Understanding Inequities in Institutional Childbirth in Odisha, India

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by

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DECLARATION

I, Rohit Samuel Shah, hereby declare that the PhD thesis titled: **Understanding Inequities in Institutional Childbirth in Odisha, India,** is the outcome of my original study undertaken under the guidance of my supervisors. It has not previously formed the basis for awarding any degree, diploma, or certificate of this Institute or any other Institute or University. I have duly acknowledged all the sources used while preparing this thesis.

16.10.22 Rohit Samuel Shah

Approval Sheet

The thesis entitled "**Understanding Inequities in Institutional Childbirth in Odisha, India**" by **Rohit Samuel Shah** is approved for the degree of **Doctor of Philosophy.**

Date: 26.04.23

Place: Mumbai

DEDICATION

"for Paakhi"

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"I will give you a talisman. Whenever you are in doubt or when the self becomes too much with you, apply the following test. Recall the face of the poorest and the weakest man [woman] whom you may have seen, and ask yourself if the step you contemplate is going to be of any use to him [her]. Will he [she] gain anything by it? Will it restore him [her] to a control over his [her] own life and destiny? In other words, will it lead to swaraj [freedom] for the hungry and spiritually starving millions?
Then you will find your doubts and your self melt away."

Mahatma Gandhi - The Last Phase, Vol. II (1958), p.65

This thesis as a work has been foundational to me, whereby the entire doctoral journey allowed me a set of thinking I perhaps would have never been able to have. This acknowledgement is only a brief statement of the contributions of all who have helped in this journey. I apologize if I miss anyone in it.

My doctoral journey is all about the contradictions in opinion from the projects outstay to the perspectives I wished to bring. In this regard, I would like to thank all my supervisors who allowed me the freedom to chart the project's direction while giving in the needed input.

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ABSTRACT

In this thesis titled "**Understanding Inequities in Institutional Childbirth in Odisha'**, I essentially state that inequity exists in a maternal health programme's outcomes due to a complex interplay of institutions, social norms, and *etic* versus *emic* perspectives about the programme. The research would show the relevance of 'social processes' on maternal health programmes 'outcomes'[1] (Zall Kusek & Rist, 2004, p. 54,122). I would also show the limitations in determining health policies when not accounting for them.

My undertaking in the thesis is to build a case for their inclusion as 'multi-dimensional inequities' to contribute to improving process evaluations of maternal health programmes.

Overall, the premise of the thesis is to understand and, in turn, propose a way by which evaluations of a maternal health programme in India would be able to address inequities in its programmatic outcomes. In the thesis, I contextualize this discussion concerning maternal health inequities for the state of Odisha, which performs poorly on different socioeconomic indicators. The thesis would help understand the complex interplay of different social processes, institutions, norms, and practices that are not accounted for in the programme's design. Accounting for them could help reduce inequities in the programme's outcomes, a gap previously unaddressed.

Although there is much work on impact evaluations of maternal health programmes in India, a concurrent investigation of social processes and

[1] Process evaluations of a programme are undertaken to see if the outcomes of a programme are being delivered in line with its design. As seen in the thesis, different social processes which are not accounted for in process evaluations of the programme could account for the variations in a programmes outcomes.

institutions affecting these outcomes is absent to the best of my knowledge. The thesis is situated as an interdisciplinary work between Public Health and Development Studies to address the larger problem of my thesis statement.

It uses contrarian research paradigms (deductive versus interpretivist) through a mixed-method approach (Pluye & Hong, 2014) to better understand how equity can be assessed in maternal health programmes in India for policy outcomes. The thesis would benefit academicians and health systems researchers interested in health policy evaluation in India and the Global South. It is expected to contribute to the body of knowledge on inequities in health systems and programme evaluation.

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ABBREVIATIONS

ASHA	Accredited Social Health Activist
OOPE	Out of Pocket Expenditure
JSY	Janani Suraksha Yojana
HSR	Health Systems Research
EAG	Empowered Action Group
GDP	Gross Domestic Product
DGHS	Director General of Health Services
MoHFW	Ministry of Health and Family Welfare
NFHS	National Family Health Survey
GoI	Government of India
MMR	Maternal Mortality Rate
IMR	Infant Mortality Rate
WHO	World Health Organisation
UNICEF	United Nations Children's Emergency Fund
UNFPA	United Nations Population Fund
NRHM	National Rural Health Mission
WCD	Department of Women and Child Development
EmOC	Emergency Obstetric Care
LMIC	Low- and Middle-Income Countries

VIF	Variance Inflation Factor
ANC	Antenatal Care
PNC	Post Natal Care
SC	Scheduled Caste
ST	Scheduled Tribe
OBC	Other Backward Classes
CAS	Complex Adaptive Systems
DLHS	District Level Health Survey
AHS	Annual Health Survey
ATE	Average Treatment Effect
IIPS	International Institute for Population Sciences
EDD	Expected Date of Delivery
VHND	Village Health and Nutrition Day

Chapter 1: Introduction

Chapter Synopsis

The chapter is an introduction to the thesis.

I begin by presenting 'welfarism' as outlined by the Indian state. It is followed by a historical background on the evolution of public health financing in India. Thereafter, I discuss how health programmes in India have been limited to funding arguments.

After that, I reason the need for a discussion about overcoming inequities in health outcomes instead. Additionally, I bring to light my reasons for examining health programmes specifically for the state of Odisha in the context of maternal health outcomes. Next, I introduce my research objectives and the chapters where I would address them. I then describe where the thesis situates itself as a body of knowledge and the epistemic stances undertaken in my research design.

Following it, I discuss the outline of the thesis and what the intended reader would be exploring in the consequent chapters. The chapter concludes with a synopsis of the main findings of the thesis. It is followed by a discussion on how the thesis can have potential health policy implications, whereby it could address inequities in maternal health specific to the state of Odisha.

1.1 Introduction

The Directive Principles of State Policy in Schedule IV of the Constitution of India mandates the establishment of India as a 'welfare state', making for its 'soul' as a nation (Hardgrave & Markandan, 1968). Thus constitutionally, the welfare of its population should be the stated objective of the Indian government. However, a large variance exists between the aforementioned stated objective and the observed outcomes regarding welfare being meted out by the state[2] to improve population health. One of the reasons for this dissimilarity in meeting the stated objective is the limited production of basic social goods or social protection (Kapur & Nangia, 2015) for the varied 'welfare' needs of the population.

It, however, changed significantly with the liberalization reforms in the early 1990s. They allowed a greater influx of funds and improved the governments' monetary reserves, thereby improving access to different social protection and welfare programmes (Nayar,1998; Sachs *et al.,*1995) by making public money more readily available for welfare programmes. However, if this has translated to a more equitable welfare distribution is what needs to be questioned. More so in the context of programmes specific to improving health outcomes. The above discussion lays the foundation for the premise of my argument as to why one should consider the dimensions of equity in evaluating health programmes in India. It also brings to

[2] The Indian union consists of a federation of states. It is the equivalent of the federal government as used for other nation states. Unless mentioned otherwise 'the state' or 'centre' is synonymous with the union or the central government. The 'states' refers to the states making the union and their respective state governments. Although public health as a subject comes under the State list (jurisdiction of the states), the centre, however, can be an enabler in improving the outcomes by providing both financial and technical support to the states.

question if public health outcomes are determined by financial expenditures alone (K Sujata Rao, 2018). Evidence shows that an increased financial expenditure by the state impacts certain health outcomes. To give an example, Farahani *et al.,*(2010) have shown that an increased budgetary allocation for public health programmes in India did help reduce mortality among women.

As an outline of the chapter, in the following sections, I will discuss how the financing of public health expenditure has evolved in India and the impacts this lessened government expenditure on public health has had. I reason that given this focus; the equity question is often limited to financial inequity. My central argument is that while financial resources are necessary, do they remain the only condition for addressing health equity? If not, are there other dimensions that interact with finances to cause the observed differences in health outcomes? If these dimensions exist, there needs to be due consideration of their interplay to understand inequity in maternal health outcomes, which is discussed as a conclusion to the chapter.

1.2 Historical evolution of Public Health Financing in India

India's mainstay of public expenditure on health is usually between 0.8 to 0.9% of GDP (Drèze & Sen, 2002). This amount remains minuscule considering similar-sized nation states, e.g., China spends nearly 5% of its Gross Domestic Product (GDP henceforth) (Chen *et al.,*2021). Although there had been a higher allocation during the First (1951-1956) and Second Five-Year Plans (1956-1961), national health

budgets have been contracting after that and more so in the post-liberalisation period (Gangolli *et al.,*2005).

However, this is not a recent phenomenon, as historically, India has had poor budgetary allocation for health since pre-independent times, and even this low allocation did not translate into total spending on health programmes (Amrith, 2009). The lowered spending allowed for consistently lowered allocation in the following financial years. Even in the recent past, the waning of budgetary allocations for health programmes (Sundararaman *et al.,* 2016) speaks no differently[3].

Thus, I find that there has been a gradual retraction by the Indian state'[4] in its public health financing[5] .

1.3 Impact of reduced Financial Provisioning for Public Health in India

[3] The latest National Health Profile (Central Bureau of Health Intelligence, DGHS, MoHFW, 2021) shows the lowered account of the central budget and a greater focus on insurance services to meet the welfare needs of her citizens through social protection.

[4] The Indian union has a federal structure and Health features in the State List in its Constitution. Thus, the onus of 'health' of the given state depends on its own self. Some states have their own health schemes, whereas there are national health programmes which are common for all. Currently, the budget for health is more dependent on the states than the central contribution.

[5] By the time of liberalization, the Indian state had understood that it did not have the resources to make health available for all its population. It brought in 'markets' for such provisioning and a greater 'dependence' on them. The focus remained on individual self-regulation and utilization of health resources (Jeffery & Jeffery, 2008).Hence, simply making an increase in the budgetary allocation through different estimation methods of even thrice or four times of the existent budget might not br sufficient to meet even the acute health needs of the population (Mor & Shukla, 2023). Given these resource limitations and issues of wastage, one would require a more equity centric focus, to address the health needs of those who need it the most and perhaps would be unable to overcome their health limitation if the state does not make the resource provisioning more centric to them.

Much like other South-East Asian countries (apart from Sri Lanka, Malaysia, and Thailand), this shows that the Out-of-Pocket Expenditure (OOPE henceforth) occurs when welfare provisions are reduced or absent and remains the principal means of financing healthcare. In turn, this reduces the available expenditure for other household requirements. The outcomes of this differential availability of financial resources are not felt the same across all economic groups. Families in higher wealth quintiles remain comparatively better cushioned (Van Doorslaer *et al.,* 2007).

Thus, the poor become more vulnerable in the absence of these remedial measures provided by the state. In the Indian context, this remains evident with the increase in the OOPE at the household level, while the state withdraws itself from provisioning and focuses more on financing healthcare alone (Selvaraj *et al.,*2022, p. 5). Even this limited financing remains a low percentage of the country's GDP (Chen *et al.,* 2021).

It allows the government to focus less on the direct provisioning of services while increasing its focus on insurance/financial services. Currently, the focus of the Indian state remains on attaining the 'expected' welfare through private partnerships (Sundararaman *et al.*, 2016). Even the latest National Health Profile (Central Bureau of Health Intelligence GoI, 2021) shows the lowered account of the central budget as compared to the state budget. All in all, this evidence helps confirm the Indian states' retraction from welfare.

