of the women who experienced swelling (78.2%), fatigue (56.4%) and both (54.5%) were in the age group of 25 and more. Similarly, women from the age group of 15 to 19 years formed the second majority in all the cases: swelling (67.7%), fatigue (63.8%) and both (53.5%). A few respondents who also experienced vaginal bleeding along with the other complications were however from the younger age group, i.e., 15 to 19 years (3.9%) and below 20-24 years (0.9%). It is interesting that respondents who were adolescents and young adults exhibited more complications than respondents of age > 25 years. However, it should be noted that the respondents between 15 and 19 years age group were greater in number than respondents >25 years.

Table 6. 12: Antenatal complications based on age at marriage

Age at marriage	Swelling of body parts	Feeling excessive fatigue	Massive vaginal bleeding	Experienced both swelling of body and feeling excessive fatigue	Experienced Vaginal bleeding with swelling of body and feeling excessive fatigue	N
15-19 Years	67.7	63.8	4.7	53.5	3.9	127
20-24 years	64.2	48.1	0.9	31.1	0.9	106
25+ years	78.2	56.4	0.0	54.5	0.0	55
Total	65.9	51.4	2.3	40.2	1.9	288
	Chi-square: 3.348, p=0.188	Chi-square: 5.774, p=0.056	Chi-square: 5.177, p=0.075	Chi-square: 13.953, p=0.001	Chi-square: 3.985, p=0.136	

Based on the above discussion, it is evident that significant differences exist in the antenatal care seeking behaviour of women based on their socio-economic profile, therefore *Hypothesis 1* is rejected.

Differences in postnatal care utilization

Similar to antenatal care utilization, selected factors associated with postnatal care utilization of mother and newborn were examined and differences based on socio-economic profile assessed by carrying out chi-square statistics.

6.3.5 Place of delivery

It is not unusual among rural women to opt for delivering at home without medical assistance, a procedure with several associated risks. In the case of a home delivery, the women might not be able to receive timely assistance, if there are sudden complications, thereby increasing the chances for morbidity and mortality. This crucial decision of choosing a place of delivery can be influenced by a multitude of socio-economic factors such as their level of income, education, etc., which is assessed in the subsequent sections.

6.3.5.1 Based on age at marriage

Women of very young age, 15-19 years old, were all taken for institutional delivery (including the government hospital) for childbirth (89.0%), probably in fear of complications. This percentage of women who chose the institutional delivery gradually reduced as their age increased, i.e., 74.5% of 20 to 24 years old respondents chose government hospital, which fell further to 65.5% when age again increased to >25 years. This minimization in their preference for government hospital was found to be coupled with their increasing preference of home delivery, with age. Between 15 to 19 years age group, 11% women chose home delivery, which increased to 25.5% among 20 to 24 years and even further to 34.54% among respondents > 25 years of age. Overall, discussion suggests that as the age of the women increased, their fear of complications probably reduced, leading to increased choices of home delivery, probably because of better affordability and accessibility of the latter option. There is a significant relationship between age and place of delivery (Chi-square: 15.063, p=0.001).

Table 6. 13: Place of delivery based on age at marriage

Age at marriage	**Home**	**Institutional**	**N**
15-19 Years	11.0	89.0	127
20-24 years	25.5	74.5	106
25+ years	34.5	65.5	55
Total	20.8	79.2	288
Chi-square: 15.063, p=0.001			

6.3.5.2 Based on community

When the women's choice of place of delivery was assessed based on their community, significant differences were identified (Chi-square: 4.912, p=0.027). It could be seen that majority of the women from SC/ST community chose the institutional delivery for their childbirth (72.6%), and 27.4% of them exhibiting preference for home delivery. The preference for government hospital was even higher among women from the general category (83.4%), accompanied by a reduced preference for home delivery (16.6%) when compared to the SC/ST community. Therefore, it can be said that respondents from both the communities mostly chose institutional delivery, however this choice was more

enhanced among the women from the General community when compared to SC/ST.

Table 6. 14: Place of delivery based on community

Caste	**Home**	**Institutional**	**N**
SC/ST	27.4	72.6	113
OBC/General	16.6	83.4	175
Total	20.8	79.2	288
Chi-square: 4.912, p=0.027			

6.3.5.3 Based on education

It is evident from Table 6.14 that respondents, both literate and illiterate mostly chose institutional delivery over home delivery. Around 84% of literate women prefer institutional delivery as compare to 78.6% from illiterate women. Similarly 16.1% literate women go for a home delivery as compare to 21.4% illiterate women.

Table 6. 15: Place of delivery based on education

Literacy	**Home**	**Institutional**	**N**
Literate	16.1	83.9	31
Illiterate	21.4	78.6	257
Total	20.8	79.2	288
Chi-square: 0.466, p=0.495			

6.3.5.4 Based on monthly income of women

The respondents' choice of place of delivery was found to be significantly influenced by their monthly income (Chi-square: 12.014, p=0.002). Very few respondents (N=38) came under the category of income <5000. Respondents with low moderately income of 5000 to 6000 were found to choose more institutional delivery (86.7%) as compare to home delivery options (13.3%). However, as the income increased, preference for institutional delivery decreased to 78.1%. Accordingly, their preference for home delivery was also found to increases to 21.9%. Therefore, as the economic affordances of women increased, their choice for government hospital decreased.

Table 6. 16: Place of delivery based on monthly income

Income	Home	Institutional	N
less than 5000	39.5	60.5	38
5000-6000	13.3	86.7	113
6000+	21.9	78.1	137
Total	20.8	79.2	288
Chi-square: 12.014, p=0.002			

6.3.6 Reasons for not delivering in a hospital

When the place of delivery choices made by the women was assessed, it was found that a considerable percentage of women chose home delivery and delivery at home over government hospital. To gain better understanding of the motivating factors driving them to choose home delivery and the obstacles associated with choosing a hospital, the following analyses were carried out.

6.3.6.1 Based on current age of women

The reasons behind respondents not choosing hospitals were analyzed based on current age of the women (Table 6.16). It can be observed that a total of 60 respondents had chosen to not deliver in a hospital. Among the several reasons assessed, the predominant reason was found to be that it was not their first experience of childbirth, i.e., women who already had children did not find it necessary to seek professional help during delivery. Most of these women were found to be between 25+ years of age (34.5%) and 20 to 24 years (25.5%). The second predominant reason was that their families were against a hospital delivery. Most of the women whose families did not permit were 15 to 19 years old (89%) followed by 20-24 years (74.5%) and more than 25 years (65.5%). Financial constraints are also a reason behind not choosing the institutional delivery which increases with the increase in age. The women who faced more financial burden were in the age group of 25+ (34.5%) followed by 25.5% in the age group 20-24. Most of the women who perceived hospitals to be unnecessary belonged to the age group of 15-19 (89%). The differences were found to be statistically significant (Chi-square: 9.018, p=0.003).

Table 6. 17: Reasons for not choosing institutional delivery based on age

Age at marriage	costs too much	family didn't allow	not the first child	didn't think necessary	financial constraint	other reasons	N
15-19 years	11.0	89.0	11.0	89.0	11.0	89.0	14
20-24 years	25.5	74.5	25.5	74.5	25.5	74.5	27
25+ years	34.5	65.5	34.5	65.5	34.5	65.5	19
Total	15.0	25.0	31.7	13.3	8.3	6.7	60
Chi-square: 9.018, p=0.003							

6.3.6.2 Based on Caste

When the reasons behind some women not exhibiting preference for hospitals were examined based on their community, it was found that majority of the women who considered hospitals to be expensive were from the SC/ST community (29%). On the other hand, those women who did not prefer hospitals due to restrictions from family members were found to be mostly from the general category (44.8%), as compare to the SC/ST category (6.5%). A predominant number of women who were denied a hospital birth as it was not their first childbirth experience were mostly from the SC/ST community (38.7%) with 24.1% from the general category. In addition, it is interesting to observe that moreover a similar percentage of respondents from both SC/ST (12.9%) as well as General (13.8%) found hospitals to be unnecessary for delivery. These differences were found to be statistically significant (Chi-square: 27.346, p=0.000).

Table 6. 18: Reasons for not choosing institutional delivery based on community

Caste	costs too much	family didn't allow	not the first child	didn't think necessary	financial constraints	other reasons	N
SC/ST	29.0	6.5	38.7	12.9	0.0	12.9	31
OBC/General	0.0	44.8	24.1	13.8	17.2	0.0	29
Total	15.0	25.0	31.7	13.3	8.3	6.7	60

Chi-square: 27.346, p=0.000

6.3.7 Postnatal complications of mother

Postnatal examination of mothers for identification of complications and treatment of the same is essential to ensure adequate care for mother as well as the newborn. The postnatal period usually refers to six weeks post-delivery of the child. Since postnatal complications such as haemorrhages can lead to maternal death, it is important to assess the factors leading to such complications, in order to effectively avoid them.

6.3.7.1 Based on place of delivery

From Table 6.19, it can be seen that more than half of the respondents suffered due to urinary tract globules and a considerable number of them with both globules as well as vaginal bleeding. When the researcher tried to assess if the place of delivery was a reason contributing to postnatal complications, no statistical significance could be observed. From the table, it is evident that in all the cases of postnatal complications, most of the respondents had delivered in a home rather than institutional delivery .Because 78.3% respondent with urinary tract globules,31.7% of the respondents with vaginal bleeding, 28.3% of the respondents with both urinary tract globules and vaginal bleeding ad high fever are associated with home delivery. Similarly81.6 of the respondents suffering from urinary tract globules, 26.7% respondent from vaginal bleeding and high fever, 23.3% from both vaginal bleeding and urinary tract globules had preferred the institutional delivery.

Table 6. 19: Postnatal complications based on place of delivery

Place of Delivery	**Vaginal bleeding and high fever**	**Urinary tract globules**	**Both Vaginal bleeding and high fever, and Urinary tract globules**	**N**
Home	31.7	78.3	28.3	60
Institutional	25.4	81.6	21.9	228
Total	26.7	80.9	23.3	288
	Chi-square: 0.941, p=0.332	Chi-square: 0.324, p=0.569	Chi-square: 1.091, p=0.296	

6.3.7.2 Based on age at marriage

When a similar test was conducted to assess if age at marriage could be a reason for their postnatal complications, statistical significance could be observed. Postnatal complications were predominant among respondents married between 15 to 19 years and above 25 years of age. Respondents from these two groups mostly suffered from urinary tract globules 85% and 80% in the age group 15-19 years and 25+ years respectively. Similarly, 31% women suffered from vaginal bleeding in the age group 15-19 and 27.3% in the age group of more than 25 years. Respondents in the age group of 20-24 years are also exhibiting more postnatal complications. Among these groups, 76.4% of the respondents suffered from urinary tract globules, 27.3% with vaginal bleeding and high fever, 23.6% with both vaginal bleeding and urinary tract globules which is relatively low as compare to other age groups.

Table 6. 20: Postnatal complications based on age of marriage

Age at marriage	Vaginal bleeding and high fever	Urinary tract globules	Both Vaginal bleeding and high fever, and Urinary tract globules	N
15-19 Years	31.5	85.0	25.2	127
20-24 years	20.8	76.4	20.8	106
25+ years	27.3	80.0	23.6	55
Total	26.7	80.9	23.3	288
	Chi-square: 3.413, p=0.181	Chi-square: 2.817, p=0.244	Chi-square: 0.644, p=0.725	

6.3.8 Postnatal healthcare of newborn

Postnatal healthcare of the newborn such as continuous monitoring of the health condition and the growth of the child for a period of six months from post-delivery is critical to ensure quality of care and to avoid serious consequences such as infant death. In order to understand the level of postnatal newborn care accessed by the study respondents, the following analyses were conducted.

6.3.8.1 Based on Caste

When the women were checked if they breastfed and vaccinated their newborns post-delivery across different social groups, it could be observed that 16.6% of OBC/general class people put their child to breastfed immediately after birth, while it was 10.6% in case of SC/ST community. Similarly, more women belong to SC/ST category (76.1%) put to breastfed within half an hour after birth as compared to 72.6% women in general category. It can be seen from Table 6.21 that 93.1% of the women who got their children vaccinated after birth were from OBC/General category and 92% were from the SC/ST community. A significant portion of the respondent fed colostrum to their baby i.e., 87.4% was from general category and 83.2% from SC/ST community. A large number of women from both SC/ST as well as General community had administered vaccines to their newborns. The differences were found to be statistically significant in case of child put to breastfed (Chi-square: 3.164, p=0.039).