In turn, the expected 'health' welfare of the country's populace has had questionable outcomes using such an approach (Ghosh, 2014). A point to be noted here is that

with the reduced central allocation, states, in turn, have gone on to show differential outcomes in their health indicators[6] as they are required more to foot the bill for health budgets. With these changes and reduced central allocation, smaller or poorer states, in general, continue to perform poorly on health indicators (Dilip, 2021).

With lesser monetary resources being available to them, this furthers the existing inequality between larger and smaller states regarding their health outcomes (Dwivedi & Pradhan,2017). Thus, I find that a given state's health profile within the Indian federation depends on its available finances (Indian Council of Medical Research *et al.,* 2017). There, however, are exceptions to this where a smaller state has better health indicators than larger states, Kerala being a prime example (Drèze & Sen, 2002). As suggested by Muralidharan *et al.,*(2017), India's development priorities must be directed towards improving health-seeking behaviour by knowing how best health financing can effect such change. Thus, financing being a consistent and ever-existent challenge, one needs to find other ways of overcoming inequities in health outcomes in India.

For this, one needs to understand the philosophy with which public health is seen in India. The mainstay of approach for public health provisioning in India has been more techno-centric rather than improving or focusing on the social determinants of health (Gangolli *et al.,* 2005, sec. 2). Thus, when it comes to an understanding of the

[6] Health indicators are indicators which show the outcomes of a programme or intervention, namely the Under Five Mortality Rate, Crude (U5MR), Childbirth/Death Rates (CDR),Maternal Mortality Rates (MMR) and Infant Mortality Rates (IMR) amongst others. Here MMR and elsewhere in the text stands for Maternal Mortality Rate (and not ratio) unless otherwise mentioned.

limitations of health programmes in India, the mainstay of the literature remains on critiquing health programmes within the domain of efficiency and allocation of funds (ibid).

Most often, the debate remains between the current mechanisms of finance and the related OOPE, which pushes the population into poverty and, in turn, furthers societal inequalities (Nandi & Schneider, 2020). If, however, one is to better healthcare outcomes, then relating to Grossman (1972), investments in health should improve the stock of good health and be equity enhancing. Therefore, if a change in supply exceeds the change in demand for health, specific investments, or interventions, in my case, are needed to close this gap. Without it, if the change in demand surpasses the change in supply, the gross investment will continue to decline over a life cycle. It will not help achieve health equity. Thus, even if finances are to be considered, they alone would not be able to resolve issues of inequities in health outcomes.

Here I must state to the reader that the focus of my thesis will not be on the debate between the current mechanisms of finance and the related OOPE that a household incurs. Literature shows that this pushes the population further into poverty and increases pre-existing societal inequalities (National Health Accounts Technical Secretariat *et al.,* 2017; Prinja *et al.,* 2017). What I explore is if this query to reduce health inequities requires an analysis of the intrinsic nature of the health problem and the population under purview. In this light, the role of institutions and societal norms in promoting health-seeking behaviour turns pivotal. Thus, as seen, financing

is one aspect of health systems. There are other dimensions or rather a complex interplay of the other pillars of a health system with other systems, which I will be exploring further in the course of the thesis to see if they contribute to health inequity.

1.4 Using health systems to address inequities in health outcomes

Public Health and its quest to reduce health inequities require the utilization of public health institutions to address or overcome these inequities (Katikireddi & Valles, 2015).

A state's health profile requires health systems[7] (which include such institutions) to address these inequities. Also, one needs to consider health systems as complex systems (Shiell *et al.,* 2008), wherein finance is only one dimension or aspect. Thus, when undertaking programme evaluation, it should not be construed in the classical linear 'cause and effect' causality. Rather, it should be considered as an 'emergent causality' where multiple interactions determine the outcome (in my case, an increase in the uptake of institutional childbirth[8]) rather than thinking of them as linear processes (Greenhalgh & Papoutsi, 2018).

[7] The World Health Organisation defines Health systems as all organisations, people, and actions whose primary intent is to promote, restore or maintain health. (World Health Organization, 2007). This consists of 6 building blocks of health systems namely:1. Health service delivery 2. Health workforce 3. Health information systems 4. Essential Medicine access 5. Robust Health systems financing and 6. Leadership and governance.

[8] I wish to bring to the attention of the reader my choice for not using the word 'delivery', and my reasons for drawing a distinction between the terms 'delivery' versus 'childbirth'. The principal reason for this is that the thesis should be able to direct the reader that the core undertaking of a welfare programme should be to improve the self-agency of the individual (women, in my case, using institutions for childbirth). It requires an appropriate examination of the processes which cause the

Such an approach could help define other ways of improving health equity outcomes. It could allow for a shift in thinking for undertaking evaluations of health programmes for policy prescription in India. Including such thinking for policy outcomes are necessary to understand the possible constraints under which health programmes work and do not work and to help analyse them effectively. It will also help answer when states perform poorly due to health system financing limitations, can their performance be more equitable if we use this given approach.

In line with the above, the premise of my thesis would be to address the inequities in maternal health in Odisha through Development Studies and Public Health specific to health systems research (HSR, henceforth). The focus would be to understand and, in turn, propose a way by which evaluations of a maternal health programme in India would be able to address inequities in its programmatic outcomes. In the following section, I contextualize the above discussion concerning maternal health inequities for the state of Odisha with the reasoning for such a choice.

1.5 Why maternal health?

Maternal mortality is an important indicator of maternal health outcomes. Due to its nature, it is considered the greatest inequity of our time (World Health Organization,

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equity difference and are instrumental to understanding childbirth in Odisha. At the same time, it should allow the reader to understand the complexity of exerted institutional and societal norms, which intersects an individual's self-agency across different socio-economic parameters, which is missed in current evaluation frameworks. The thesis title also acknowledges this idea of self-agency and does not propagate that of institutional control, which is reflected by using the terms 'institutional childbirth' instead of 'delivery/birthing'. An important reading for the same is: Weik, E. (2009). *"Birthing" versus "being delivered": Of bodies, ideologies, and institutions* (pp. 171–201). https://doi.org/10.1108/S0733-558X(2009)0000027008

2014). Although the percentage of maternal mortality had reduced from 19% in 2010 (ibid) to 15% in 2015 (Registrar General and Census Commissioner, 2018; WHO *et al.,* 2015), India (along with Nigeria) continues to contribute to a third of all maternal deaths in the world even more recently (Meh *et al.*, 2021; UNFPA *et al.*, 2019).

Although there have been changes and shifts in reducing maternal mortality, globally, it continues to be a glaring issue of public health concern. In the Indian context, the variation in such maternal mortality differs between the rural and urban areas, whereby most deaths are caused due to issues in timely access to obstetric care (Montgomery *et al.,* 2014).

This issue was approached initially through concerted supply-side interventions (World Bank, 1997), which met with limited success and allowed governments to opt for alternate demand-side approaches. From findings in other developing countries, the most common demand-side approach is to increase facility usage by inducing user demand (Randive *et al.,* 2013). This is mainly done through conditional cash transfer (CCT henceforth) programmes for specific interventions such as institutional childbirth. The assumption is that increased facility usage would allow for timely interventions to reduce maternal mortality. Additionally, it would help overcome financial barriers to utilizing institutional childbirth. Thus, it is in line with the government's focus on financing health services and choosing service provisioning from itself and private players.

1.6 Janani Suraksha Yojana (JSY)

Currently, in India, the programmatic approach for addressing the issue of maternal mortality is done by the existing Janani Suraksha Yojana (JSY henceforth), a CCT programme for safe institutional childbirth. Given its coverage, it is the largest CCT programme globally (Gaarder *et al.,* 2010; Modugu *et al.,* 2012; Carvalho & Rokicki, 2019).

It was launched with the beginning of the National Rural Health Mission (NRHM) in 2005[9]. The assumptions in the programme's 'theory of change' were that financial incentivization would, in turn, lead to (a) increased facility usage, which would allow for timely interventions to reduce maternal mortality. Additionally, (b) it would help overcome financial barriers to utilizing services for institutional childbirth (Rahman & Pallikadavath, 2018). Thus, I will investigate if such linear thinking of the expected outcome rather than allowing for the complexities in the programme's operationalization could affect the 'theory of change'[10].

The programme theory is based on the argument that a financial incentive is a directive reason for the uptake of institutional childbirth, which will reduce the

[9] The NRHM had its focus on the eighteen EAG (Empowered Action Group hereafter) states. The EAG states had persistent poor health indicators, and Odisha is one of these states. To know more on the NRHM see NRHM,(2005) .

[10] A better understanding of the limitations of this simplistic reduction of the programme theory is discussed in Astbury & Leeuw,(2010). More aspects of these are discussed in the 5th Chapter of the thesis.

associated mortality. It allows a mother to be provided with a financial incentive for giving childbirth in either a public or an empaneled private medical facility. Other incentives under the programme include transfer to a hospital, coverage of food, hospital stay expenses, medicines, treatment of post-discharge complications, and follow-up. For a perspective, the financial incentive varies between INR 1000 (USD 13)-1400 (USD 18.3) for the pregnant mother and from INR 400 (USD 5.2) to INR 600 (USD 7.8) for the individuals who help encourage the institutional birth or aid with the same such as community health workers for the JSY. The incentive, however, is provided for up to two live births[11]. This amount also varies between rural and urban areas, given that rural areas are more of a higher priority due to the lesser availability of health facilities.

Given India's quasi-federal structure of government spending for health, states could contribute more, which varies through various integrated state-specific programmes (Sidney *et al.,* 2012).

For the state of Odisha, MAMATA[12] is the add-on component to the JSY scheme. The added incentive is provisioned by the state's WCD (Department of Women and Child Development) and compliments the JSY. Coalescing such financial provisioning between government departments allows the programme to have a greater uptake through more finances being available for the uptake of institutional childbirth.

[11] This, however, varies from the disbursement between states where, in high priority states all institutional births are covered, whereas in low priority states only up to two live births are covered (MoHFW & GoI, 2005).However some difference are described in verbatim from the fieldwork in Chapter 4.

[12] A description of the outline of the MAMATA scheme is described at: http://wcdodisha.gov.in/content/2/50 (accessed on 28.12.18).

Thus, the state and the central government's focus on institutional childbirth to reduce maternal and infant mortality remains central. In its initial years, given the budgetary limitation and not knowing how the intended programme would pan out, the JSY was introduced only for the Empowered Action Group (EAG) states in 2005[13] (Arokiasamy & Gautam, 2008), these are a set of 18 states which have low socio-demographic indicators (Bredenkamp, 2009). Subsequently, given the successes achieved by the programme, it was universalized in 2011 with added components of postnatal care for both the mother and child being introduced (MoHFW, 2011).

As a result of the programme, overall, there has been a decline in the MMR from 2004-05 to 2019-20 (Jose, 2018). Also, at the same time, the public sector's greater contribution to this reduction and, in turn, the increase in institutional childbirth has been observed (Joe *et al.,* 2018). What needs to be seen is if the targeted uptake of institutional childbirth is equitable[14]. Currently, the programme is nationally present and available for all socioeconomic groups. Thus, if one continues to see the description given by Randive *et al.,* (2013), the continuing issues in meeting the expected benchmark indicators made the Indian state push demand-side inducement against the supply-side. Given that the programme's focus was to increase institutional childbirth and reduce infant and maternal mortality rates and the related OOPE, literature is divided on its effectiveness.

[13] The NRHM had its focus on the eighteen EAG (Empowered Action Group hereafter) states. The EAG states had persistent poor health indicators, and Odisha is one of these states.To know more on the NRHM see NRHM,(2005) .

[14] A discussion on this would be undertaken in the following chapter.

On the one hand, evidence supports that it reduced maternal mortality. It has achieved this by increasing facility usage for childbirth in both the public and the private sector, thereby reducing the associated catastrophic expenditures (Rahman & Pallikadavath, 2019). However, it leaves much to be asked of reigning in the private sector, where the associated OOPE has increased compared to the pre-program period (Mohanty & Kastor, 2017). It becomes an important factor; since as previously discussed, it increases the economic gap between social groups and furthers the financial distress of the household.

Randive *et al.,* (2014) have shown that the programme has effectively increased institutional childbirth. However, the reduction in maternal mortality in poorer districts has been slower due to limited EmOC (Emergency Obstetric care). This, in turn, shows the need for supply-side strengthening of health systems. Also, there are studies which show the contrarian view. Evaluation studies of the programme have not been able to show if it has truly reduced maternal mortality at the district level (Joshi & Sivaram, 2014; Lim *et al.,* 2010; Powell-Jackson *et al.,* 2015). This shows that district-wise desegregation might not be able to show the intended programme effects.

Thongkong *et al.,* (2017) have shown in their comparative study between districts of Jharkhand and Odisha that in the Jharkhand context, the scheme's beneficiaries were in the higher wealth quintiles, had previous pregnancies and were conversant with the utilization of such institutional services for childbirth. They showed that the

scheme had a high percentage of awareness in the study districts of both states, but uptake was lower in the lower wealth quintiles.

Goyal. *et al.,*(2014) similarly have shown that specific to maternal health, these inequities are not addressed adequately by such programmes, thereby questioning their effectiveness. The authors state that the comparisons of even a well-performing state's average do not show deprived and vulnerable groups.

Thomas *et al.,*(2015) have shown that in Odisha, although there has been a concerted government effort to reduce maternal mortalities via means of strengthening health systems by increased spending, it leaves much to be expected of the supply-side problems. They state that "*…in case of institutional childbirth, the quality of care remains a major challenge in the translation of the improved access to reducing maternal mortality*". Also, Das (Chapter 7, Mark, 2017) states that health systems are ignorant about traditional pregnancies and do not cater to their requirements in their programmatic pursuit. Moreover, the author (Chapter 7, Mark, 2017) states that to evaluate in the face of contrarian evidence for the given programme, it must allow for the assumptions of the programme and its intended outcomes. These should align with understanding the beneficiary population and its social processes. It is important to account as "*...health functioning across entire populations are determined by social processes and institutions*" (Venkatapuram, S. 2013, p.49), without which the outcomes could be inequitable.

Against this backdrop, I argue that the programme might not have the true intended effect, as outlined in its programme theory and shown by Randive *et al.,* (2013). There might not be a direct correlation between increasing institutional childbirth and reducing maternal mortality, the intended outcome of the JSY programme. Thus, I concur that financial incentivization, a principal focus of the programme, by itself might be unable to help improve the outcomes. The forthcoming chapters will explore some plausible contributory reasons, including a complex interplay of social norms, institutions, and perspectives for the observed variation in the programme outcomes.

Furthermore, through the review, these emergent antagonistic views about the programme (whose prime goal is to promote institutional childbirth amongst women) brings me to question if such maternal health programmes are truly able to address the equity question or, much like the experience in other countries, comply with the 'inverse equity hypothesis'[15] (Ahmed. Shakil & Khan. M. Mahmud, 2011) whereby with any programmatic intervention, the inequality worsens before it betters off.

1.7 Research Objectives

The above discussion becomes important in the framing of my research objectives which are as follows:

[15] This is described in detail in the following chapter.

1. To understand the inequalities in institutional childbirth in Odisha.
2. To understand what comprises 'multi-dimensional' inequities in institutional childbirth.
3. To examine the 'multi-dimensional' inequities in institutional childbirth in Odisha.
4. To propose a conceptual framework for assessing 'multi-dimensional inequities' for a maternal health programme evaluation.

The first research objective is addressed in the second chapter. The second objective is answered in the second and third chapters. The fourth chapter addresses the third objective, while the fifth chapter addresses the fourth objective.

1.8 Research Design

To answer the aforementioned research objectives, the thesis is situated as an interdisciplinary work between Development Studies and Public Health with a greater focus on HSR. It uses contrarian paradigms (deductive versus interpretivist) through a mixed method approach (Pluye & Hong, 2014) to better understand how equity can be assessed in a maternal health programme for policy outcomes. It would benefit academicians and health systems researchers interested in policy evaluation in India and the Global South. The thesis is expected to contribute to the body of knowledge on health systems inequity in low and middle-income countries (LMIC).

1.9 Conclusion

Health as a construct is multidimensional and concurrently multi-layered as well. Often the understanding of public health equates it to medicine which often remains the reason for a techno-centric approach. The deliberations within a functionalist approach attempt to medicalize and address an issue (it could be physiological, social, or psychological) of concern (White, 2017). It thereby becomes intrinsic for making requisite changes in a population's health through a techno-centric approach. In essence, it makes the understanding of public health a 'pill-based approach'; more quantified but inadequate for understanding its complexities. This purview and approach, in turn, affects how one sees health programmes and their impacts.

Given Odisha's poor health performance (Gopalan *et al.,* 2011), the thesis focuses on the effect of inequities in institutional childbirth in the state. Given that most studies on the JSY did not account for the OOPE associated with the post-childbirth period, its variation among different wealth quintiles shows that the expected benefits were not equitable (Sidney *et al.,* 2016). It also shows a need to know the possible deterrents to the expected outcomes in increasing institutional childbirth.

For the JSY, however, in addition to awareness, the support of the ASHA workers acted as a greater enabling factor than financial incentives provided by the program. (Vellakkal, Reddy, *et al.,* 2017). Moreover, Das (in Mark 2017) states that maternal mortality was already declining in the pre-programme period, and what is achieved

could be part of a secular trend furthering the challenge in the programme's evaluation.

These examples show that mechanisms beyond the financial incentive determine that the programmes working. Learning from it would be necessary if one is to evaluate a programme, in my case, the JSY, to see if it made any difference in the uptake of institutional childbirth. Concurrently there needs to be an assessment of institutional childbirth to figure out if there has been a proportionate increase with state-specific additions[16]. Such observations need to be seen in a context-specific manner, as a recent qualitative study in Odisha (Contractor *et al.,* 2018) has shown that institutional barriers might prevent vulnerable population groups from accessing the programme. Thus, the programme needs to be evaluated in light of the contextual issues to improve health equity. Also, it remains significant to understand who composes the women where maternal mortality occurs to make the uptake more equitable (Ronsman & Graham 2006; Krishnamoorthy *et al.,* 2020).

The outcomes of the JSY are argued to help improve maternal health indicators, including MMR. However, current frameworks for evaluating the programme do not incorporate the 'multidimensional nature' of inequity as a construct. Current practices of evaluation and monitoring are very checklist based and linear. The thesis argues for a more nuanced understanding of these programs to improve their outcomes and evaluations as well. It is important to note that when programmes do not show

[16] The state specific intervention in the case of Odisha is the MAMATA scheme (http://wcdodisha.gov.in/content/2/50 accessed on 28.12.18).

the desired outcomes, social norms and existent institutions of the catered population are often not well-measured. These spill-over effects need a more qualitative contextual understanding and must be assessed in line with the societal baseline. The change should move away from the only empiricist take on the subject of evaluations and include a more depth-based understanding. Delving into an understanding of what should constitute an assessment of a welfare programme to address equity is more requisite. The focus of the work in the following chapters would be to determine these plausible reasons through further examination. The findings could have potential health policy implications in addressing inequities in maternal health outcomes.

Chapter 2: Understanding inequalities in institutional childbirth in Odisha

Chapter Synopsis

As described in the previous chapter, despite improvements in the maternal mortality rate (MMR) and infant mortality rate (IMR), India is among the three worst-performing countries globally. While there has been a considerable policy emphasis on reducing maternal and infant mortality through large-scale programmatic interventions, the undertaking of an equity analysis in evaluating such health programmes is limited.

In this chapter, I will address my first research objective, using the case of the Janani Suraksha Yojana (JSY), a safe motherhood programme, in the context of a poorly performing state (Odisha) in India.

I begin with analyzing unit-level data from a large national survey, the National Family Health Survey (NFHS-4) (2015-16). My reason for focusing on the state of Odisha is because it is an EAG (Empowered Action Group) state and has one of the worst indicators of MMR and IMR (Government of Odisha, 2004, 2015) in the country, as previously discussed. I estimate the determinants of institutional childbirth as an increase in institutional childbirth uptake is a key outcome of the programme. It is followed by a concentration curve exercise that shows the existent inequality. My empirical findings support the 'inverse equity hypothesis' (Ahmed. Shakil & Khan. M. Mahmud, 2011; Sen, Govender Veloshnee & Salma El-Gamal, 2018, p. 10; Ghosh & Ghosh, 2020).

After that, I introduce 'intersectionality theory', whereby my empirical findings corroborate my theoretical stance and helps provide insights for probing inequities in institutional childbirth. Thereafter, I build further on my argument on the issues in a programme's impact evaluation to account for equity. Here, I specifically bring forth the trade-offs between equity and efficiency, whereby a focused and contextual process evaluation could help overcome these problems. I also show how an

empirical analysis of survey data such as the NFHS-4 (and, by implication, the latest NFHS-5 data) would allow the reader to understand the limits in its usage for assessing equity for policy prescription.

My results also help understand the issues I raise on the evidence of impact evaluations of the programme. Concurrently I discuss methodological aspects of capturing inequity from the empirical data. After that, using a critique of the extant literature, I identify the limitations of contemporary impact evaluation frameworks and argue for the need to incorporate the dimensions of 'operational' and 'social processes' and the 'experiences' of both the health system (*etic perspective*) and beneficiaries (*emic perspective*); in turn, partially addressing my second research objective. The chapter concludes with me arguing for a focus on the need to consider '*social norms and institutions*' that act as processes which could contribute to the inequities in the observed outcomes of the programme. These, in turn, could influence the programme's outcomes. Such an approach can be definitive for understanding 'inequity' as applicable to a health programme's evaluation, as seen in the forthcoming chapters.

2.1 Introduction

As discussed in the previous chapter, wherein there was an introduction to CCT programmes in the Indian context, in this chapter, I will examine my first research objective. I would be using the case of the JSY, a safe motherhood programme, to examine inequality[17] in institutional childbirth in Odisha. The reason for such a choice is due to the national presence of the programme, as explained in the previous chapter.