Table 6. 21: Postnatal new-born care based on community

Caste	**Child put to breastfed after birth**			**Baby fed colostrum**	**Child vaccinated after birth**	**N**
	immediately	**within half an hour**	**after some days**			
SC/ST	10.6	76.1	13.3	83.2	92.0	113
OBC/General	16.6	72.6	10.9	87.4	93.1	175
Total	14.2	74.0	11.8	92.7	85.8	288
	Chi-square: 3.164, p=0.039			Chi-square: 1.012, p=0.314	Chi-square: 0.125, p=0.724	

6.3.8.2 Based on place of delivery

The level of medical assessment of newborn was found to differ even more significantly based on their choice of place of delivery. It is interesting to observe that nearly all the respondents who delivered at home carried out less vaccination as compared to those who got institutional delivery. However, 43.3% of the women who delivered at home put their child to breastfed within half an hour of birth which is more (82%) in case of institutional delivery Unlike in home delivery where no child was put for immediate breastfed, in institutional delivery 18% women fed their child immediately after birth. Another observation can be made by seeing the figure of colostrum fed. In institutional delivery

98.7% women fed colostrum to their baby which is very less (36.7%) in case of those who delivered at home. These differences were found to be statistically significant.

Table 6. 22: Postnatal new-born care based on place of delivery

Place of Delivery	**Child put to breastfed after birth**			**Baby fed colostrum**	**Child vaccinated after birth**	**N**
	Immediately	**within half an hour**	**after some days**			
Home	0.0	43.3	56.7	36.7	80.0	113
Institutional	18.0	82.0	0.0	98.7	96.1	175
Total	14.2	74.0	11.8	92.7	85.8	288
	Chi-square: 149.601, p=0.000			Chi-square: 149.633, p=0.000	Chi-square: 18.107, p=0.000	

Based on the above discussion, it is evident that significant differences exist in the postnatal care seeking behaviour of women based on their socioeconomic profile, therefore Hypothesis 20is rejected.

6.3.9 Cultural aspects related to reproductive healthcare (preference for folk medicine)

Despite the great advancements in the field of medicine in India, Indians continue to exhibit faith in folk medicine, superstitions, herbal medicines, etc. Owing to differences in safety and efficacy of alternate medicines from modern medicine, assessing the level of preference for folk medicine among the respondents was considered to be important.

6.3.9.1 Preference for folk medicine practitioner based on community

Preference for folk medicine was found to significantly depend on their community (Chi-square: 6.658, p=0.010). It is evident that out of total women who visited folk medicine practitioners, a higher percentage of them were from the SC/ST community i.e., 30.1% when compared to the 17.1% from General category.

Table 6. 23: Preference for folk medicine practitioner based on community

Caste	Percentage of women who are consulting folk-practitioners	N
SC/ST	30.1	113
OBC/General	17.1	175
Total	22.2	288
Chi-square: 6.658, p=0.010		

6.3.9.2 Preference for folk medicine practitioner based on monthly income

Preference for folk medicine was also found to vary significantly based on the monthly income (Chi-square: 5.428, p=0.066). It can be observed from Table 6. 23 that 36.8% of the women with low monthly income of less than 5000 consulted a folk medicine practitioner which got reduced as their income levels increased, i.e., the gap between the percentage of respondents who consulted and did not consult folk medicine practitioners increased when their monthly income exceeded Rs. 5000. Only 20.4% of respondents from 5000 to 6000and 19.7% from >6000 income group preferred folk medicine. This suggests that the women probably settled for folk medicine as it was a more affordable treatment option to them when compared to the modern medicine.

Table 6. 24: Preference for folk medicine practitioner based on monthly income

Income	Percentage of women who are consulting folk-practitioners	N
less than 5000	36.8	38
5000-6000	20.4	113
6000+	19.7	137
Total	22.2	288
Chi-square: 5.428, p=0.066		

Like income, education has also a very significant relationship with preference for folk medicine. It can be observed from the table 6.24 that 23.8% illiterate women prefer for more folk practitioners while only 20.7% literate women go for consulting folk practitioners. Thus education and preference for folk medicine are highly significant (chi square: 5.428, p: 0.066).

Table 6. 25: Preference for folk medicine practitioner based on education

Literacy	Percentage of women who are consulting folk-practitioners	N
Literate	20.7	31
Illiterate	23.8	257
Total	22.2	288
Chi-square: 5.428, p=0.066		

6.3.9.3 Reasons for adopting folk medicine

When the respondents were enquired regarding the several reasons behind their preference for folk medicine, it was found that nearly half of them (48.4%) preferred folk medicine owing to less costs associated with it. Nearly one-fourth of them (21.9%) followed folk medicine as they considered it to be traditional while 17.2% of them preferred folk medicine as a result of their blind belief. Nearly 12% of the respondents also posited to have other reasons for having preferred folk medicine.

Table 6.25: Reasons for adopting folk medicine

Reasons	N	%
Some blind belief attached to it	11	17.2
Traditional practice	14	21.9
Low cost/no cost of treatment	31	48.4
Other	8	12.5
Total	64	

6.4 Summary

Differences in prenatal health seeking behaviour of the women based on their socio-economic profile were first studied in terms of number of antenatal visits carried out by the respondents. The percentage of women who have accessed to ANC is found to be varying as compared to the State and all India Level. Moreover, the findings of the present study stresses on the fact that to increase the utillisation of health care services, grass root health workers should be made aware of specific social determinants of risk, perceptions and preference adhered by them (Slimak et. al., 2006). Through increased awareness and access to health care facilities can bring a change in accessing the ANC services (Graham

et. al.,2006).

In general, more than half of the respondents had made at least four antenatal visits. The coverage of four or more ANC visit increases as their age of marriage increased. Pell, Menaca and Were et al., (2013) also found that older women of South Africa received delayed antenatal care and visited their doctors only after the second trimester. However, this is contrary to the observation of Ochako and Gichuhi (2016) that younger women of Kenya between 15 and 24 years were not as frequent with their visits as women between 25 and 34 years.

In the present study, the number of antenatal visits also improved with increasing monthly income of the women, i.e., increasing financial status. Roy, Kulkarni and Vaidehi (2004) pointed out maternal wealth to be a strong determinant among rural SC/ST women for healthcare utilization. Similarly, Sa and Gummadi (2012) reported reduced healthcare utilization among lower caste women of Orissa due to lower levels of income.

The number of antenatal visits made was higher among women from general community when compared to SC/ST. This finding is in accordance to Kumar and Gupta (2014) who confirmed social exclusion of SC/ST women and observed lower antenatal as well as postnatal utilisation of maternity services among them when compared to others. Maiti, Unisa and Agarwal (2008) observed enhanced malnutrition and elevated onset of problems such as anaemia among SC/ST women. Higher spending among women from general category on maternity has also been observed by Goli, Moradhvaj, Rammohan, Shruti and Pradhan (2016).

Caste of the respondents was also a significant effect on choice of place of delivery, with women from general community exhibiting better propensity to choose institutional delivery (83.4%) over home delivery for childbirth In addition, the present study exhibited that most of the women who exhibited more preference for folk medicine were also found to be from SC/ST community (30.1%) as compared to general category (17.1%). Navaneetham and Dharmalingam (2002) also proved that SC/ST women of southern Indian states failed to prefer healthcare centres for delivery, which was attributed to unavailability of healthcare centres resulting from their residential segregation. Similar results were also reported among SC/ST women of Jharkhand (Agrawal & Agrawal, 2010) and women of Uttar Pradesh (Saroha, Altarac&Sibley, 2008).

On exploring the reasons behind women's lack of preference for institutional delivery, it was found that women were restricted by family members from seeking hospital services during childbirth. This was especially true among women from the forward community when compared to SC/ST. Studies such as Devasenapathy, George and Jerath et al. (2013) also emphasised the role of family members in choosing place of delivery and explained that family members associated institutional deliveries with embarrassment and considered it less reassuring than the safe environment offered by home delivery. Not being the first childbirth experience was also found to be another reason preventing them for seeking institutional delivery.

The women's choice for institutional delivery was also found to increase with increasing income. 86.7% respondents with moderately income of 5000 to 6000 were found to choose institutional delivery over home delivery options, but it decreases to 78.1% when income of the respondents increases to more than 6000. This can be explained based on Balaji, Dillip and Duggal (2003) who pointed out that even if not as expensive as the private sector, the costs associated with public sector healthcare services had increased much over the past few years. So the present study also suggested that women's propensity for seeking institutional delivery decreased with increasing in income, age group, i.e., older respondents chose home delivery over institutional delivery for consultations. A study conducted among women of Ethiopia also reported the same and attributed this finding fortwo reasons: older women associated lesser risks with home deliveries and older women were usually less educated than their younger counterparts (Teferra, Alemu & Woldeyohannes, 2012). This finding was also consistent with studies such as Melkamu (2005) and Yared and Asnaketch (2002) who reported the same.

The present study also found that most of the women who had chosen government hospitals for antenatal consultations experienced several antenatal complications like massive vaginal bleeding, experienced excessive fatigue and excessive swelling. Similar results have also been reported by Galadanci, Ejembi, Iliyasu, Alagh and Umar (2007) among women of Nigeria who experienced complications such as prolonged fever and bleeding in government hospitals. It was interesting to observe that adolescents and young adults experienced more prenatal and postnatal complications than >25-year-old respondents. Worku, Yalew and Afework (2013) observed that women who gave birth at very young age as well as advanced age of >35 years had increased risk of prenatal and

postnatal complications.

Since the Indian culture has made women more vulnerable to traditions and beliefs, especially in events related to childbirth, women's preference for folk medicine was also assessed as a sociocultural dimension in the study. Even though most of them were found to not believe in folk medicine, still a significant proportion of the respondents (30.1%), especially people from SC/ST category are continuing this practice. This preference was found to reduce as their level of monthly income increased, i.e., most of the folk medicine believers were from the lower monthly income category. This was also found to be the case among women of Malaysia and Nigeria where lower income groups exhibited more preference for herbal remedies owing to their illiteracy and poverty (Sooi & Keng, 2013, Tamuno, Omole-Ohonsi & Fadare, 2010). Indian studies such as Shahin and Ahmed (2014) as well as Bhatt, Leong and Yadav (2016) on the other hand suggest contrasting results that herbal medicine use increased among higher income households. This assessment of preference for folk medicine is important since women with preference for modern medicine over folk medicine exhibited better antenatal medical and nutritive care.

The results of the study therefore suggest that antenatal care as well as postnatal care utilisation significantly depends on different socio-economic factors. This disparity in healthcare utilisation based on factors such as their community, income, age at marriage, etc. among the female construction workers of Odisha, suggest that these differences should be addressed through policies and interventions by stakeholders in the healthcare industry. Consistent differences could be observed in the case of antenatal, postnatal healthcare utilisation as well as cultural beliefs with the results in favour of women from the forward castes with higher monthly income, education and spousal financial support. It should however be noted that the study did not cover other factors such as infrastructure, quality of healthcare personnel, etc. which might also lead to significant differences in their healthcare choices and decisions made. To summarize, it is evident that disparities in maternal healthcare utilisation must be tackled so that the less educated and less resourceful can gain access to all the services during, before and after delivery of the child.

Chapter 7

Identifying and Measuring Autonomy on the Reproductive Healthcare Decision Making

7.1 Introduction

"We realize the importance of our voice when we are silenced".

-Malala Yousafzai (2013),Nobel Peace Prize

One of the major proponents of empowerment, particularly in case of women lies in autonomy (Malhotra a Schuler, 2005). While empowerment has been described as the capability of women to enhance 'self-reliance', their right to choose, and their capacity to impact the course of development by achieving control over useful resources (Sanyal, 2009), autonomy has been associated with 'self-determination' and defined as 'a psychological state of free will' (Clement, 2018). Dyson and Moore (1983) described autonomy as the "social, psychological and technical' capacity of procuring information and then utilize this for decision making. Basu (1992) associated autonomy with freedom and independence, whereas Jejeebhoy and Saathar (2001) designated autonomy more as a control mechanism for attaining equality. Chaudhuri and Yalonetzky (2018) defined autonomy as the competency of 'rational' people to decide impartially on 'informed and uncoerced' choices. Autonomy can exist in both forms, actively and passively. In the active form, the decision has been taken after an identification of an associated purpose to it, however, the passive forms typically indicate a limited choice of options (Kabeer, 2005). Narayan (2005) and Osamor and Grady (2016) described autonomy as a multifaceted balance of experiences, starting with general health to relationship emotions and many others. Therefore, it can be assumed that the basis of the existence of a healthy and fair world depends upon the prevalence of autonomy among all the individuals. Autonomy has enabled the easy access to all forms of resources, both social and materialistic, within the family, thereby helping in the progression of the human race (Acharya et al., 2010). The developing or undeveloped countries, however, have witnessed the existence of a negative behavior aligned with the gender inequality within the society

(Osamor and Grady, 2016). The presence of such bias cannot be denied as it has been reported to be commonly experienced. Time and again, it has been proven that our society is patriarchal and male-dominated (Chaudhuri and Yalonetzky, 2018). Discrimination among women still exists even in the modern times. This thought process jeopardizes the entity of the entire female population and has been a major cause of limitation to the growth of autonomy in women.