Globally, the main objective of all maternal health programmes is a targeted increase in institutional childbirth, thereby aiming to reduce maternal mortality alongside neonatal and infant mortality. The principal reason for a considerable focus on maternal mortality is that it is considered the greatest inequity of our times (World Health Organisation, 2014) and is a glaring issue of public health concern. Moreover, in the Indian context, despite improvements in recent decades, India still contributes to a third of all maternal deaths in the world (Meh *et al.,* 2022; Registrar General and Census Commissioner, 2018; UNFPA *et al.,* 2019). To address this, I find that maternal mortality has many causative factors: such as supply-side issues. These defining

[17] An earlier working draft of this chapter has been presented at **the Sixth Global Symposium on Health Systems Research (8–12 November 2020) organised by Health Systems Global (HSG)** as a virtual poster presentation titled: **Which mothers do we 'care'— really 'care' for? Thinking equity in the evaluation of the Janani Suraksha Yojana in Odisha. Shah, R.** Excerpts of the said chapter was presented as a full-length paper titled: **Which mothers do, we really 'care' for? Incorporating an equity analysis framework in the evaluation of public health programmes: The case of the Janani Suraksha Yojana in Odisha, India. Shah, R. Gaurav, S.(2021)** at the **XVI International Conference on Public Policy and Management (23rd -25th August 2021) organised by the Centre for Public Policy (CPP) at the Indian Institute of Management, Bangalore (IIMB).** I thank the feedback from the supervisor (SG) and those received at both the events. They have been critical to improving the outline of the chapter.

reasons that cause maternal mortality were identified by Thaddeus & Maine (1994) in their seminal work and are accounted for in the JSY programme design.

However, although these specific areas or causes can be individually identified, the programme's ability to address maternal mortality remains limited, which will be discussed in forthcoming sections of the chapter.

As seen in later chapters, my proposition is that there exists a complex interplay of institutional and societal mechanisms which lead to the unfavourable outcomes in institutional childbirth. These mechanisms can be considered similar to pathways that are needful in overcoming maternal mortality which are consistent with an individual's choice for institutional childbirth (Gabrysch & Campbell, 2009).

Hence, what needs an understanding is if individual and health systemic reasons alone make a person's access and 'self-agency'[18] to maternal health services inequitable. For this reason, I would begin by examining if there are inequalities in the uptake of institutional childbirth in Odisha as my first research objective.

2.2 Data and Methods

As mentioned in the above discussion, I undertake an empirical analysis to understand the health system on the uptake of institutional childbirth in Odisha using the National Family Health Survey-4 (NFHS-4 henceforth).

[18] Self-agency is defined as the ability of the individual to understand their self so as to better their future outcomes (in my case the uptake of an institutional childbirth) Damon & Hart,1991 in DeSocio et al.,(2003).

2.2.1 National Family Health Survey-4 (NFHS-4)

The NFHS-4 conducted under the aegis of the Ministry of Health and Family Welfare (MoHFW) is a large-scale multiple-round survey conducted by the International Institute of Population Sciences (IIPS henceforth), Mumbai, as its nodal agency. The first round (Round-1) of the survey was held in 1992-93, the second (Round-2) in 1998-99, the third round (Round-3) in 2005-06, the fourth (Round-4) in 2015-16 and the fifth (Round-5) in 2021-22.

The survey provides information on national and state-wise demographic indicators such as infant mortality, fertility, household characteristics, nutritional status, and health services.

The NFHS-4 was unique where it was the first-time district-wise data was collected for all the country's 640 districts (at the time of the survey). Besides, separate estimates were determined for the 157 districts with an urban population of between 30-70%, along with forecasts for slum and non-slum areas in major cities ('National Family Health Survey,' 2018., p.1). Four survey questionnaires were used and were divided into i) Household, ii) Man's, iii) Woman's, and iv) Biomarker questionnaires', while interviews were conducted in the regional languages. This round of the survey was also the first time that biomarkers for HIV status and blood pressure readings were collected in the survey.

The total sample size included 628,892 households nationally, and women in the age groups of 15-49 who had resided the night prior in the household were eligible for

the survey. Correspondingly men in the age groups of 15-54 years were eligible for the survey. For Odisha, information was collected from 30,242 households, with 57,826 women in the age groups of 15-49 and 4,634 men in the age groups of 15-54.

2.2.2 Methods

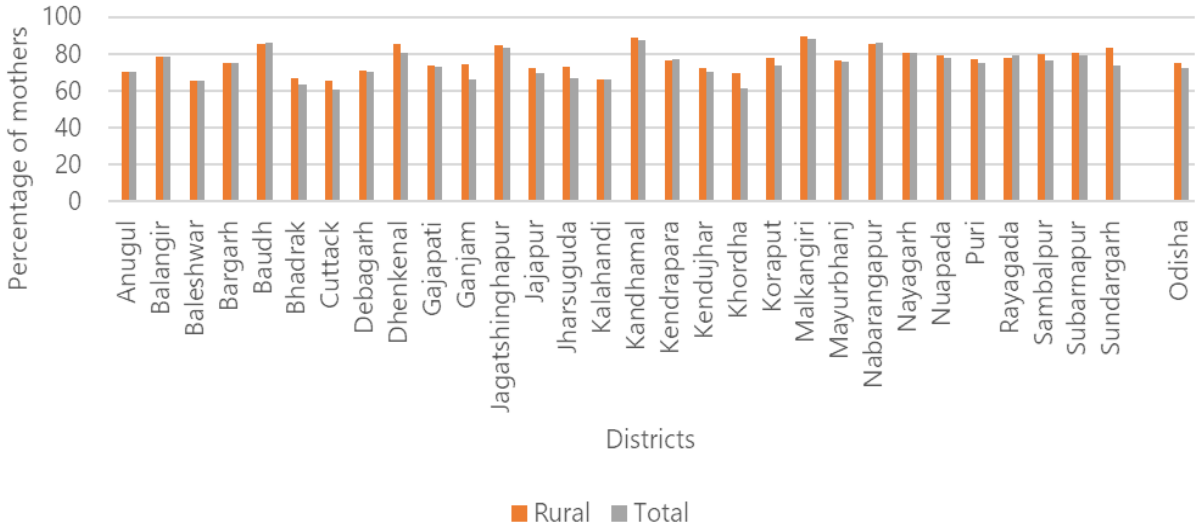
The 'IABR74DT' (Childbirths Recode) dataset in NFHS-4 from the Demographic Health Survey website was used for my analysis. The dataset was then extracted for the selected variables and saved as separate nationally representative and Odisha-specific datasets. The extracted state-specific dataset, in turn, had 11,091 women who had reported childbirths in the five years leading up to the survey year (2015). In turn, this was used to determine the correlates of institutional childbirth. Since the dependent variable of institutional childbirth is binary (undergone institutional childbirth or not), a probit regression model (with marginal effects) is used. After that, concentration curves (Jann, 2016; O' Donnell *et al.,* 2007; Wang *et al.,* 2019; Yiengprugsawan *et al.,* 2010) on various sociodemographic variables were used to further comment on the observed inequality. The selected sociodemographic variables were checked for multicollinearity using the Variance Inflation Factor (VIF), which were all within the accepted valued ranges. Stata version 16 was used for the analysis.

2.3 Results

2.3.1 Performance of JSY and Institutional childbirth in Odisha

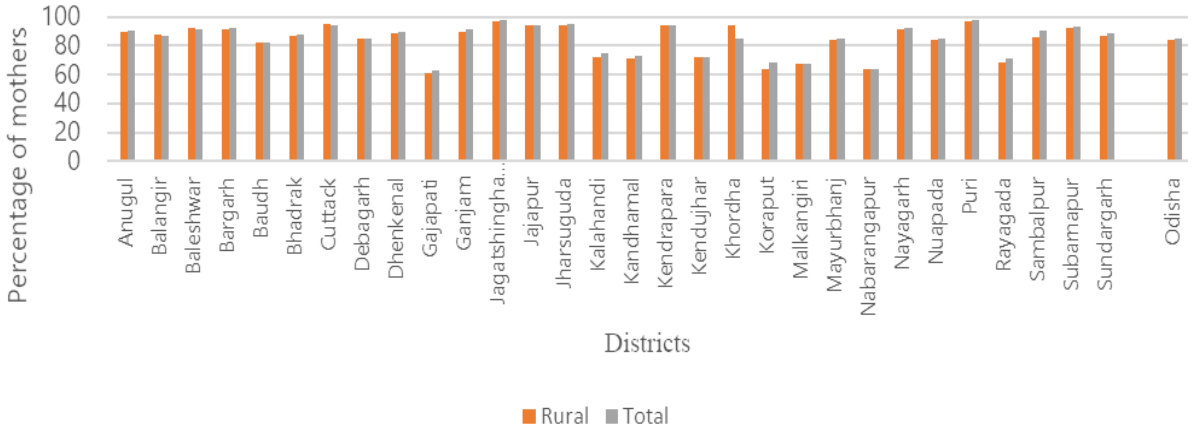
As a beginning, Figures 2.1-2.4, relevant to the state of Odisha, help showcase some of the district-wide variations of the JSY and institutional childbirths as extrapolated from the States Factsheet in the NFHS-4.

Figure 2.1: Percentage of mothers who received financial assistance under the Janani Suraksha Yojana (JSY) for undergoing an institutional childbirth for the last birth in the five years prior to the survey, NFHS-4 (2015-16).

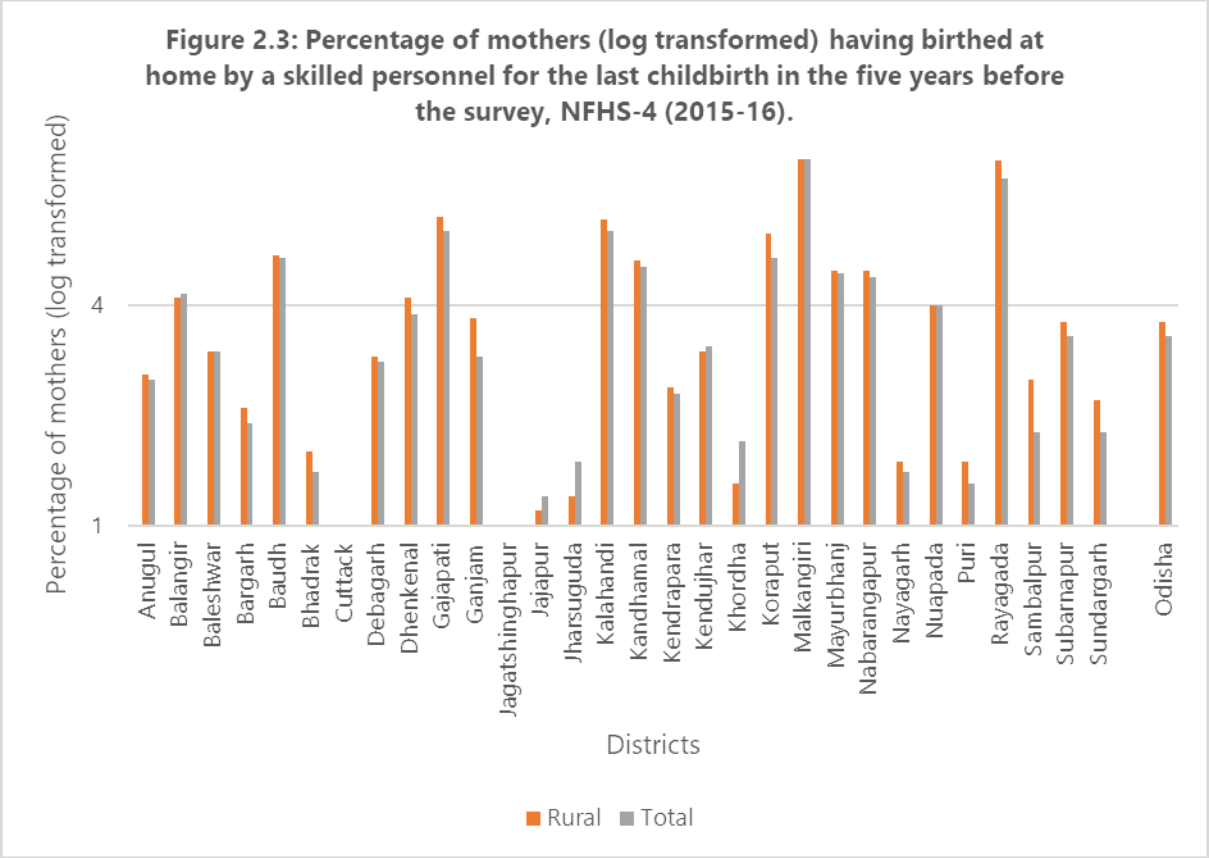


Source: National Family Health Survey -4 Factsheet (2015-16), IIPS; authors' own calculation.