Autonomy has been researched widely among the major countries in the world. Some of the recent studies have associated autonomy with healthcare in women. Awoleye et al. (2018) reported that age of the married women influenced autonomy and maternal healthcare in Nigerian women. It was observed that the young women had lesser antenatal visits than recommended by WHO. Osamor and Grady (2016) reviewed studies on autonomy and decision making in developing nations such as Africa and summarized that there is no single acceptable definition of autonomy. Most of the studies that studied health care was revolved predominantly around the reproductive health of women. The most crucial socioeconomic aspects impacting autonomy are educational qualification, age and monthly salary irrespective of the region or culture of the respondents. Studies on Nepalese women observed that the husband's involvement was significantly related to the autonomy of females (Thapa and Niehof, 2013), whereas Acharya et al. (2010) reported that age, education, employment status and the number of children positively influenced female autonomy. However, socioeconomically well off women did not decide about their healthcare. These studies primarily concentrated on the socioeconomic backgrounds features that induce any decision making skills in the women.

In India, the social structure also encourages gender inequality and typically bends towards the male child (Chakarabarti and Chaudhuri, 2018). This has led to the believe that females are a burden to the society instead of being an asset, which has caused a decline in the Indian sex ratio and necessitated the spread of various social evils (such as child marriage, dowry, domestic violence, etc.). Government of India (GOI, 1950) realizing these problems introduced laws and initiatives in favor of the Indian women, however, the current state of affairs remains in a pitiable condition. The provision of autonomy to Indian women has been considered to improve the status of Indian women (Sharma et al., 2007). Autonomy was reported in India as early as in 1983 by Dyson and Moore, where the autonomy varied from region to region with higher autonomy in South

India than North India. Similarly, Jejeebhoy and Sathar (2001) also reported that women from Tamil Nadu experienced higher levels of decision making. Their studies also included parts of Pakistan apart from North and south India, which showed the lowest level of autonomy in Pakistani women in comparison to Indian women. This study also indexed female autonomy into four aspects, including mobility, economic decision making, access to regulate and manage over financial resources and independence from any threat. Kaur et al. (2018) conducted stratified multistage random testing of women in Punjab, according to their farm size. The women with small sized farms had a higher percentage for assertion in comparison to the large landowners. Chakarabarti and Chaudhuri (2018) compared the levels of autonomy with respect to the employment status before and after marriage and grouped them as two sets of movement autonomy, one useful for fulfilling the needs of the family and the other for recreational activities. Moreover, age, religion, education and region also influenced female autonomy. Domestic violence was also observed to be related to female autonomy, while studying the mental distress and well-being among the women of Santhal tribes from Jharkhand (Pandey and Singh, 2018). Chaudhuri and Yolenetzky (2018) calculated women's autonomy in terms of relationship dominance in various states of India. The highest autonomy was observed in the northeastern states, followed by southern states and least in the north India.

The significance of female autonomy was realized and its awareness has been documented by many researchers (Bloom et al., 2001, Moursund and Kravdal, 2003, Upadhyay and Hindin, 2005, Anderson and Eswaran, 2009, Mistry et al., 2009, Field et al., 2010, Duflo, 2012, Rahman et al., 2014). This has been linked to enhance economic growth and enrichment in the quality and status of women in general (Chaudhuri and Yalonetzky, 2018). Therefore, it is imperative to recognize the factors that can measure autonomy. This forms the basis of the aim of our study.

The main objective of the present chapter as follows:

- To investigate the impact of women's autonomy and experiences of domestic violence on their reproductive healthcare seeking behavior among construction workers.

In order to achieve the objective, the following hypotheses were formulated as described below:

As mentioned above, the empirical studies on autonomy demonstrate the use of varied types of measures for autonomy (Osamor and Grady, 2016). Bloom et al., (2001) shortlisted three primary determinants of autonomy. They include freedom of movement, financial control and decision-making power. These variables were also studied by multiple researchers (Al-Riyami et al., 2004, Fotso et al., 2009, Senarath and Gunawardena, 2009, Nigatu et al., 2014). Thapa and Niehof (2013) identified five dimensions of female autonomy, which included the first two measures of Bloom et al., (2001) and added other measures such as knowledge autonomy, household decision making authority and emotional autonomy. Chakrabarti and Chaudhuri (2018) focused only on movement autonomy. Since these parameters have been observed to be critical in measuring autonomy, therefore, for our study, we followed the same measures that were used by Bloom et al., (2001), i.e., The current study assessed autonomy using three dimensions: Movement autonomy, economic autonomy and decision-making autonomy.

Decision-making autonomy has been considered as a factor that is related to the overall healthcare of women (Osama and Grady, 2016), particularly reproductive health of the women studied (Sharma et al., 2007, Thapa and Niehof, 2013). Moreover, it also improves the health of the newborn and the mother (Acharya et al., 2010), decreases maternal mortality (Awoleye et al., 2018). Decreased autonomy often leads to poor reproductive health. The gender discrimination leads to decreased or restricted communication between couples, leading to suppression and ignorance of self to a lethal level. Despite of this, most of the Asian households, including Nepal, Bangladesh and India had no participation from the women in any healthcare decisions (Mistry et al., 2009, Senarath and Gunawardane, 2009). Therefore, it becomes mandatory to consider all parameters pertaining to reproductive health. Within reproductive health, the decision pertaining to pregnancy healthcare has been studied extensively by the researchers (Bloom et al., 2001, Kabeer, 2005, Mistry et al., 2009, Kamiya et al., 2011, Osamor and Grady, 2016, Awoleye et al., 2018). The pregnancy care as described by Mistry et al., (2009) has three phases. The first phase comprises of prenatal care, delivery checkup and post-natal care. Therefore, our next hypothesis on reproductive healthcare has been divided into two main hypothesis covers antenatal and postnatal care as described below.

The antenatal care primarily includes the acceptable number of prenatal care visits

and the gestational age in which the visit should be done (Mistry et al., 2009). The Ministry of Health guidelines by GOI (1997) and WHO (2007) mandated the number of visits of prenatal care to a minimum of three within the first quarter of pregnancy. This was also supported by studies in Central Asia, particularly Tajikistan, Kazakhstan, Kyrgyzstan, Turmenistan and Uzbekistan (Kamiya, 2011) and Africa, especially, Nigeria (Awoleye et al., 2018).

Even though, the post-natal aspect is vital as the antenatal part of healthcare, the postnatal care has not been much reported. Bhatia and Cleland (1995) claimed that there was an imbalance between pre and post-natal care as the number of women going for any post-natal checkup was five times lesser than the antenatal visits. This was also highlighted by Mistry et al., (2009), where the postnatal checkup was described as the positive reply for visiting a doctor or any other healthcare professional within two months post birth. A research gap was realized, and our study intends to fill this gap.

Malhotra and Schuler (2005) listed domestic violence as a part of the interpersonal or the familial dimension of empowerment. The impact of violence on women typically by their intimate partners in their healthcare has been emphasized by WHO (2002) and Kamiya (2011). In fact, Bhattacharya et al. (2011) pointed that domestic violence violates the fundamental rights of any women. Moreover, Eswaran and Malhotra (2011) also suggested that domestic violence also leads to decrease in autonomy, while Chaudhuri and Yalonetzky (2018) reported that women not in control of their health resources suffer more from domestic violence. Keeping the socioeconomic background and the working conditions in mind, our study will not be complete without understanding the association (if any) between domestic violence and construction workers.

Based on the above literature following hypotheses have been formulated:

Hypothesis 1: Autonomy of women has no significant impact on the reproductive health care utilization.

Hypothesis 2: Women's experiences of domestic violence have no significant impact on the reproductive healthcare received by them

7.2 Measures of Autonomy

As described in the above section, autonomy was measured with the help of three dimensions: movement autonomy, economic autonomy and decision-making autonomy. Movement autonomy measured the freedom of mobility of women to three places: market, healthcare facility and places out of the community or village. The responses were scored on three categories namely alone, with someone else and not at all. Economic autonomy was measured with the help of two items: if the women set aside money for their personal needs and if they possessed a savings bank account. The responses in this case were coded as yes and no. Finally, decision making autonomy measured the women's freedom of making decisions in the case of five crucial aspects, scored using four categories, namely, decisions taken alone, by husband, together and by other family members.

7.2.1 Composite index of women autonomy

An attempt has been made to measure women autonomy by the composite index of the three constructs of women autonomy: freedom of movement, economic empowerment, and decision making power. There are 10 variables which provide information on women autonomy. The constructs of movement and decision making autonomy are recoded as follow (2=decision taken by the women independently; 1=decision taken jointly; 0=otherwise). Economic autonomy are in binary nature i.e. (1=yes; 0=no). Based on these values the overall score is found to be 17. So, purposefully, we have classified the autonomy score into two categories i.e. higher autonomy (score more than 10) and lower autonomy (score having 10 or less).

7.3 Measures of domestic violence experiences

Domestic violence was measured at two levels: frequency of experiences and forms of violence experienced. Frequency of domestic violence experiences assessed how often the women were humiliated, threatened or belittled in front of others in the past 12 months, scored using three categories, often, sometimes and not at all. The second variable assessed using a dichotomous scale (yes/no) if the respondents had experienced specific forms of violence, physical, emotional and sexual in nature.

7.4 Measures of reproductive healthcare seeking behaviour

Reproductive healthcare seeking behavior of the women was studied under two broad divisions, antenatal care and postnatal care. Following indicators related to ante-natal, postnatal and contraceptive practices are considered for the analysis; (i. Four ANC visit; ii.more than 100IFA taken; iii. 2 TT taken; iv. Other drinks given to the baby after birth; and v. using any contraceptives to avoid successive child births)

7.5 Results

7.5.1 Level of autonomy of respondents

The levels of autonomy exhibited by the women construction workers has been included in the study in terms of movement, economic and decision-making autonomy in the following section.

7.5.1.1 Movement autonomy of the respondent

The movement autonomy of the women construction workers participating in the study was assessed which reveals that the freedom of mobility experienced by them differ with the place visited (Table 7.1). While almost half of the respondents (46.9%) were allowed to go to market alone, however a very small proportion of the same set of respondents were allowed to go to out of their village/community (24.3%) and health facilities (10.4%). Some women were not ever allowed to go outside, neither alone nor with someone else. Therefore, it can be said that the respondents of the study experienced limited levels of movement autonomy.

Table 7. 1: Movement autonomy

Allowed to go to	Alone	With someone else	Not at all	N
Market	46.9	51.7	1.4	288
Health facility	10.4	80.2	1.4	288
Out of village/communities	24.3	72.6	3.1	288

7.5.1.2 Economic autonomy of the respondent

Nearly half of the respondents were found to possess the autonomy of saving for their own needs (56.6%), whereas, nearly all the respondents were found to lack a personal savings account for themselves (97.2%). This suggests that even though half of the women had accessed to small scale savings, savings in larger scale in the form of bank deposits was most uncommon among the women. Even though the lack of financial inclusion among these women can be attributed to factors other than autonomy such as lack of access to bank, lack of education, etc. Therefore, access to economic resources for women participated in the study can be said to be limited (Table 7.2).

Table 7. 2: Economic autonomy of the respondents

Economic autonomy	Yes	No	N
Savings for own use	56.6	43.4	288
Personal savings account	2.8	97.2	288

7.5.1.3 Decision making autonomy of the respondent

Decision autonomy of the women was assessed in five levels as exhibited by Table 7.3. It is understood that decisions related to utilization of family income were either made by the husband (49.3%) or together with family member (44.1%), but only 6.6% of the women take decision independently i.e., how to spend their earned money. Similarly, decisions related to healthcare were also mostly taken together (55.9%) or by the husband alone (30.6%). However, decisions related to household purchases and other everyday purchases were found to be taken alone by the women i.e.,69.8% and 70.1% respectively, and rarely by the husband or together. Similarly, the decision regarding visiting to relatives are mostly made by women together with husband and other family members (61.1%).

Table 7. 3: Decision making autonomy of the respondent

Decision regarding	Alone	By husband	Together with husband or family member	N
Utilizing money earned	6.6	49.3	44.1	288
Healthcare	13.5	30.6	55.9	288
Household purchases	69.8	14.6	15.6	288
Everyday purchases	70.1	14.2	15.6	288
Visiting relatives/family members	16.7	22.2	61.1	288

7.5.1.4 Composite women autonomy Index

As discussed in the previous section, composite autonomy index is constructed using three constructs of women autonomy; viz. movement autonomy, economic autonomy and decision-making autonomy. The aggregate score is classified into two categories i.e. Lower autonomy (score having less than 10) and higher autonomy (score having more than 10).

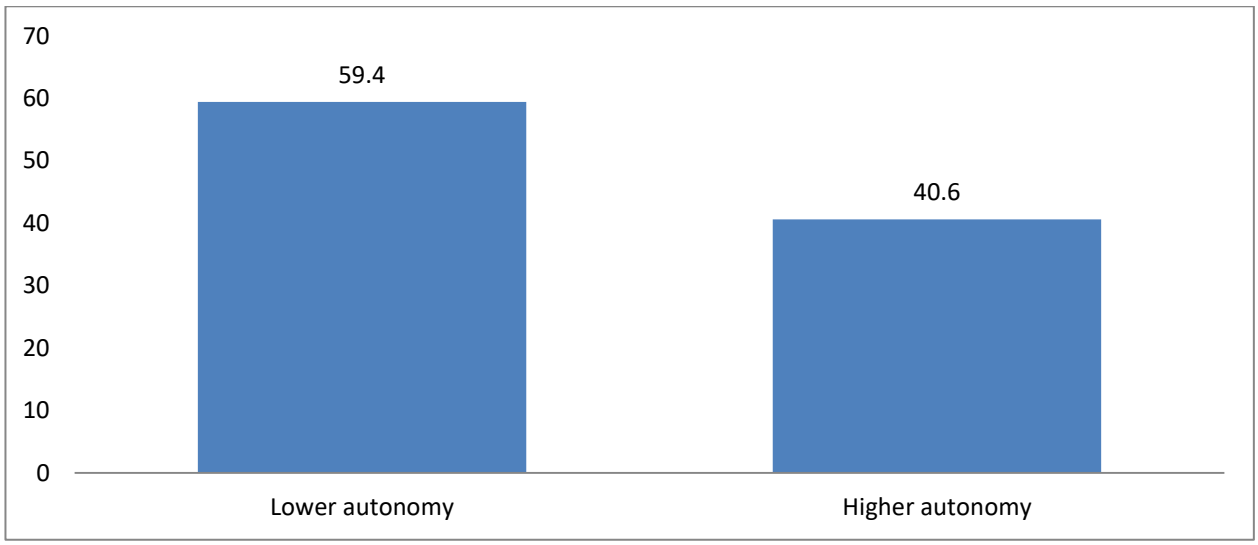

Figure 7. 1: Level of autonomy based on composite index

Figure 7.1 suggest that about 60% of women experienced lower level of autonomy and 40% of the women experienced higher level of autonomy based on the composite index score.

7.6 Women autonomy and Reproductive Healthcare Utilization

In order to establish a causal relationship between women autonomy and the level of reproductive health (RH) utilization, both bivariate and multivariate logistic regression has been used in this section.

Table 7. 4: Association of women autonomy with key RH indicators

	Key RH indicators				
Autonomy Level	**Four ANC visit**	**100 IFA taken**	**2 TT taken**	**Given other drink after birth**	**Using contraception to delay pregnancy**

Lower	55.0	6.4	41.5	39.2	13.5
Higher	68.4	10.3	59.8	31.6	25.6
Total	60.4	8.0	49.0	36.1	18.4
$\chi 2$	5.22*	6.23**	9.31***	5.12*	6.87**

*p<0.10 **p<0.05 ***p<0.01

Results from table 7.4 clearly suggest that, there is a significant association between women's autonomy and key RH indicators among women construction workers. Women having higher level of autonomy are more likely to receive four ANC, 100IFA, 2TT injection and using contraception to delay pregnancy. More importantly the chi square value is significant for all five key RH indicators. So, critical analysis is required to address the impact of women autonomy to enhance the RH care utilization among women construction workers in India.

7.7 Logistic regression analysis of women autonomy and RH care utilization

The above analysis only shows the association between women autonomy and the utilization of key RH indicators. However, it is critical to examine the adjusted impact of women autonomy of the RH utilization. So, an attempt has been made to assess the net impact of women's autonomy on the key RH indicators by controlling major socio-economic covariates e.g. age, caste, education, family type, type of house, availability of separate kitchen, source of lighting, availability of toilet facility, and income of the respondent.

Table 7. 5: Results from logistic regression analysis

Autonomy Level	**Four ANC visit**		**100 IFA taken**		**2 TT taken**		**Given other drink after birth**		**Using contraception to delay pregnancy**	
	Model 1	**Model 2**	**Model 3**	**Model 4**	**Model 5**	**Model 6**	**Model 7**	**Model 8**	**Model 9**	**Model 10**
	Unadj	Adj$	Unadj	Adj$	Unadj	Adj$	Unadj	Adj$	Unadj	Adj$
Lower ®	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Higher	1.771**	2.026**	1.662*	1.509*	2.098***	2.369***	0.718*	0.760	2.219**	2.131**
Constant	1.221	1.564	2.677	-0.990	-0.342	3.009	-0.441	2.521	-1.862	-7.746

*p<0.10 **p<0.05 ***p<0.01

$ estimated controlling age, caste, education, family type, type of house, availability of separate kitchen, source of lighting, availability of toilet facility, and income of the respondent.

Analysis from the above table clearly suggests that woman having higher autonomy is more likely to avail better antenatal and postnatal care as compared to their counterpart. So, hypothesis 1, autonomy of the women has no significant impact on the RH utilization is rejected.

7.8 Experiences of domestic violence

Statistical tests were conducted to assess how often the respondents experienced the act of domestic violence during last 12 months, the different forms of violence experienced and the impact of such experiences on the antenatal as well as postnatal care received by them.

7.8.1 Frequency of domestic violence experienced

Results from table 7.6 suggest that nearly half of the respondents studied were never humiliated (41.3%), or insulted (41.7%) and more than half of them (68.1%) were never threatened by their husbands. However, a significant proportion of the respondents confided to have been humiliatedin front of others by their husbands sometimes (33.3%) and often (25.3%).

Table 7. 6: Frequency of domestic violence experienced

Experience of violence	Often	Sometimes	Not at all	N
Humiliated in front of others	25.3	33.3	41.3	288
Threatened by husband	3.8	28.1	68.1	288
Insulted by husband	20.5	37.8	41.7	288

7.8.2 Types of domestic violence experienced

When the kind of domestic abuse experienced by them was assessed in detail, it was surprising to observe that nearly 90.0% of them were being slapped by their husbands. Approximately three-fourth of them confessed that they experienced violent acts such as being pushed (78.5%), punched (58.0%) and kicked (78.8%) by their husbands. They also revealed that they were physically forced to have intercourse in the absence of their consent (62.5%). Violence leading to emotional trauma was also reported by 53.8% of the respondents.

Table 7. 7: Different forms of domestic violence experienced (n=288)

Forms of violence	**%**	**N**
Emotional violence	53.8	155
Pushed/shook/threw something	78.5	226
Slapped	89.6	258
Punched	58.0	167
Kicked/dragged	78.8	227
Pulled by hair	20.8	60
Used knife or weapons	5.6	16
Sexual violence	27.1	78
Physically forced to have intercourse	62.5	180
Performed other kinds of sexual acts without consent	1.0	3

7.8.3 Impact of domestic violence on RH utilization

Like previous section bivariate analysis has been performed to examine the association between occurrence of domestic violence and the level of RH utilization among female constriction workers. Results from table 7.8 clearly suggest that domestic violence has a negative impact on the level of RH utilization. ANC visits, TT vaccine, using contraception to delay pregnancy have significant relationship with domestic violence.

Table 7. 8: Impact of domestic violence on RH utilization

	Key RH indicators				
Domestic violence	**Four ANC visit**	**100 IFA taken**	**2 TT taken**	**Given other drink after birth**	**Using contraception to delay pregnancy**
Not experienced	81.5	8.0	59.3	33.3	34.5
Experienced	58.2	7.4	47.9	36.4	20.4
Total	60.4	8.0	49.0	36.1	18.4
$\chi 2$	5.52**	0.128	3.621**	0.421	6.71***

*p<0.10 **p<0.05 ***p<0.01

7.9 Logistic regression analysis of domestic violence and RH utilization

Logistic regression analysis is employed to examine the adjusted effect of domestic violence on various antenatal and postnatal-care among women construction workers. Results from various models suggest that domestic violence is significantly associated with the level of RH care utilization level (Table 7.9).

Table 7. 9: Logistic regression analysis of domestic violence and RH utilization

Autonomy Level	**Four ANC visit**		**100 IFA taken**		**2 TT taken**		**Given other drink after birth**		**Using contraception to delay pregnancy**	
	Model 1	**Model 2**	**Model 3**	**Model 4**	**Model 5**	**Model 6**	**Model 7**	**Model 8**	**Model 9**	**Model 10**
	Unadj	Adj$	Unadj	Adj$	Unadj	Adj$	Unadj	Adj$	Unadj	Adj$
Not experienced ®	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Experienced	0.317**	0.292**	0.812	0.965***	0.632**	0.624*	1.145**	1.112	0.641**	0.812**
Constant	1.482	2.919	-2.526	-0.971	0.375	3.384	-0.693	2.610	2.305	3.210

*p<0.10 **p<0.05 ***p<0.01

$ estimated controlling age, caste, education, family type, type of house, availability of separate kitchen, source of lighting, availability of toilet facility, and income of the respondent.

Therefore, *hypothesis 2*, women's experiences of domestic violence have no significant impact on the reproductive healthcare received by them has been rejected.

7.10 Discussion

At first, the three types of autonomy, namely, movement, economic and decision making autonomy of the study respondents were assessed. The results suggested that when economic autonomy of women are considered it is found that even though half of the women had accessed to small scale savings, but savings in larger scale in the form of bank deposits was most uncommon among the women. . In the case of decision-making autonomy, women were expected to obtain the permission of their husbands in advance to plan their trip to their relatives, healthcare center and also for spending money. Similarly

in case of movement autonomy, where almost half of the respondents (46.9%) were allowed to go to market alone, however a very small proportion of the same set of respondents were allowed to go to out of their village/community (24.3%) and health facilities (10.4%). This suggests that women's mobility out of the house was not only restricted by men of the household for security reasons but also because the women were expected to remain indoors to monitor the household activities and take care of the other members of the house. Another reason might be that the urge to fulfill their desires such as meeting their kin, friends, etc., reduced as women get older, thereby limiting their movement out of the house (Acharya, Bell, Simkhada, Teijlingen & Regmi, 2010).

The probability of women construction workers receiving antenatal guidance from doctors was found to depend on their movement and economic autonomies, i.e., freedom of women to visit places outside their house and the ability of women to set aside funds for their personal use significantly determined if they consulted doctors for antenatal care, if they received valuable antenatal advice from the doctors regarding delivery procedures, breastfeeding, general nutrition, etc., and their propensity to follow the guidance received. Movement autonomy as a significant factor influencing antenatal healthcare seeking behaviour of women belonging to Mumbai has also been reported by Matthews, Brookes, Stones and Hossain (2005). The same study also reported women's autonomy to expend on personal needs to have an even greater effect on the frequency of antenatal visits to the doctor.

The same factors were also found to be responsible for enhanced medical care of women during maternity, i.e., women with enhanced freedom of mobility to clinics and other places in general, when allowed to possess personal savings, were able to expend on nutritional supplements such as folic acid, multivitamins, etc. and received vaccinations such as tetanus, etc., during their pregnancy. Women who had the autonomy to allocate finance for themselves also enjoyed better chances of staying healthy at work.

Since autonomy of women is closely related to their experiences of domestic violence, the latter construct was also studied among the study respondents. It was observed that all the respondents had encountered some level of domestic violence in the past 12 months. It has been observed that nearly 90.0% women were being slapped by their husbands. And approximately three-fourth of them confessed that they experienced violent acts such as being pushed (78.5%), punched (58.0%) and kicked (78.8%) by their

husbands. Even some of them reported that they were physically forced to have intercourse in the absence of their consent. This finding is not surprising since reports such as the one released by WHO in 2013 have already stated Asia and regions of Southeast Asia to be major regions for registering domestic violence against women, both physical and sexual (WHO, 2013). Women's experiences different forms of domestic violence leading to several levels of emotional and physical trauma were found to significantly diminish their antenatal health. The study conducted by Pun, Infanti, Koju, Schei and Darj (2016) also concluded that pregnant women facing domestic violence restrict the utilization of antenatal healthcare services. The authors attributed the reasons behind this finding to several factors such as restricted access to hospitals in victims of domestic violence and emotional concepts such as endurance, normalized perceptions of domestic violence among the victims, etc.

The autonomy of women to take part in household decisions, everyday decisions and other decisions significantly affected the odds of them receiving postnatal healthcare. Therefore, by obtaining the consent of women while taking healthcare decisions and by encouraging their decision making, postnatal complications of the mother such as urinary tract infections, globules infection, vaginal bleeding, etc. can be avoided. Further, treatment sought in the case of such complications as well as frequency of consultation with health professionals post-delivery can be improved. Studies such as Matthews et al., (2005) as well as Woldemicael et al., (2007) also reported decision making autonomy of women to be an important governing factor for the utilization of healthcare services. It is noteworthy that women's mobility and economic autonomy were not found to be as important as their decision making autonomy in securing their postnatal health. This is in contrast to the studies such as Thapa and Niehof (2013), which established that all the three autonomies had a positive effect on women's utilization of antenatal as well as postnatal healthcare services in Nepal.

The role of autonomy was found to be even greater in determining the postnatal healthcare received by newborns. Economic and decision making autonomies were found to play a major role in willingness to seek professional practitioners following home delivery and determining the frequency of doctor visits made for health assessment of the newborn. It is understood that by including women in planning resources and making decisions, timely health checks of the newborn such as monitoring its weight, giving

vaccinations on time, securing appropriate treatment in the case of infections of the child, etc., can also be improved. Studies such as Govindasamy and Malhotra (1996), Allendorf (2007), etc., also reported that when women had better autonomy over their economic resources, their tendency to seek healthcare facilities improved.