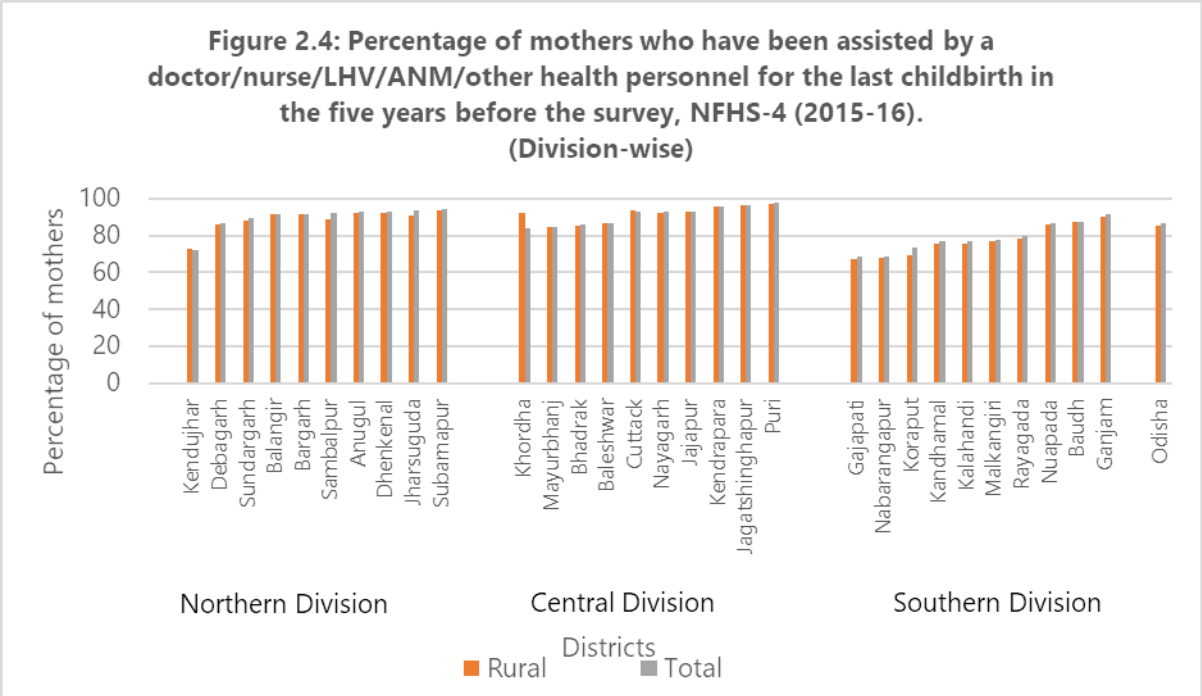
Figure 2.2: Percentage of mothers who have had an institutional childbirth for the last birth in the five years prior to the survey, NFHS-4 (2015-16).



Source: National Family Health Survey -4 Factsheet (2015-16), IIPS; authors' own calculation.



Source: National Family Health Survey -4 Factsheet (2015-16), IIPS; authors' own calculation.



Source: National Family Health Survey -4 Factsheet (2015-16), IIPS; authors' own calculation.

The figures above show a lowered usage of health facilities for birthing in the Southern districts of Odisha and a greater dependence on home births. Using this learning, I would undertake an empirical model using different health systems and other socio demographic indicators to understand their respective contributions to the uptake of institutional childbirth.

A description of the selected sociodemographic and health system specific variables for my empirical model and their respective summary statistics are mentioned below.

Table 2.1: Variable Description

Variable	Description
Place of childbirth	Place of childbirth (dummy=1 if institutional childbirth, 0 otherwise).
Age	Mothers' age (in years).
Urban	Type of place of residence (dummy=1 if Urban, 0 otherwise).
Education	Highest education level of the mother (No education=0, Primary=1, Secondary=2 and Higher=3).
Religion	Religion of the mother (Hindu=1, Muslims=2, Christians=3, Sikhs=4, Jains=5, Buddhists/Neo-Buddhists=6).
Caste/Tribe	Membership of mother to a caste group or tribe (dummy, if an individual belongs to SC/ST/OBC=1, if not belonging to SC/ST/OBC=2 if an individual does not know on membership=3).
Household members	The number of members residing in a household.
Household head's sex	Sex of Household head (Male=1, 0 otherwise).
Household heads age	Age of Household head.
Wealth Index*	Wealth index (Poorest=1, Poorer=2, Middle=3, Richer=4, Richest=5, rural=1, urban=2).
Children born in the past five years	Total children born to the mother in the past five years.

Antenatal checkup place	Place where the antenatal checkup (ANC) was performed. (dummy, if undergone antenatal checkup at home/institution/other=1, if not undergone antenatal care =0).
Postnatal checkup person	The person who performed the postnatal checkup for the mother (PNC) (Doctor=1, ANM=2, LHV=3, midwife/ASHA/TBA=4, Other=5).
Postnatal checkup place	Place the baby was first checked (dummy, if postnatal checkup at home=1 if postnatal checkup in institution=2 if postnatal checkup at another place =3).
Financial Assistance sources: JSY	Source of Financial Assistance for childbirth for the mother: Dummy=1 if Janani Suraksha Yojana (JSY), 0 otherwise.
Financial Assistance sources: Other governmental programmes	Financial Assistance sources (Other governmental programmes=1, 0 otherwise).
Transport Facility usage	Usage of a transport facility for undertaking childbirth.
Received Mother and Child Registration Card**	Pregnancy registered and mother and child registration card provided 1=if registered,0=otherwise.
Pregnancy registration person	The person with whom the pregnancy is registered (ANM=1, LHV=2, midwife/ASHA=3).
Institutional childbirth advice	During the pregnancy, if the mother advised of the need to undertake institutional childbirth, 1= if provided, 0 otherwise.
District	District (30 district dummies).

Source: National Family Health Survey-4(2015-16), IIPS; ANM=Auxiliary Nurse Midwife; ASHA=Accredited Social Health Activist; AWW=Anganwadi Worker SC=Scheduled Caste, ST=Scheduled Tribe, OBC=Other Backward Class. Source: National Family Health Survey -4 (2015-16), IIPS; authors' own calculation.

*Wealth Index: The wealth index is calculated similarly for all countries in the DHS. A Principal Component Analysis (PCA) for the given population is undertaken, which considers occupants, type of housing, ownership of household items, type of toilets, etc. For a more detailed understanding, please refer to https://dhsprogram.com/programming/wealth%20index/India%20DHS%202015-16/IndiaNFHS4.pdf

**Mother and Child Registration Card: This is used to register the mother, determine the micro-childbirth plan, and track. Please refer to Nagarajan P, Tripathy J.P., Goel S. For more details, is the mother and child tracking system (MCTS) on the right track? An experience from a northern state of India. Indian J Public Health [Internet]. 2016 Jan 1 [cited 2020 Aug 28];60(1):34–9. Available from: https://pubmed.ncbi.nlm.nih.gov/26911215/

Table 2.2: Summary Statistics

Variable	Mean	Std. Deviation	Percentage	No. of Observations
Age (in years)	27.2	5.19		11,091
Place of childbirth				11,091
Institutional			84.95	
Non-institutional			15.05	
Education				11,091
No Education			30.77	
Primary Education			14.17	
Secondary Education			49.73	
Higher Education			5.33	
Religion				11,091
Hindu			92.54	

Muslim			1.97	
Christian			5.27	
Sikh			0.08	
Buddhist/Neo-Buddhist			0.03	
No religion			0.05	
Other			0.05	
Caste/Tribe				11,091
Belongs to SC			21.72	
Belongs to ST			31.26	
OBC			31.60	
None of them /do not know			15.42	
Household membership	5.45	2.05		11,091
Household head's sex				11,091

Male			90.60	
Female			9.40	
Wealth Index*				11,091
Poorest			41.06	
Poorer			25.89	
Middle			17.93	
Richer			10.00	
Richest			5.12	
Children born in the past five years	1.40	0.57		11,091
Antenatal checkup (ANC)				11,091
Undergone an ANC at home/institution/others			76.91	

Not undergone antenatal checkup	23.09	
Postnatal checkup person		5,407
Doctor	41.98	
ASHA	34.92	
Other health personnel	0.54	
Dai/Traditional Childbirth Attendant	1.54	
ANM/Nurse/Midwife/LHV	20.21	
Other	0.81	
First Postnatal checkup place		5,407
Institutional	75.01	
Non-institutional	24.84	
Others	0.15	

Transport facility usage		7,735
Government Ambulance	35.81	
Other Ambulance	2.35	
Jeep/Car	22.84	
Motorcycle/Scooter	2.13	
Bus/Train	0.45	
Tempo/Auto/Tractor	33.57	
Cart	0.58	
On foot	0.72	
Other	1.53	
Received Mother and Child Registration Card**		11,091
Yes	75.59	
No	24.41	

Pregnancy registration person		8,625
ANM	14.19	
ASHA	25.52	
AWW	59.07	
Others	1.22	
Institutional childbirth advice		7,105
Yes	88.91	
No	11.09	

Source: National Family Health Survey-4(2015-16), IIPS; ANM=Auxiliary Nurse Midwife; ASHA=Accredited Social Health Activist; AWW=Anganwadi Worker SC=Scheduled Caste, ST=Scheduled Tribe, OBC=Other Backward Class. Source: National Family Health Survey -4 (2015-16), IIPS; authors' own calculation.