Postnatal contraceptive practices, on the other hand, were not influenced by autonomy or experiences of violence of the study respondents. This finding was found to contradict Furuta and Salway (2006), who found that autonomy of women enhanced their use of contraceptives, thereby helping them avoid unwanted future pregnancies. However, this contradiction is not surprising since most of the studies conducted so far linking different dimensions of women's autonomy to their uptake of contraceptive practices have reported differential results based on the settings of the study and the study design adopted by the researcher (Matthews et al., 2005).

Chapter 8

Summary and Conclusion

This chapter describes the major findings, recommendations, policy implications and scope for future work.

8.1 Summary of research findings

Women perform the crucial responsibility of giving birth to a child and therefore have special reproductive health needs. Reproductive health refers to the total reproductive health needs of women, ranging from child bearing to child rearing, such as their freedom in choosing to reproduce, their ability to reproduce, etc. observed at any stage of life (WHO, 2002).The burden of poor reproductive health is applicable to women across all age groups, from infancy to old age, in the form of female genital mutilation, infections of the reproductive tract, anaemia, malnutrition, sexual violence, unwanted pregnancies, infertility, cancer, sexually transmitted diseases, etc., all of which might cause heavy suffering in them. Considering these facts, the study was conducted among the female construction workers in the city of Bhubaneswar, Odisha.

More than half of the construction workers staying in the city were migrants, who have come in search of employment from different districts of the State. The results shows that majority of the respondents had no formal education and did not attain school due to poor financial condition. More than half of the sample respondents belonged to the General or OBC Category. About 70% of the respondents lived in semi-pucca or asbestos houses as they were migrants and did not have any house of their own and majority of them had nuclear families. They did not have any separate room for kitchen and results indicates that only 8% had electricity in their house while 92% had used other source for lighting. Drinking water as well as sanitation is the necessity of life as well as prerequisite for a healthy life. But it was found that about 51% of the respondents used open well and 41.3% depend on tanker, which was common for everyone in their community. Moreover, they had no access to toilet facilities and they used to go to bushes, field and railway tracks for their daily ablutions. This kind of poor sanitation and unsafe drinking water from unauthorized and unhygienic sources can lead to various kinds of infections as well as

water borne diseases. The present study also depicts the status of dependency of family members on the female construction workers. About52% of them had two members, below 14 years who are dependent on them. While looking at the dependency of elderly people it was found the respondents didn't have any old age people residing with them.

The study also highlights the issues and challenges faced by these construction workers. It gives a detailed account of the migration status, constraints at the workplace, differentiation in wage rates and facilities available for these women workers along with case studies. The women workers in this sector especially are generally unskilled and are engaged only for manual works. The lack of employment, low wage payment impoverished conditions are some of the factors behind the concentration of migrant workers in the cities. These migrant construction workers lead a very miserable life because of the absence of job security as well as opportunity for better jobs (Castles et. Al., 2013). The migration pattern in the study shows that it is predominantly inter-district in nature, which is determined by the fact that 82.6% of total migrants move within the state to find work. These migrated workers basically work as daily labourers in different construction site. Especially, in the Khurda district they are hired by the contractors from the labour congregation points for daily work with a fixed payment and some other women are hired as domestic help in households (Odisha State Migration Profile, July 2014). Moreover, the workers are not registered and the absence of documentary evidence restrains them from accessing measures for social security, pension and insurance from the Construction Welfare Board etc. Within a very limited income they don't have any savings, investments and remittance and are also deprived of basic amenities like sanitation, clean drinking water, electricity, shelter and a safe environment. Especially, the women and children face vulnerabilities in relation to health, safety, nutrition and hygiene. The children of these workers are deprived of education, exposed to unhealthy working environment and gradually at a later stage are pushed into this construction sector. This significantly limits the overall development of the child disallowing them a better future and is a serious concern for the advocates of Human Rights in this decade. But, unfortunately no attention has been paid to the plight of the migrant workers despite the prevalence of these ubiquities.

The study also stresses on the fact that the female workers engaged as unskilled workers, are never promoted to skill workers, even if they had worked for number of

years. They continue to do the same monotonous work which ultimately paves the way for discrimination among the male & female workers in terms of allocation of work as well as wage distribution (Suchitra & Rajsekhar, 2006). Majority of the respondents reportedly work get engaged in this construction sector to meet the needs of the family and are usually accompanied by their spouse and friends. One of the major findings of the study reveals is the difference in wages among the construction workers. They were paid very less amount than their male counterparts; one-fourth of the respondents reported that there is difference of wages between them and the male workers reported to be ranging around Rs 100-150 only. Majority of the respondents were unaware about the wage differentials and lag behind the male workers and some even chose to stay silent in this matter knowingly in fear of losing the work. Thus, the level of awareness among the female construction workers needs to be increased through mass –media and by educating them about their equal share of rights. They should be equally remunerated like the male workers. By the means of education and motivation only they can know their potential and thus their capabilities will not be under-utilized.

The female construction workers face different types of harassment at the workplace and even at home also. The insecure nature of job itself creates a trap in which the unmarried girls and women are bound to please the contractor and sometimes co-workers in order to get work (Rai and Sarkar, 2012). About 80.6% of the respondents reported that they are verbally harassed by the contractor and sometimes have to listen to the lewd comments passed by the co-workers also. Moreover, they feel reluctant to discuss the matter with anyone in fear of losing job and sometimes due to embarrassment. This is a very serious matter of concern, yet no action or steps have been taken to improve the condition of the women. Therefore, empowerment of women is the need of the hour so that there will be reduction in the workplace harassment and this trend of exploitation of these women workers is put to an end. The facilities like drinking water, sanitation, first-aid are also absent at the workplace. Although legislations concerning provision of basic facilities are there, but are not properly implemented. Thereby, steps must be taken to implement and ensure that they are provided with the basic facilities on humanitarian grounds.

The pattern of gynaecological morbidity represents the ubiquity of different gynaecological morbidities among the women construction workers. Most of the

respondents reported to have more than one gynaecological morbidities like painful and irregular menstruation, urinary inconsistency, excessive white discharge, prolapse of uterus, etc. The respondents are of the opinion that, they perceive these kinds of disorders as a process of sexual maturation for women and consider it as normal. They tend to ignore these morbidities as they think it is a natural process for a woman. Moreover, they avoid taking any kind of treatment as they feel very shy and reluctant to discuss all these matters and in turn end up without any proper medical care. Results reveal that about 75% of women in the age group of 15-19 years were found to have more than three gynecological morbidities followed by age group of 20-24 years and 25-49 years. This signifies the fact that the females in the adolescent stage and in the early stage of twenties are more prone to be affected by different type's gynaecological morbidities. The prevalence of higher percentage of Reproductive Tract Infections (RTI) among the respondents indicates towards the negligence of the social and cultural dimensions of reproductive health (National Research Council, 1997).

The health care seeking pattern in the study shows the situation that 60% of the respondents still prefer medicine from local stores and self –medication apart from going to hospitals for treatment. Majority of the respondents still prefer home remedial measures for treating the reproductive diseases. And sometimes the family, customs and traditions of the society prohibit the women in taking any kind of decisions relating to their health. Besides, self- treatment, there are some other real situations like lack of physical accessibility to the modern health care providers, time and cost factors etc. play a very major role in the treatment seeking behaviour of the respondents (Gabrysch & Campbell, 2009).

Differences in prenatal health seeking behaviour of the women based on their socio-economic profile were studied in terms of number of antenatal visits carried out by the respondents. In general, about 66% of the respondents in the age group of more than 25 years had made at least four antenatal visits. The respondents who had married at a young age exhibited less antenatal visits, which increases as their age of marriage increased. The importance of husbands' financial involvement and accompaniment during antenatal as well as postnatal visits has been emphasized time and again as an important factor determining the level of care received (Kawungezi, AkiiBua &Aleni et al., 2015). In the present study, the number of antenatal visits also improved with increasing monthly

income of the women, i.e., increasing financial status. Similarly, Gummadi (2012) reported reduced healthcare utilisation among lower caste women of Orissa was basically due to lower levels of income.

The present study found that antenatal care was better among women from general community when compared to SC/ST. The number of antenatal visits made was higher among women from general community (61.7%) when compared to SC/ST. A few women from lower monthly income groups and who were SC/ST were found to take iron and folic acid supplements but not tetanus vaccines, suggesting unaffordability or unavailability of the vaccines to them. The postnatal care received by newborn was also found to be better among women in the general category when compared to SC/ST. This finding is in accordance to (Kumar and Gupta, 2014) who confirmed social exclusion of SC/ST women and observed lower antenatal as well as postnatal utilisation of maternity services among them when compared to others. Higher spending among women from general category on maternity has also been observed by (Goli, et. al, 2016). Community of the respondents was also found to affect their choice of place of delivery with women from general community exhibiting better propensity to choose government hospitals over ASHA or Anganwadis for childbirth. One of the reasons for the same was that women from the SC/ST community considered hospitals to be expensive. In addition, the present study exhibited that most of the women who exhibited preference for folk medicine were also from this SC/ST community. Similar results were also reported among SC/ST women of Jharkhand (Agrawal & Agrawal, 2010) and women of Uttar Pradesh (Saroha et, al., 2008).

On exploring the reasons behind women's lack of preference for institutional delivery, it was found that women were restricted by family members from seeking hospital services during childbirth. Not being the first childbirth experience was also found to be another reason preventing them for seeking institutional delivery. Results from the study reveal that women's choice of government hospitals for antenatal consultations and delivery was also found to increase with increasing income. This can be explained based on the study conducted by (Dillip and Duggal, 2003) who pointed out that even if not as expensive as the private sector, the costs associated with public sector healthcare services had increased much over the past few years. The present study also suggested that women's propensity for seeking institutional delivery decreased with increasing age, i.e., older respondents chose home delivery over institutional delivery. A study conducted

among women of Ethiopia also reported the same and attributed this finding to two reasons: older women associated lesser risks with home deliveries and they were usually less educated than their younger counterparts (Teferra et. al., 2012). The present study also found that most of the women who had chosen government hospitals for antenatal consultations as well as delivery, experienced several complications.

It was interesting to observe that adolescents and young adults experienced more prenatal and postnatal complications than >25 year old respondents. Since the Indian culture has made women more vulnerable to traditions and beliefs, especially in events related to childbirth, women's preference for folk medicine was also assessed as a socio-cultural dimension in the study. It has been observed that 36.8% of the women with low monthly income of less than 5000 consulted for a folk medicine practitioner which got reduced as their income levels increased. Indian studies on the other hand suggest contrasting results that herbal medicine use increased among higher income households as well (Bhatt, Leong and Yadav, 2016Shahin and Ahmed, 2014)). To summarise, it is evident that disparities in maternal healthcare utilisation must be tackled so that the less educated and less resourceful can gain access to all the services during, before and after delivery of the child.

The last objective of the study deals with the reproductive health care decision making ability of the women workers. Three types of autonomy, namely, movement, economic and decision-making autonomy of the study respondents were assessed. In the case of decision-making autonomy, women were expected to obtain the permission of their husbands in advance to plan their trip to their relatives, healthcare centre and also for spending money. Similarly, in case of movement autonomy, where almost half of the respondents (46.9%) were allowed to go to market alone, however a very small proportion of the same set of respondents were allowed to go to out of their village/community and health facilities. This result suggests that women's mobility out of the house was not only restricted by men of the household for security reasons but also because the women were expected to remain indoors to monitor the household activities and take care of the other members of the house. Another reason might be that the urge to fulfill their desires such as meeting their kin, friends, etc., reduced as women get older, thereby limiting their movement out of the house (Acharya et. al., 2010).

Since autonomy of women is closely related to their experiences of domestic

violence, the latter construct was also studied among the study respondents. It was observed that all the respondents had encountered some level of domestic violence in the past 12 months. It has been observed from the study that nearly 90.0% women were being slapped by their husbands. And approximately three-fourth of them confessed that they experienced violent acts such as being pushed (78.5%), punched (58.0%) and kicked (78.8%) by their husbands. Even some of them reported that they were physically forced to have intercourse in the absence of their consent This finding is not surprising since reports such as the one released by WHO in 2013 have already stated Asia and regions of Southeast Asia to be major regions for registering domestic violence against women, both physical and sexual (WHO, 2013). Women's experiences of different forms of domestic violence leading to several levels of emotional and physical trauma were found to significantly diminish their antenatal health.

Against this backdrop, autonomy was identified to be a significant factor influencing different aspects of their antenatal and postnatal healthcare seeking behaviour. The study concludes that women with lesser autonomy exhibit minimized antenatal and postnatal service utilization.

8.2 Conclusion

The findings of the present study will help in addressing the challenges faced by the female construction workers and to cater the growing healthcare needs of this segment of the population. Availability of social protection mechanism among these female construction workers to a large extent can solve the issue of unmet needs of RH. So, new policy initiative should be introduced to enhance the empowerment of women, especially for women involved in day labour and manual labour such as construction workers, to promote awareness of their rights, better access to financial resources and improved role in decision making regarding their reproductive health issues.

8.3 Suggestion & Policy implications of the study

The construction industry is a highly labour intensive industry absorbing a large number of unskilled workers manpower. The plight of these migrant workers residing in the unplanned settlements cannot be neglected. Although most trades in the construction

industry are covered under the Minimum Wages Act, the workers do not receive the minimum wage. Moreover, the work timings are long and uncertain as of which they are exposed to a very unhealthy environment and thus their health cannot be neglected in this changing time. Some of the suggestions that can be enlisted for the upliftment of these migrant workers are mentioned below:

Public Distribution Services: Fair price shops are basically meant for people below the poverty line(BPL).Although the construction workers form a large population earning less than subsistence level. But these construction workers cannot avail the facility of ration cards as they are migrants, their duration of stay is temporary and are not registered as of which they remain as invisible entity. The implication is very largely felt by women as managing food items within a restricted budget becomes difficult. Therefore, efforts should be made like opening of small cooperative markets nearby the worksite so that the workers can avail food items at a cheaper rate. Besides, temporary ration cards can be issued so that they can avail the benefits.

Health facilities: Public health facilities do not have any kind of model which caters to this labour force. The health services are inaccessible to the workers on the site and there is no special package for the construction workers. Moreover, major health programmes like immunization drives, malaria eradication, etc. never reach the construction workers on the site. As revealed from the study, the female workers work at the construction site throughout their pregnancy and join work soon after the delivery, she barely gets time to regain her health and the child is left in the care of older siblings or in a shade at the site of work itself. Although they are enlisted under the Maternal Benefit Act, but they hardly are beneficiaries of this act. Therefore, creating a network of supportive programmes involving the Govt. as well as NGOs is the need of the hour to address different needs of the women workers (Vaidyanathan,2006). Medical camps and mobile health care vans can be conducted at different times throughout the year so that both the mother and child can get avail routinely checkup as well as other health programmes can be addressed.

Educational facilities: Although there is constitutional provision of universalization of primary education still the educational services of the Govt. as well as NGOs do not have any alternate model of education for the children of these construction workers. The children are forced to remain out of the educational arena thus sealing their future as unskilled or semi-skilled construction workers (Anand,1998). Therefore, some welfare

measures should be addressed to work out a viable education pattern for these children.

Banking facilities: Majority of the construction workers are out of the purview of banking system. Irregularity in wage payment system and the hand to mouth situation perpetuated by the contractors, keeps construction workers away from the saving habits. Thereby, initiatives should be taken to implement various financial schemes and insurance for these workers, so that they can be free from the clutches of the money lenders, who are generally known as contractors.

There exists a plethora of acts, welfare measures and social security measures which are applicable to the construction industry but are not implemented properly. Some of the important legislations applicable to the construction workers are:

- Minimum wages Ac t,1948
- Contract Labour (Regulation & Abolition) Act,1970
- Equal Remuneration Act,1976
- Payment of Gratuity Act,1972
- Interstate Migrant Workmen (Ref…Employment and Conditions of Employment Service) Act,1979
- Employees Provident Fund Act,1952
- Employees state insurance act,1948

8.3.1 Other interventions

Skill upgradation: the construction industry is characterized by a general lack of training facilities. Mostly, the women remain unskilled with hardly any scope of skill improvement. If construction specific training is provided to these female workers, then their employment opportunities can be widened.

Reducing occupational hazards: The construction industry is generally prone to different types of accidents and the environmental factors at the workplace leads to different types of health hazards. the safety measures at the worksite are minimal. Even though their extensive safety guidelines prescribed for the workers at the construction site but hardly they are followed. Workers continue to work unguided, unaware of the hazards and the contractor usually does not implement any of the safety measures at the worksite

to ensure the safety of the workers. Many sites do not have any safety equipment or first aid kit and most of the time the workers are unaware of these precautionary measures. Keeping these in view, various activities can be taken up with the workers directly like exposing them to first -aid training programme, AIDS awareness and other awareness programmes. These can reduce the occupational hazards as well as make them aware of their rights.

Access to basic facilities: It is very well known that the living conditions of these workers are miserable. There is absence of safe drinking water as well as the sanitation facilities.it is therefore essential to look at the problems of these migrant workers so that they can avail basic amenities from a humanitarian perspective.

In India, as most of the workers are illiterate, it becomes desirable to convey health education to them, to make them aware about the work effects. Campaigning for the right of the construction workers can only yield result only when the workers actively participate in the process. Several issues like health, education and skill upgradation needs to be tackled not as welfare measures but to acquire their rights at the workplace. The present study also reveals the prevalence of various RTIs/STIs morbidity among the women in the age group of 15-49 years of age. Therefore, imparting knowledge and making them aware is the most important way to limit its complications.

At the policy level, this study can enable in shaping the social policies that will enhance the choices and reproductive rights of Indian women. The knowledge about reproductive rights will improve the decision-making skills. Moreover, the social workers can propound and shape policies that will reduce the barriers in the path of development for women, so that they can enjoy their basic rights like access to education, right to work, etc. Apart from it, developing health service centres catering to the needs of these workers can also increase their reproductive health accessibility. If the accessibility to health care increases, it will enable women to take their own decisions about health and place of treatment, hereby improving their reproductive health. The theoretical framework used in this study has explored the significant effects of social and economic factors on the reproductive health of women in India. This framework can be used for developing different health programmes and policies for women in India. In addition to this, it can also be used for evaluation of different health programmes, analysis of health data and future studies concerning reproductive health as well as gender in India as well as

developing countries.

8.4 Limitations of the study

The following are some of the limitation of the study:

- The major challenge of the study was to explain the purpose behind this study and underlying benefit to them. Initially, they were interested to answer only if there was any financial benefit to them. Many of them were reluctant to answer at their workplace fearing the contractor and only answered during their leisure time.

- The workers avoided questions pertaining to sexual harassment at the workplace. They were reluctant to answer due to embarrassment as well as fearing of loss of job.

- This study takes into consideration only self-reported cases for any sort of ailments and morbidity. No clinical examination has been performed, so the results may vary.

- The study is confined to the construction sites in Bhubaneswar, Odisha. However, It can be extended to other districts also to provide a probable solution to the problems faced by these construction workers , that can be useful for the decision makers in future for policy implications.

- Other theoretical approaches can also be applied to the study in future.

8.5 Scope for future research

Although the study offers some direction to uplift the reproductive health of women in the unorganised sector in India, but to translate these findings to a larger population or the broader sections of the Indian society is a critical issue. It also provides the platform for further research in the area of wage differentials, health and living conditions with special reference to the gender dimension. In this study, only social and economic variables were examined but other structural variables like women's participation in labour force, political space can be included in further studies.

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Appendix

APPENDIX-I

NATIONAL INSTITUTE OF TECHNOLOGY

Rourkela, Odisha – 769008

Reproductive Health Challenges and Coping Strategies: A Study of the Female Construction Workers in India

SECTION 1:Identification Particulars

District	:
Tehsil/ Block	:
Gram Panchayat	:
Village Name	:
Name of the head of the household :	
Address:	
Interview date	☐☐ ☐☐ ☐☐

A. INTRODUCTION AND INFORMED CONSENT

Namaste. My name is ---------- and I am working with National Institute of Technology, Rourkela. Odisha. We are conducting a survey about the reproductive health challenges faced by the women construction workers and would very much appreciate your participation in this survey. Whatever information you provide will be kept strictly confidential.

Participation in this survey is voluntary and you can choose not to answer any question or all of the questions. However, we hope that you will participate in this survey since your participation is important.

At this time, do you want to ask me anything about the survey?

ANSWER ANY QUESTIONS AND ADDRESS RESPONDENTS CONCERNS.

In case you need more information about the survey, you may contact the undersigned person: Dr. Jalandhar Pradhan, Assistant Professor, Department of Humanities and Social Sciences, National Institute of Technology, Rourkela, Odisha-769008, Mob: 8984360073 May I begin the interview now?
RESPONDENT AGREES TO BE INTERVIEWED . . . 1 RESPONDENT DOES NOT AGREE TO BE INTERVIEWED . . . 2 END BEGIN INTERVIEW

B. RECORD TIME (in 24 hour format) HOUR☐☐ MINUTES ☐☐

SECTION 2: PERSONAL DETAILS

201	NAME OF THE RESPONDENT		
202	AGE		
203	CATEGORY	(a)ST……..01 (b)SC…….....02 (c)OBC…….…03 (d)GENERAL……...04	
204	RELIGION	(a)Hindu……....01 (b)Muslim……..…02 (c)Christian……....03 (d)Other…….....04	
205	EDUCATIONAL BACKGROUND	(a)Literate…….....01 b)Illiterate…….....02 c)Primary…….……..03 d)Matriculate……..….....04 e)Intermediate……....05 f)Other…….....06	

SECTION 3: SOCIO-ECONOMIC PROFILE

Sl. No.	Name (Start with head of House Hold)	*Relation with HH*	Sex (Male-1/Female-2)	Age*	Marital status	Educational Qualification	Main Occupation	Subsidiary Occupation	Current Annual Income (Rs)
301									
302									
303									
304									
305									
306									
307									
308									
309									
310									

** Enter the completed age (for less than one year age = 00, 98 years and above =98) or Date of birth after verifying records*

Codes used:

Relationship with HoH (Column 3): Self-HoHH-1/Spouse-2/Father-3/Mother-4/Father-in-law-5/Mother-in-law-6/Uncle-7/Aunt-8/Brother/Brother-in-law-9/Sister/Sister-in-law-10/Son/Son-in-law-11/Daughter/Daughter-in-law-12/Nephew-13/Niece-14/Own grandchildren-15/Sibling's grandchildren-16/Cousin (brother)-17/Cousin (sister)-18/Live-in domestic help-19/Others (specify)-20

Marital Status (Column 6): *Married (1), Unmarried (2), Divorcee (3), Widow/Widower (4), Separated/Deserted (5)*

Educational Qualification (Column 7): *Illiterate (1); Literate (2); Primary (3); Middle (4); Matriculate (5); Intermediate (6); Graduate and above (7); Professional qualification (Specify)(8); other (Specify)(9)*

Occupation (Column 8 & 9): *Cultivation-1/Dairy-2/Fishery-3/Gloater & other animal*

rearing-4//Daily Wages-Agricultural Labourer-5/Skilled Wage Labourer-6/Semi or Unskilled Wage Labourer-7/Service-Private Sector-8/Service-Government-9/Trade/Business-from fixed premises-10/Owner of SSI/Cottage Industry-11/Other Self-employed-12/Professionals-13/Household Industry-14/Artisan-15/Vendor(Cycle/Pheri wala)-16/Others (Specify)-17

Section 4: HOUSING AND OTHER AMENITIES

Sl no.			
401	Types of Family Structure?	a)Single headed……....01 b)Nuclear …….02 c)Joint ……..03 d)Extended ……..04	
402	What type of house you have?	a)Pucca.....01 b)Semi-Pucca.....02 c)Kutcha.....03 d)Hut.....04	
403	How many rooms are there in house?	☐	
404	Do you have sanitation facility in the house?	a)Yes……....01 b)No……02	
405	Do you have a separate room for kitchen in your house?	a)Yes……01 b)No……..…..02	
406	What is the main source of cooking?	a)Wood……01 b)Charcoal……02 c)Kerosene……...03 d)Cow dung…….....04 e)Gas……....05 f)Electricity……..06	
407	Where are you getting source drinking water?	a)Tube wel…….....01 b)open well……...02 c)Spring/ stream……...03 d)Pond……..…...04 e)Piped water/ Tap…..……..…...05 f)Tanker/ Truck……....06	

408	Where are you getting source of lighting?	a)Electricity……..…01 b) Kerosene…….….02 c)Solar ……..…03 d)Gas……...04 e)Other…….…05	
409	What items does your household have?	**Yes=01 No=02** a)Household electrification…… .1 2 ***Ownership of a*** b)Mattress……..……...1 2 c)A pressure cooker……..……1 2 d)A chair……..…….1 2 e)A cot/bed……...…….1 2 f)A table……...….1 2 g)An electric fan……..….1 2 h)A radio /transistor……..…1 2 i)A black and white television..…1 2 j)A color TV…….....1 2 k)A sewing machine……..…1 2 l)A mobile telephone……...…..1 2 m)Any other phone…….…...1 2 n)A computer…….…...1 2 o)A refrigerator……..…1 2 p)A watch……..1 2 q)A bicycle……..…1	

		2 r)A motorcycle or scooter……..…1 2 s)An animal drawn cart……..…1 2 t)A car…….....1 2 u)A water pump…….....1 2 v)A thresher…….....1 2 w)A tractor……....1 2	
410	Does this household own any agricultural land?	a)Yes …….....01 b) No …….....…02	
411	If yes, size of land	a)Irrigated land (in acres):_____ b)Non-irrigated land (in acres):_____	
412	How much land is used for cultivation?	a)Irrigated land (in acres):_____ b)Non-irrigated land (in acres):_____	
413	Which livestock do the household own?		