*Wealth Index: The wealth index is calculated similarly for all countries in the DHS. A Principal Component Analysis (PCA) for the given population is undertaken, which considers occupants, type of housing, ownership of household items, type of toilets, etc. For a more detailed understanding, please refer to https://dhsprogram.com/programming/wealth%20index/India%20DHS%202015-16/IndiaNFHS4.pdf

**Mother and Child Registration Card: This is used to register the mother, determine the micro-childbirth plan, and track. Please refer to Nagarajan P, Tripathy J.P., Goel S. For more details, is the mother and child tracking system (MCTS) on the right track? An experience from a northern state of India. Indian J Public Health [Internet]. 2016 Jan 1 [cited 2020 Aug 28];60(1):34–9. Available from: https://pubmed.ncbi.nlm.nih.gov/26911215/

Based on the summary statistics mentioned in Table 2.2, the following can be inferred for the individual and household characteristics.

The mothers who gave birth in the five years before the year of the survey (2015) have the following characteristics: The average mother is 27 years old, practices Hinduism (93%), resides in a rural area (84.13%) and has undergone at least one childbirth in the five years prior to the survey. The average level of education is low, with nearly half having completed secondary schooling.

Most of these mothers belong to Other Backward Classes (31.60%), followed by individuals belonging to Scheduled Tribes (31.26%). The average household to which they belong is male-headed (90.6%) with five members in household membership, while two-fifths (41.06%) of these households belong to the poorest wealth index.

Regarding the health system characteristics (Table 2.2), over three-fourths of respondents had undergone at least one antenatal care (ANC) visit for their last childbirth. However, a fourth did not receive any institutional antenatal care. I also find that close to four-fifths (85%) of all childbirths occur in an institution, but there is reduced uptake of postnatal care (PNC) compared to ANC. Most of those who underwent postnatal care were attended to by a doctor (41.98%), followed by an ASHA (34.92%). Of those who opted for postnatal care, most received it at an institution (75.01%). Likewise, most individuals who undertook institutional childbirth utilized government transport services by ambulance services (35.81%), followed by self-paid private transportation using a Tempo/Auto/Tractor (33.57%). Amongst the

mothers who underwent childbirth in the five years preceding the survey, almost three-fourths (75.59%) have received a Mother and Child Registration Card for their pregnancy, and most (88.91%) received institutional childbirth advice. More than half (59.07%) of these were registered with an Anganwadi worker.

Table 2.3: Probit Regression Model (with marginal effects) of Institutional Childbirth in Odisha, NFHS-4 (2015-16)

Dependent Variable: Institutional Childbirth	**1**	**2**
Sociodemographic variables:		
Age	-0.015***	-0.019***
	(0.003)	(0.004)
Place of residence		
(Ref: Urban)		
Rural	-0.015	0.029
	(0.077)	(0.081)
Highest level of education		
(Ref: No education)		
Primary	0.343***	0.240***
	(0.062)	(0.065)

Secondary	0.596***	0.444***
	(0.055)	(0.059)
Higher	0.810***	0.691**
	(0.204)	(0.211)
Religion		
(Ref: Hinduism)		
Muslim	-0.424*	-0.534**
	(0.181)	(0.189)
Christian	-0.396***	-0.200*
	(0.080)	(0.096)
Buddhist/Neo-Buddhist	-1.452	-1.157
	(0.854)	(0.844)
Other	-0.269	-0.264
	(0.898)	(0.896)
Caste		
(Ref: Belongs to S.C.)		
Belongs to ST	-0.132*	-0.096
	(0.056)	(0.060)
Belongs to OBC	0.090	0.108
	(0.063)	(0.065)
None of these	0.122	0.0613
	(0.091)	(0.095)
Do not know	-0.240	-0.391

	(0.264)	(0.275)
No. of household Members	-0.045***	-0.047***
	(0.011)	(0.011)
Sex of household head		
(Ref: Male)		
Female	0.128	0.082
	(0.079)	(0.082)
Wealth indices[$]		
(Ref: Poorest)		
Poor	0.297***	0.284***
	(0.053)	(0.055)
Middle	0.679***	0.644***
	(0.080)	(0.083)
Richer	0.720***	0.712***
	(0.121)	(0.125)
Richest	0.959***	1.000***
	(0.237)	(0.246)
Total childbirths in the past five years	-0.233***	-0.248***
	(0.041)	(0.042)

JSY programme-specific variables:		
Received institutional childbirth advice		
(Ref: No)		
Yes	0.194**	0.185**
	(0.063)	(0.066)
The person with whom the pregnancy is registered		
(Ref: ANM)		
ASHA	0.115	0.064
	(0.071)	(0.075)
AWW	-0.049	-0.070
	(0.062)	(0.065)
Received Mother and Child Protection Card[$$]		
(Ref: No)		
Yes	0.608***	0.628***
	(0.120)	(0.124)
Undergone antenatal care		
(Ref: Not undergone antenatal care)		
Undergone antenatal care at home/institution/home/institution/another place	0.589***	0.635***
	(0.100)	(0.105)
District	No	Yes
Constant	0.280	0.581*

	(0.233)	(0.280)
N	6923	6923
Pseudo-R^2	0.184	0.214

Standard errors in parentheses
="* p<0.05 ** p<0.01 *** p<0.001"
ANM=Auxiliary Nurse Midwife; ASHA=Accredited Social Health Activist; AWW=Anganwadi Worker.

$ Wealth Indices: The wealth indices are calculated similarly for all countries in the DHS. A Principal Component Analysis (PCA) for the given population is undertaken, which considers, amongst other things, occupants, type of housing, ownership of household items, type of toilets and the like. For a more detailed understanding, please refer to https://dhsprogram.com/programming/wealth %20index/India %20DHS %202015-16/IndiaNFHS4.pdf

$$ Mother and Child Registration Card: This is used to register the mother, determine the micro-childbirth plan, and track. Please refer to Nagarajan P, Tripathy J.P., Goel S. For more details, is the mother and child tracking system (MCTS) on the right track? An experience from a northern state of India. Indian J Public Health [Internet]. 2016 Jan 1 [cited 2020 Aug 28];60(1):34–9. Available from: https://pubmed.ncbi.nlm.nih.gov/26911215

2.4 Discussion

The results (Table 2.3) suggest that the probability of undertaking institutional childbirth reduces by 15 per cent with a year's increase in the mother's age. A suggested reason could be that adolescent mothers require more care since the given childbirth is primigravid, reducing when childbirth occurs at a higher age[19] and order (Singh *et al.,* 2012). Additionally, compared to the reference group with no education, there is an increased probability of an institutional childbirth with an increase in education. Compared to women practicing Hinduism, the probability of an institutional childbirth reduces significantly for women belonging to minority

[19] I find evidence of it in Chapter 4, through my qualitative inquiry.

religious groups (Islam and Christianity). Also, women belonging to a Scheduled Tribe (ST) with large families are significantly less likely to undertake an institutional childbirth[20].

These findings indicate that existing inequalities may not be adequately addressed in the programme; hence, this shows the need to parameterise the varied contributors of inequality to understand maternal health inequities.

Also, compared to the group with the least wealth, the probability of an institutional childbirth increases with each improving wealth group. This finding shows the existence of the 'inverse equity hypothesis', where individuals in higher wealth groups better uptake the programme incentives.

In addition to those mentioned above, another interesting observation is that the probability of undertaking an institutional childbirth reduces with the increase in the total number of births. This finds similarities with evidence from the literature on higher-order births being less facility-based (Gabrysch & Campbell, 2009). A principal reason could be that since the first childbirth is known to be more difficult, more amenities are thus made available for it (Simkhada *et al.,* 2008). Once there is experience of undertaking more births, women may not feel the requirement of undergoing skilled childbirth[21] if prior births had no associated complications. Also, smaller children might be a deterrent to undertaking facility-based childbirth due to their need to be attended to (Stephenson & Tsui, 2002), which could be a reason for

[20] Their reasons are investigated in Chapter 4.
[21] A similar finding is probed through my qualitative inquiry in Chapter 4.

the reduction of any additional institutional childbirths in the previous five years of the survey.

The other significant observations of my results align with the expected performance of health system variables, such as registration for antenatal services and whether the individual has been provided with institutional childbirth advice. The overall evidence shows a greater uptake of Antenatal care (ANC) which reduces the risk of any complication which may occur during a pregnancy. In turn, it could reduce maternal mortality (Koblinsky *et al.,* 2006). What is of concern is if this ANC uptake is equitable.

A further enunciation can be understood by inspecting the concentration curves of select variables on which the probit estimation was based. These would help better understand the existence of the 'inverse equity hypothesis' and the inequalities in the uptake of institutional childbirth.