	Total in numbers
Cow	
Buffalo	
Goat	
Sheep	
Pig	
Bullock	
poultry	

		Others (Specify……..)	
414	Is this house classified under BPL (below poverty line) criteria?	a)Yes …….…....01 b)No ……..…02	

415	Do you have BPL cards?	a)Yes ……..…..…..01 b)No……...…..…….…02	
416	If yes, are you availing the benefits under the scheme?	a)Yes , Fully……..…01 b)Yes, Partially……..02 c)No……...03	
417	Facilities obtain from government….	**Yes=1 No=2** a)Job Card…….. .1 2 b)Antodoya/Annapurna…… ..1 2 c)Old age pension…….1 2 d)Rajiv Gandhi Bidyut Yojana..1 2 e)Others……....1 2	

SECTION 4(A): Dependency Load

418	Number of Family Member:	☐☐
419	No. of Full Time earners:	☐☐
420	No. of Part Time earners:	☐☐
421	Total no of dependants	☐☐
422	No of dependent below 14yrs	☐☐
423	No of dependent above the age of 60 Yrs	☐☐

SECTION 5: WORKPLACE CULTURE

501	You are currently employed as….	a)Skilled worker……..…01 b)Unskilled worker……..…02 c)Semi skilled worker……..03 d)Working on contractual basis……...04 e)Newly employed……...05	
502	Since when you are working at the current work site?	Less than 1 year…….……..01 Years ☐☐	
503	Were you working anywhere else before joining this work?	a) Yes……..01 b)No……..…..02	
504	Have you ever migrated?	a)Yes…….…..01	

		b)No……02			
505	If yes, where have you migrated during (2012-13)?	NATIVE PLACE	(CURRENT PLACE OF RESIDENCE)	(PLACE OF RESIDENCE BEFORE MIGRATING TO CURRENT PLACE)	
506	For how many months do you migrate?	☐☐			
507	For how many days you work in a month?	☐☐ (Days)			
508	What is the basic amount do you get per day for your work?	☐☐☐ (In Rs)			
509	What is your monthly income?	☐☐☐☐ (In Rs)			
510	Is it same for your male co-workers?	a)Yes……...01 b)No……....02			
511	Do you get paid less than other female co-workers?	a)Yes……...01 b)No……...…02			
512	If yes, what are the reasons?	a)Paid on the amount of work done……..……..01 b)Unable to do complete the work……02 c)Usually paid less than the male workers……....03 d)Don't know…….…04			
513	Have you ever complained about this discrepancy to the contractor?	a)Yes……..….01 b)No…….…...02			
514	What is the nature of relationship with your contractor while dealing with the work? Does he……	**YES=01 NO=02** a)Shouts at you……..…....1 2 b)Behaves with you badly……..... 1 2 c)Is strict towards you……...1 2 d)Abuse you physically……....1 2 e)Sometimes abuses……...1 2			

515	Is the behavior same towards your fellow co-workers?	a)Yes……...…01 b)No……..…..02	
516	Have you ever faced physical harassment by the contractor or fellow co-worker?	a)Yes…….……...01 b)No…….…….....02	
517	If yes, what was the nature of harassment?	**YES=01NO=02** a)Insulting you infront everyone…...1 2 b)Slapped you……...…1 2 c)Kicked you…….…...1 2 d)Personally threatening with you some equipments……1 2 e)Any other……....1 2	
518	Have you ever informed this to any one?	a)Yes……01 b)No……02 →	**(Go to Q 520)**
519	If yes, with whom have you shared the details about the harassment?	a)Parents…….……...…01 b)Co-workers……...02 c)Police officials…….....03 d)NGO officials…….……..04 e)Other social workers…….....05 f)No one…….…....06	
520	If no, what are the reasons?	a)Threatned by the contractor……..01 b)Feeling embarrassed……02 c)Ignored it……..03 d)Any other……04	
521	Do your parents/spouse allow working at the construction site?	a)Yes……..……..01 b)No……...……..02	
522	If no, what is the reason behind your working at the construction site?	a)For money……01 b)Help financially to the family…..…02 c)Working as part time job after school……..……....03 d)Joined to work as friends are working……...….04 e) Working because staying as a migrant at the construction site.....05 f)Working after being dropped out from school……...06 g)To get pocket money/individual	

		income.....07 h)Staying alone .....08 i)Suggested by friend .....09 j) Other reasons.....10	
523	Do you get leave when you are not well?	a)Yes……..01 b)No…….…...02	**(Go to Q 525)**
524	If yes, are the leave…….	a)Sufficient…….01 b)Insufficient……..02	
525	If not granted leave, do you work while you are unwell?	a)Yes……...…….01 b)No…….……02	
526	Does the contractor feel reluctant for granting you leave?	a)Yes……01 b)No…….…....02	
527	Do you get any extra money from the contractor while you are unwell?	a)Yes…….……..01 b)No…….…...….02 c)Sometimes……...….03	
528	Is there any safety measures taken at the worksite to avoid injuries?	a)Yes……..…….....01 b)No……02	
529	In case of any mishaps/death are you remunerated?	a)Yes……..…..01 b)No……...……..02	
530	In case of any minor accidents do you have the facility of first- aid?	a)Yes……..…..01 b)No……...……..02	
531	Do you have proper sanitation facilities at the place where the construction work is taking place?	a)Yes……..…..01 b)No……...……..02	
532	Do you have any canteen or any other option of taking food nearby the working place?	a)Yes……..…..01 b)No……...……..02	
533	Do you take your children to the work site?	a)Yes……...….01 b)No…….…02	**(Go to Q 536)**
534	Do they help you while working at	a)Yes…….……01	

	the site?	b)No……..….02	
535	If yes, what is the nature of the work done by the children?	a)Carrying water……..…..01 b)Helping them while carrying brick……02 c)Doing iron work…….….03 d)Other…….…..04	
536	If not, where do you leave them?	a)At the construction site with other children……..….01 b)At home…….....02 c)At school…….….03 d)Lend to beggars for money…..……04 e)Other…….…..05	
537	Who accompanies to you to the work?	a)Parents.....01 b)Spouse……..02 c)Siblings .....03 d)Friends .....04 e)Relative.....05 f)Other members.....06 g)No one 07	
538	Are you working at the construction site at your own will?	a)Yes.....01 b)No.....02	
539	If no, are you forced by someone to work at the construction site?	a)By the family .....01 b)By the relatives.....02 c)By the contractor himself .....03 d)Friends…….....04 e)Other reasons.....05	

SECTION 6: MARRIED WOMEN

601	At what age did you first get married?	☐☐	
602	Was your marriage……	a)Within the community……....01 b)Outside the community……..02	
603	When did you have your first sexual experience?	a)Before marriage……..….....01 b)After marriage……....02	

604	If before marriage, with whom?	a)Contractor……..……..01 b)Fellow co-worker……...02 c)Friend…….……03 d)Others……04	
605	Was there any reported case of termination of pregnancy before marriage?	a)Yes…….……....01 b)No…….…….....02	
606	Have you ever terminated your pregnancy after marriage?	a)Yes.....01 b)No.....02	**(Go to Q 608)**
607	How many times did you have miscarriages?	a) None .....01 b) One .....02 c) Two .....03 d) More than two 04	
608	If yes, what are the reasons?	a) Natural abortion.....01 b) Couldn't access the medical facilities……...02 c) Financial problems.....03 d) Any other reasons.....04	
609	Was it attended by a qualified medical practitioner?	a)Yes .....01 b)No 02	
610	Was the medicine prescribed by the qualified medicine practitioner?	a)Yes .....01 b)No 02	
611	If no, from where did you get the medicine?	a) Local stores .....01 b) By some other women .....02 c) Followed other methods of abortion.....03 d)Quacks .....04 e) Other (explain).....05	
612	Who was the decision maker regarding the termination of pregnancy?	a) Self.....01 b) Husband.....02 c) Family members .....03 d) Both self and husband……..04 e)Others 05	

613	If self, was it supported by the family members?	a)Yes .....01 b)No 02	
614	Have you faced any kind of sexual gestures or looks from the fellow workers or contractors at the worksite?	a)Yes…….....01 b)No……..02	
615	Has the contractor /co-worker/any other person ever pressurized you for sexual favor?	a)Consistently…….…….....01 b)Often…….....02 c)Sometimes…….....03 d)Once/twice…….....04 e)Never…….…….....……05	
616	What was this person's relationship to you?	a)Contractor……...01 b)Friend……...…..02 c)Live-in partner……....03 d) Casual acquaintance……..…04 e)Fellow worker…….05 f)Sex worker……..…06 g)Other……...…07	
617	Was the person involved in the sexual act married or unmarried?	a)Married……...…....01 b)Unmarried…….…….....02	
618	For how long did you have a sexual relationship with this person?	☐ (Days) ☐ (Months) ☐ (Years)	
619	Did you have sexual contact with the same person or multiple partner?	a)Same person.....01 b)Multiple partners.....02	
620	Did you get paid in exchange for sex?	a)Yes.....01 b)No.....02	
621	Where did it usually take place?	a)At the workplace……..…..01 b)At the house……...02 c)At the small dwellings nearby the construction place……..03 d)At some field…….04	

622	How do you then cope with that situation?	a)Avoid the harasser……..01 b)Quit the job…….02 c)Ignore the behavior……..……...03 d)Discuss with others……....04 e)Threaten the harasser……..05 f)Bring along a friend when the harasser is present……...06 g)Ask another person to intervene……....07 h)Report in the nearest police station……08 i)Seek legal action……..…09	
623	To whom have you reported this matter?	a)Parents……..……..01 b)Friends……...02 c)Other co-workers……03 d)Reported in a nearby police station……....04 e)NGO……...05 f)No one……....….06	
624	Are you aware about the sexually transmitted diseases?	a)Yes.....01 b)No.....02	
625	If yes, have you had a disease which you got through sexual during the last 12 months?	a)Yes.....01 b)N o.....02 c)Don't know.....03	

SECTION 6(A):GYNECOLOGICAL PROBLEMS

626. Do you have any of these gynecological problems?

Gynaecological problems	**Yes/no**	**Treatment Yes/no**	**Place of treatment**	**Reasons for not taking any treatment**
a)Irregular menstruation				
b)Painful menstruation				
c)Excessive bleeding during menstruation				

d)Absence of menstruation				
e)Excessive white discharge				
f)Foul smelling discharge				
g)Itch in vaginal area				
h)Pain during intercourse				
i)Sepsis in vagina				
j) Protepse of uterus				
k)Burning during urination				
l)Pain during urination				
m)Pus in urine				
n)Urinary inconsistence				
o)Genital ulcers/sores				

Reasons:

Ailment cured…….…… 01

No medical facility available in the neighbourhood……. …02

Facilities available but lack of faith …….. 03

Long waiting time ……04

Financial reasons……..…05

Ailment not considered serious …….…..…06

Others Specify ……. ……...07

Place of treatment:

Government hospital/ Clinic.....01

Private hospital/ clinic.....02

Charitable / Missionary.....03

NGO hospital/ clinic.....04

AYUSH hospital/ clinic 05

Pharmacist/ Dispensary.....06

Ritualistic healing.....07
Un-qualified medical practitioner….....08
Self medication.....09
Other Specify ……..….....10

SECTION 6(B): ANTENATAL CARE

627	Were you pregnant in the last 3 years?	a)Yes .....01 b)No 02	
628	When was your last pregnancy?	☐☐ (Months) ☐☐ (Years)	
629	Was the pregnancy successful in terms of……..	a)Live birth……..01 b)Still birth……....02 c) Born alive but died later……..03 d)Currently pregnant…….04	
630	What is the total number of children ever born?	☐☐	
631	How many children were born alive but died later?	☐☐	
632	Did you consult anyone for ante natal care during pregnancy?	a)Yes .....01 b)No 02	
633	Where did you go for the detection of pregnancy?	a)Govt. hospital/clinic……..01 b)Private hospital clinic……02 c)Charitable/missionary……03 d)Pharmacist/dispensary…...04 e)Ritualistic healer……05 f)Unqualified medical practitioner……..…..06 g)Anganwadi workers……...07 h)No one……..….08	

634	What was the duration of your pregnancy when you visited the health care professional/hospital?	a)Before 7 weeks of pregnancy.....01 b)During 7 weeks to 12 weeks of pregnancy .....02 c)More than 12 weeks of pregnancy.....03 d)Don't know.....04 e)Can't remember.....05	
635	Did you worked after getting pregnant or after the confirmation of your pregnancy?	a)Yes.....01 b)No 02	
636	Upto which month of your pregnancy were you working at the construction site?	☐☐ (In Months)	
637	What was the nature of work you were exposed to during this period?	a)Lifting of heavy materials……...01 b)Doing of the work by standing……02 c)Work involving strenuous exercise…….....03 d)Work involving forward bending…….04 e)Others ……..05	
638	How many ante natal checkups did you have in total?	☐☐	
639	Was there any change in your dietary habits during pregnancy?	a)Yes.....01 b)No.....02	
640	During pregnancy were you given any kind of iron/folic acid tablets/syrups?	a)Yes.....01 b)No.....02	
641	For how many days/months did you take the folic acid tablets or syrups?	☐☐	
642	During pregnancy were you given an injection to prevent you and your baby from getting tetanus?	a)Yes.....01 b)No.....02	
643	How many times did you get a tetanus injection?	a)Once.....01 b)Twice.....02 c)More than 2 times.....03 d)Don't know.....04	

644	Did you feel excessive fatigue during pregnancy?	a)Yes.....01 b)No.....02	
645	Did you have swelling of legs /body/face during pregnancy?	a)Yes.....01 b)No.....02 c)Don't know.....03	
646	During this pregnancy did you have massive vaginal bleeding?	a)Yes.....01 b)No.....02	
647	Whom did you visit during the last three months of pregnancy?	a)Govt. hospital/clinic……..01 b)Private hospital/clinic…....02 c)Charitable/missionary……03 d)Anganwadi workers.....04 e)Community health worker.05 f)Lady health visitor.....06 g)Qualified medical practitioner.....07 h)ANM.....08 i)ASHA workers.....09 j)Primary health centre.....10 k)Others.....11	
648	During the last three months of pregnancy did you receive any advice on any of the following?	a)Deliver advice……01 b)Breast feeding.....02 c)Nutrition advice…….....03 d)Keeping the baby warm.....04 e)Cleanliness.....05 f)Family planning.....06 g)Spacing.....07	
649	Did you follow the advice as prescribed by the doctor?	a)Yes.....01 b)No.....02	
650	If no, what are the reasons for not following it?	a)Ignored it.....01 b)Lack of money.....02 c)Didn't feel necessary.....03 d)Followed advice of elders/other women.....04 e)Didn't have faith in medical practices.....05 f)Followed some other traditional practices.....06 g)Followed other blind	

		belief.....07 h)Treatment is expensive….08 i)Thought it would be cured after some days.....09 j)Thought as a normal process……..10 k) Due to some blind beliefs .....11 l)Other(specify).....12	
651	Did you consult any folk –medicine practising person during pregnancy?	a)Yes.....01 b)No.....02	
652	If yes, what was the reason behind it?	a)To get treatment.....01 b)Some blind belief attached to it.....02 c)A traditional practice.....03 d)Low cost /no cost of treatment.....04 e)Other(specify).....05	
653	Is there any beliefs/rituals/practice associated before the birth of the child?	a)Yes.....01 b)No.....02	
654	If yes, what are those practices?(specify)	a) b) c) d)	
655	Do you strongly believe in these practices?	a)Yes.....01 b)No.....02	
656	What are the reasons behind these practices?	a)Traditional practice.....01 b)Safety of the baby.....02 c)Bound by family members.....03 d)Any other reason.....04	

SECTION 6 (C): NATAL PERIOD:

657	Where was the delivery conducted?	a) At parents home.....01 c) At the workplace.....02 d)Government hospital.....03 e)Private clinic/hospital…….....04 e)Home delivery.....05 f)NGO.....06	
658	If it was a home delivery, was the child taken to the hospital for immediate check up?	a)Yes.....01 b)No.....02	**(Go to Q 661)**
659	If the baby was delivered in the hospital, how much money was spent?	☐☐☐☐ (In Rs)	
660	Who paid for the treatment?	a)Self…….....…01 b)Spouse…….....…...02 c)Family members…….....03 d)Relatives……..…04 e)Contractor/employer…….....05 f)Mortgaged items to pay the bill……..…..06	
661	Why didn't you deliver in a health care centre/govt. Hospital?	a)Costs too much.....01 b)Distance too far.....02 c)No female provider.....03 d)Family didn't allow.....04 e)Not the first child……..…05 f)Didn't think necessary…….…….....06 g)Ignorance.....07 h)Financial constraints.....08 i)Other reasons……...09	
662	When your baby was born was he/she weighed at birth?	a)Yes.....01 b)No.....02	
663	Was the health of your baby checked immediately after the birth?	a)Yes……..01 b)No…….…...02	
664	How many hours/days/week after the birth of the baby did the first check up took place?	Hours ☐ | Days ☐ | Weeks ☐	
665	Post delivery during the initial months did you have massive vaginal bleeding and high	a)Yes.....01 b)No.....02	

	fever?		
666	Did you consult a qualified medical practitioner immediately after the child birth in case of home delivery?	a)Yes.....01 b)No.....02	
667	If no, what are the reasons?	a)Financial constraints.....01 b)Ignorance .....02 c)Didn't have time.....03 d)Other reasons.....04	
668	After your delivery how long did you stay there?	a)24 hours.....01 b)2/3 days.....02 c)1 week.....03 d)More than 1 week.....04	
669	Before you were discharged did any health professional checked you?	a)Yes.....01 b)No.....02	
670	Was there any period of confinement before joining the work?	a) Yes.....01 b)No…….....02	**(Go to Q 672)**
671	If yes, for how many days?	a) Three – four days.....01 b)For a week.....02 c)14 days.....03 d)More than 14 days.....04	
672	If no, what are the reasons for joining the work early?	a)Daily wage labourer……..…..01 b)Contractor didn't allow leave……..…...02 c)Not necessary……..……03 d)Financial problems……..……...04 e)Other reasons……..…05	
673	Was your child vaccinated after birth?	a)Yes.....01 b)No.....02	
674	Did you ever breast fed the child?	a)Yes.....01 b)No.....02	
675	How long after the birth did you put the child to breastfed?	a)Immediately.....01 b)Within half an hour.....02 c)After some days.....03	
676	Was the baby fed colostrums right after two hours of the	a)Yes.....01 b)No.....02	

	birth?		
677	Was any other drink given to the child after delivery other than the breast milk?	a)Yes…….....……..01 b)No……....02	
678	For how many months did you breast fed the child?	a)2 months.....01 b)6months.....02 c)8months.....03 d)More than 8 months.....04 e)Not at all.....05	
679	Was there any report of infection of the child after birth?	a)Yes.....01 b)No.....02	
680	Was any treatment sought for the infection of the child?	a)Yes.....01 b)No.....02	
681	Post child-birth did you face any kind of urinary tract infections and globules infection?	a)Yes.....01 b)No.....02	
682	Have you sought treatment for the problem?	a)Yes.....01 b)No.....02	
683	If no what are the reasons for not getting treated?	a)Financial constraints.....01 b)Ignorance .....02 c)Didn't have time.....03 d)Other reasons.....04	
684	Have you visited any health care professional or lady health visitor during the last three months?	a)Yes.....01 b)No.....02	
685	Did you have any major health problem requiring hospitalization in the last year?	a)Yes.....01 b)No.....02	
686	How many times you were hospitalized?	☐☐	
687	What was the duration of your stay in the hospital?	In days……. ☐☐	
688	Who accompanied you to the hospital?	a) Self…….…….....01 b)Spouse…….…….....02	

		b)Son…….…….....03 c)Daughter…….……....04 d)Son/Daughter-in –law…….....05 e)Family members……..……....06 f)Relatives……..…….....07	
689	How much money was spent on… (In Rs)	a) Transportation…… b) Food…… c) Diagnostics…… d) Consultation…… e) Medication……..... f) Treatment……...…….	
690	Who paid for the treatment?	a)Self……...…01 b)Spouse…….……....02 c)Family members…….....03 d)Relatives……..…04 e)Contractor/employer……....05 f)Mortgaged items to pay the bill……...06	
691	Is getting medical help for self was.....	a)A problem.....01 b)Not a problem.....02	
692	Are you currently using any kind of family planning techniques to avoid frequent child births or spacing between successive child births?	a)Yes.....01 b)No.....02	
693	What are the reasons for not using any contraceptive practices?	a)Opposed by husband……...…01 b)Religion prohibited…….…....02 c)Opposed by family members……....03 d)Don't know any method……...04 e)Don't know the source to acess.....05 f)Costs too much……..…06 g)Fear of side-effects…….……..07 h)Inconvenient to use……...……...08 i)No sex……...……....09 j)Using earlier but not using after child birth…….....10 k)Other……11	
694	Have you ever undergone an operation to avoid having anymore children?	a)Yes.....01 b)No.....02	

695	Are you using or aware of these contraceptive practices?	a)Female sterilization……01 b)Pills……..02 c)IUD/Loops…….….03 d)Injectables…….…..04 e)Implants……..….05 f)Female condoms…….....06 g)Diaphragm……..….07 h)Foam/jelly……08 i)Emergency contraception…….09	
696	What are the other methods apart from contraceptives do you use to avoid pregnancy?	……..	
697	Are you aware about the prevalence of HIV/AIDS?	a)Yes.....01 b)No.....02	

SECTION 7: ECONOMIC SECURITY/DECISION MAKING

701	Who decides how the money you earn will be used?	a)Yourself.....01 b)Husband.....02 c)Both of them jointly.....03 d)Others.....04	
702	Would you say that the money that you earn is more than what your husband earns?	a)More than husband.....01 b)Less than husband.....02 c)About the same.....03 d)Husband has no earnings.....04 e)Don't know.....05	
703	Who usually makes the decisions regarding health care for yourself?	a)Alone.....01 b)Husband.....02 c)Both of them jointly.....03 d)Family members.....04	
704	Who usually makes the decisions regarding household purchases?	a)Alone.....01 b)Husband.....02 c)Both of them jointly.....03 d)Family Members.....04	
705	Who usually makes the decisions regarding making purchases for daily household needs?	a)Alone.....01 b)Husband.....02 c)Both of them jointly.....03 d)Family members.....04	

706	Who usually makes the decisions about visiting your family or relatives?	a)Alone.....01 b)Husband.....02 c)Both of them jointly.....03 d)Family members.....04	
707	Did your husband ever try to limit your contact with your family members or relative?	a)Yes.....01 b)No.....02 c)Don't know.....03	
708	Do you have any money of your own that you alone can decide how to use?	a)Yes.....01 b)No.....02	
709	Are you usually allowed to go to the market.....	a)Alone.....01 b)With someone else.....02 c)Not at all.....03	
710	Are you usually allowed to go to the health facility.....	a)Alone.....01 b)With someone else.....02 c)Not at all.....03	
711	Are you usually allowed to go outside the village/community?	a)Alone.....01 b)With someone else.....02 c)Not at all.....03	
712	Do you have a bank or savings account that you yourself use?	a)Yes.....01 b)No.....02	
713	Do you know of any welfare programmes that give loans to women to start or expand a business of their own?	a)Yes.....01 b)No.....02	
714	Have you ever taken a loan, in cash or in kind, from any of these programmes, to start or expand a business?	a)Yes.....01 b)No.....02	
715	Have you ever participated in a literacy programme or any other programme that involves learning to read and write?	a)Yes.....01 b)No.....02	
716	Do you read a newspaper/magazine…..	a)Everyday……01 b)Once in a week……..….02 c)Not at all……..…03	
717	Do you listen to the radio……	a)Everyday…….01 b)Once in a week……..…02 c)Not at all…….03	

718	Do you watch television…….	)Everyday……..…01 b)Once in a week……..……02 c)Not at all……03	
719	In the last few months have you ever heard or seen any message about family planning on……..	a) On a radio……..…….....1 2 b)On the television……...1 2 c)In a newspaper/magazines….1 2 d) On a wall painting/hoarding..1 2	

SECTION 8: EXPERIENCE OF VIOLENCE

801	Did your spouse ever do or say something in front of others to humiliate you during the last 12 months?	a)Often.....01 b)Sometimes.....02 c)Not at all.....03	
802	Has he ever threatened or tried to harm you in the last 12 months?	a)Often.....01 b)Sometimes.....02 c)Not at all.....03	
803	Has he ever insulted you or tried to make you feel bad?	a)Often.....01 b)Sometimes.....02 c)Not at all.....03	
804	Have you ever faced any kind of emotional violence by your spouse in the last 12 months?	a)Yes.....01 b)No.....02	
805	Did your spouse ever pushed, shooked or threw something at you?	a)Yes.....01 b)No.....02	
806	Did he ever slapped you?	a)Yes.....01 b)No.....02	
807	Did he ever punch you with fist or something that could hurt you?	a)Yes.....01 b)No.....02	
808	Does he kick/drag you or beat you up?	a)Yes.....01 b)No.....02	
809	Does he ever tried to pull you by your hair or twisted your arm that could hurt you?	a)Yes.....01 b)No.....02	
810	Did he ever try to strangle you or burn you purposively?	a)Yes.....01 b)No.....02	

811	Has he ever threatened you with knife or other weapon?	a)Yes.....01 b)No.....02	
812	Have you ever faced any kind of sexual violence by your spouse?	a)Yes.....01 b)No.....02	
813	Does your spouse physically force you to have sexual intercourse with him even when you did not want to?	a)Yes.....01 b)No.....02	
814	Does your spouse ever force you to perform other sexual acts that you didn't want?	a)Yes.....01 b)No.....02	