Figure 2.5

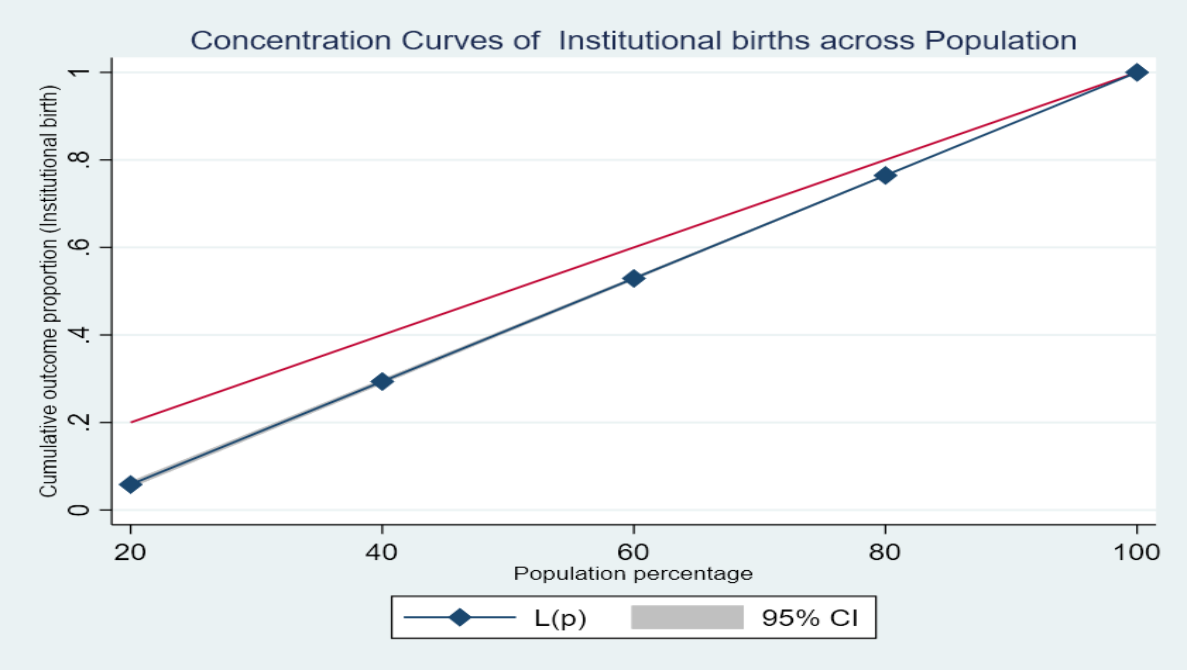


Figure 2.6

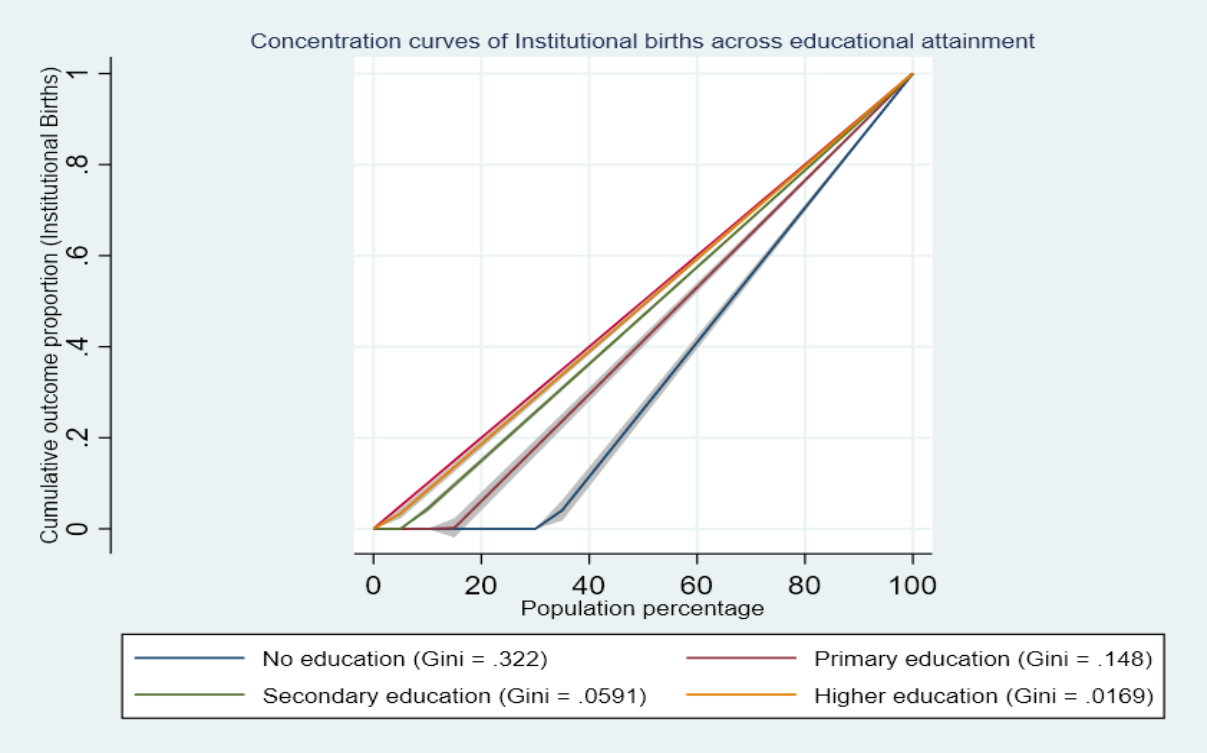


Figure 2.7

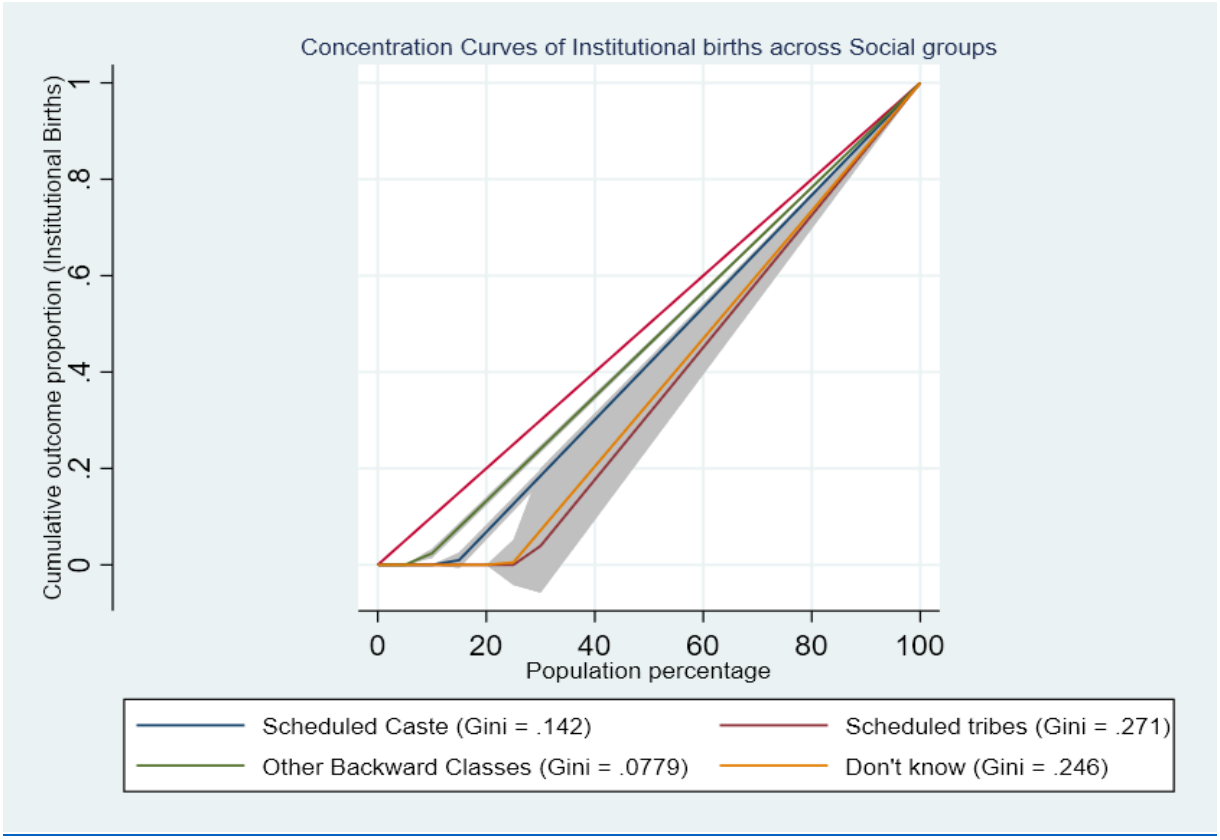
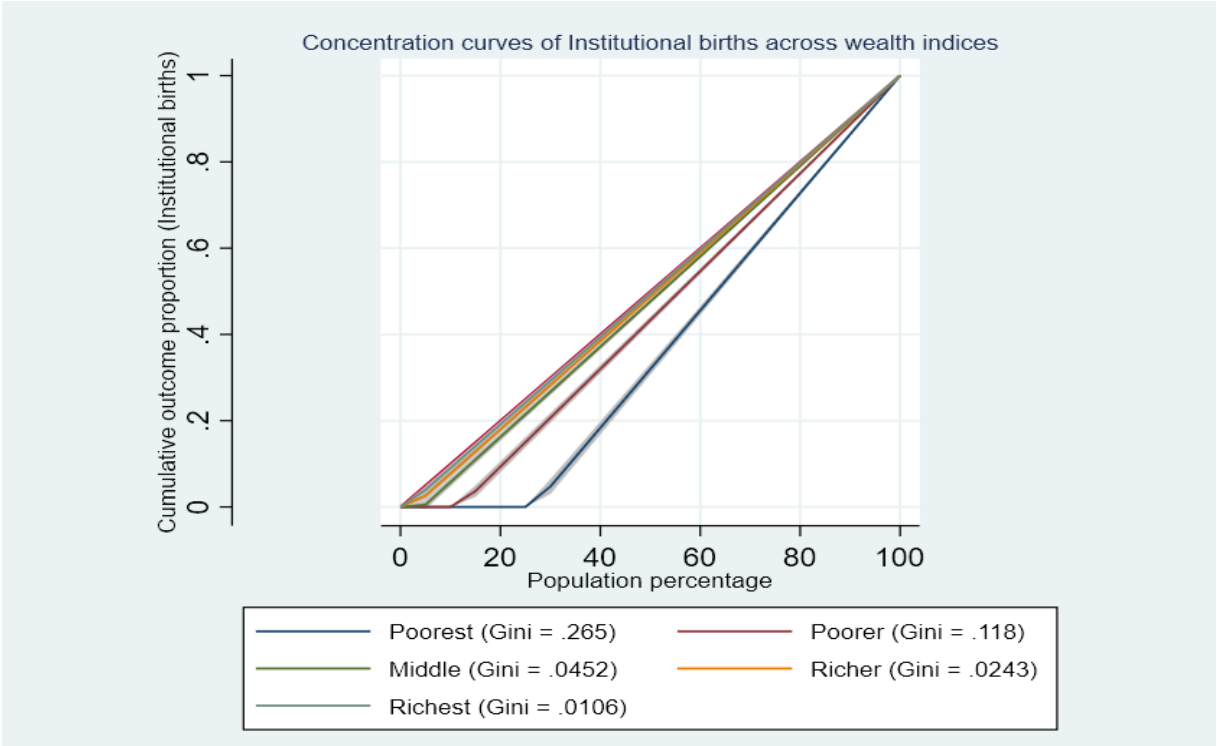


Figure 2.8



The concentration curves (Figures 2.5,2.6,2.7,2.8) above show how unequal institutional childbirths are in Odisha and that they depend on one's socioeconomic status, the place of living as well as the education of the individual. E.g., for Figure 2.5, the x-axis represents the proportionate outcome of the dependent variable (institutional childbirth) across different population percentages. Considering the value of 1 as indicating perfect equality, the deviation of the observed values across different population percentages shows the existent inequality.

Additionally, as seen in Figures 2.6, 2.7 and 2.8, the variation across wealth groups shows the variation between lower and higher socioeconomic groups[22].

It shows the existent inequality but not if this is unfair or unjust as dimensions that are programme dependent. The intersections, however, are not accounted for in my empirics. Thus, as an exercise, it shows where the inequality exists in the subject population but retains the 'status quo' vide the 'plausible' explanations of the 'processes' behind these observations.

A principle issue I find is that these curves, much like the regression analysis, cannot ascertain the contributory effects of the 'processes' which govern these sociodemographic indicators. Thus, educational enrolment, for example, does not show how it might help or impair the intersections of the existent power asymmetries when beneficiaries belonging to different wealth indices interact with educational institutions to uptake education.

[22] The findings are very similar to those by Kruk et al.,(2008) on the uptake of skilled childbirth where they showed the persistence of the 'inverse equity hypothesis'.

As seen from my empirical evidence, it appears that inequality still exists in institutional childbirths in Odisha, while at the same time, I am unable to comment if this is due to existent inequity or, rather, which specific form of inequity. To answer this query, I must then identify the layered nature of each construct that contributes to it. In turn, it could help improve the design of the programme prior to setting the evaluation for it.

I have shown the variation in the output ranges through the empirical exercise. However, deconstructing it at various levels of analysis to understand the dimensions of inequity cannot be answered by such empirical estimation alone, thereby making for the problematisation of current impact evaluations. Here, I argue that the main intention of this chapter is to question programmatic conclusions with macro-level empirical evidence in the absence of concurrent complementary evidence at the meso and micro levels. I argue the greater need to focus on the causative inequities of these observed inequalities. From a policy perspective, using the empirical analysis alone could yield only a skimmed view (since the plausible causes are not inspected) and not a more realistic or depth-based understanding of inequity. The outputs used for programme evaluation could hinge on the 'empirically unaccounted processes' (such as caregiver violence[23], women's autonomy[24] , bribery, institutional trust[25],

[23] Sando *et al.*,(2016) have shown how disrespect and abuse can be a deterrent to the usage of a facility-based service utilization. Also from a qualitative Indian experience, Coffey,(2014) shows the need for a discussion on the service quality which could act as a deterrent towards the uptake of the programme, since there is an increase in institutional childbirths without any significant impact in the expected reduction of the outcomes such as maternal mortality.

disability and the like, which might be endogenous). These, in turn, could address 'inequity'. Accounting for it could make the realisation of a truer reality by overcoming the present limitations, thereby contributing to better policy formulations.

Here, I propose that the way to address this limitation would be by the usage of 'intersectionality theory' both as a theoretical and a methodological approach (Sen & Iyer, 2012; Springer *et al.,* 2012). It could help understand the processes contributing to these inequities while commenting on the 'status quo'[26] questions as seen in the programme's specific outcomes.

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[24] Using an earlier round of the same survey (DLHS-2) Mistry *et al.*,(2009),Thind *et al.*, (2008) have shown the lowered presence of women's autonomy. This becomes more important when I consider the different indicators which might contribute towards it and the intertwining of them to increase these individual inequities. Thus, what is seen is only a simplistic reduction which could be more complex in nature. The authors state the limits of not undertaking a more micro level anthropological approach which could have provided a more vivid picture. Mondal, *et al.*,(2020) have used the NFHS-4 and have found similar correlates with individual autonomy which showed significant relationship with the socioeconomic status of the individual but did not have any effects on the uptake of an institutional childbirth. A plausible reason could be the way programme itself operationalizes which might be a deterrent to an individual's heuristic choice mechanism. Gabrysch and Campbell,(2009) have even accounted for such an individual autonomy in decision to uptake referral services which helps overcome the associated risk of a maternal mortality when there is a pregnancy related complication. Mumtaz *et al.*,(2014) have shown the issues which occur as well when not considering for women's self-agency.

[25] These can be thought of as issues of 'cultural access' where there is discrimination by the health workers on the minority or vulnerable groups restricting their access even if there is availability of a health service (Whitehead and Dahlgren, 2006, p. 10)

[26] Randive et al.,(2014) argue that an increase in the uptake of institutional childbirths might not be able to address a reduction in the maternal mortality which is an intended programme outcome. Hence the 'status quo' in this case is the inability to address the required reduction in maternal mortality. In my exploration of the processes which contribute to these inequities, I will see the '*emic*' reasons which could contribute to maternal mortality e.g.: reasons for choosing a home childbirth when institutional facilities are available.

2.5 Intersectionality Theory

Intersectionality theory (Crenshaw, 1989; Green, Evans & Subramanian, 2017; Kapilashrami & Hankivsky, 2018; Springer *et al.,* 2012) brought to light the need to see the complexity in disadvantage of the vulnerable when considering a multiplicity of identities, especially of women of color. My given inspection of methods for addressing evaluations is divided between methodologies, varying from quantitative to qualitative methods (Bauer, 2014). Also, the focus of intersectionality is not to draw statistical measures that merely add or multiply the constructs (Hancock, 2007). In my case, it is not to determine inequity or to conclude by describing the phenomenon alone (Bowleg, 2008); but to understand the layered nature of each contributory construct. It could allow for a better presentation of the observed reality by 'prescribing' (as would be seen in later chapters) as what should account for inequity in institutional childbirths. This theoretical perspective will later allow for constructing an equity-centric evaluation framework[27] whereby using different methodologies would help understand the layered nature of the phenomenon (of institutional childbirth, in my case).

Thus, in the context of my first research objective, it becomes more important since it would help me figure out why programme evaluations become very different from what is visualized in the design phase. Another important question is, if it is different,

[27] As would be seen in the 5th Chapter.

does the expected path dependency of the given programme hold in such conditions, and are there ways to account for them?[28]

My reading of 'intersectionality theory' (Bowleg, 2012) helped me understand that the defined constructs used in the model might not fully explain the phenomenon that is under review. For example, caste as a construct in a regression model would be unable to describe the phenomenon of casteism. To undertake a methodological understanding (Bowleg, 2008; Samra & Hankivsky, 2021) of intersectionality theory, I would require additional methodologies, which could help provide an *emic*[29] account for the specific nature and attribution of the processes which cause inequities within a social group (Adler & Adler, 1987, pp. 12–15), and be inclusive of the viewed or existent reality alongside empirical judgment methods. To put it more succinctly, they would show how policy interventions affect the subject population in reality. It could also help me understand the working of policy 'actors' and address problems of bottlenecks that affect the programmatic outcomes of the JSY.

Thus, as a principal reason, my endeavor in the thesis would help better understand the processes contributing to inequities in the outcomes of institutional childbirth in Odisha. Secondarily, it would be in line with the understanding that there is an 'urgent' need to consider health systems as learning systems and make adaptive changes (Sheikh & Abimbola, 2021). It can allow policymakers to better engage with varying perspectives on how maternal health programmes such as the JSY

[28] Another important notion which can be considered is if a programme is dynamic versus static in nature.

[29] This is described in the following chapter by Sen's 'positional objectivity'.

operationalise, hence the need for an *etic* versus the *emic* perspective of a programme (Sabbagh & Golden, 2007).

The learning would help one overcome the concerns which arise when considering 'health systems' as being and having syncretic linear systems[30] that would give in or be deterministic of the intended outcome. What this implies is an imperative need to understand maternal healthcare as Complex Adaptive Systems (CAS) (Asefa *et al.,* 2020; Abimbola & Topp 2018), whereby the health system is influenced by other social systems (Braithwaite, Clay-Williams, *et al.,* 2018; Gomersall, 2018; Hawe, 2015). Thus, there needs to be a concurrent revision of the programme design alongside a change in its evaluation approach.

These questions, which arise from my empirical estimation, show that there needs to be a robust means of engagement with the programmatic process evaluation. It should factor in the contextual scenario of both the 'supply-side inequity' and 'demand-side inequity', not the lone 'financial inequity' (Deaton, 2019; O' Donnell *et al.,* 2007; Waters, 2000) as generally done. It would help determine the precise target for an expected increase in institutional childbirth, alongside considering the evaluation after that.

[30] Syncretic linear systems show that the outcomes are in one direction and have only linearly increasing outcomes (Hardesty L., 2010) In health policy perspectives, the application of a policy usually has many an outcome which might have complex networks in their outcomes.

2.6 Programmatic aspects of equality versus Programme evaluation aspects of equity

These questions on what makes for inequity in institutional childbirth often remain unaddressed when trying to understand the requisite contextual outcomes for health policy prescription (Hankivsky, 2014). Without such queries, I believe that the programmatic conclusions of the JSY would remain inadequate for the state of Odisha.

The discussion in the paper by Carvalho (Carvalho & Rokicki, 2019) of the JSY throws light on the fact that the gains in health were most amongst individuals in the middle level of education and wealth[31]. It concurs with my statement on the existence of the 'inverse equity hypothesis' from the data (DLHS-3) from 2007. The phenomenon continues, as seen by my empirical evidence for the state of Odisha from the NFHS-4 dataset.

A work by Sinha (in Fabio Veras Soares, Radhika Lal, 2013, pp. 6–9) also shows that there has been an increase in the uptake of institutional childbirth. The authors state that financial incentivization (in this case, financial equity considerations) is still

[31] The evidence provided by Joe *et al.*,(2018) shows that there has been an increased uptake of institutional childbirth through CCT programmes. There has been a shift whereby there is a greater uptake by the poorer sections of society. However much more can be achieved to make it more equitable for the vulnerable population groups. However, the inequity aspect continues where women from the poorest households continue to be reliant on home childbirths even in 2014. These are the very women who need to be catered to vide the complex network of reasons which keep them away. Similar evidence is provided by Patel *et al.*,(2021) who have gone onto show that even between the 2 rounds of the DLHS 3 and 4 , there has been a reduction of home childbirths, but it has been unequal across different wealth groups with the largest reduction occurring in the more well off groups. This also shows the existence of the 'inverse equity hypothesis' amongst the more vulnerable. These groups are the ones who should be more specifically catered to.

inadequate if structures are unavailable. From the given data period of their study (2010 Annual Health Survey) to that of mine, there has been an increase in institutional childbirths from around 61% to approximately 85% (NFHS-4) in the state of Odisha within a difference of about five years, which is a worthwhile achievement.

However, what also needs to be determined is whether this is a secular occurrence (Jose 2018), even at the district levels[32]. As shown by Sinha *et al.,*(2012) and as observed in my empirical estimation, there is a variation in the uptake of institutional childbirth. According to my empirical results, certain districts of Odisha show a reduction in the uptake of institutional childbirth during the NFHS-4.

Since patriarchal norms are culturally embedded, a plausible aspect for further investigation of 'inequity' is the question of who would determine the choice of institutional childbirth (Papp *et al.,* 2013, p. 458) in Odisha. An important factor that needs to be considered is how these inequities vary between mothers who are adolescents as against adults and the specifics of the childbirth order for them (Singh *et al.,* 2012). Another aspect is developing a perspective (ibid) on how evaluations are, in fact, a form of exercise in accountability of equity dimensions. It could bring in dimensions such as bribery (Landrian *et al.,* 2020), violence or disability, and trust (Jeffery & Jeffery, 2010), which, as 'social processes' (Hamal *et al.,* 2018), are not measured in the NFHS-4 dataset but could contribute towards the working of the

[32] Vellakkal *et al.*,(2017) have gone onto show the reduction in the inequities in the country overall due to the incentivisation of maternal health programmes which have improved their uptake.

programme. It could also mean that measuring inequity as a multidimensional construct is a lackey to biases introduced in understanding the programme[33].

There is also a concurrent need to distinguish which of these 'social processes' contributes to 'unfair health' (Asada *et al.,* 2014; Fleurbaey & Schokkaert, 2009) for their 'prescription' in evaluations[34]. What needs to be seen is if these issues of access barriers can be amplified by the presence of contextual barriers (Jacobs *et al.,* 2012), which might add to the limitations of the outcomes of the programme. Thus, it is essential to determine whether it is the outcomes of the intersections of these interactive 'social processes' or rather an individual behaviour responsible for the observant inequities and if they are truly unfair and unjust (Rawls, 1958)[35].

2.7 Gaps in the literature

1. A large volume of the literature uses major CCT programmes in Latin American countries. One of these is the Mexican programme for education, health, and nutrition (PROGRESA) (Onwuchekwa, Verdonck & Marchal, 2021), which has had overall positive outcomes. Lagarde, Haines and Palmer (2007, 2009) have discussed how CCT programmes are operationalized for different welfare programmes. Overall, the evidence is in favor, whereby such

[33](Feather,1982) speaks on the need for considering the cultural as a variable as intrinsic to a programme evaluation. The paper discusses what occurs when not making for such considerations and why such a variable is not often considered as against more easily measurable indicators of economic input. This valence is what perhaps makes for a difference in the programme's outcomes.

[34] discussed in more detail in the forthcoming chapters

[35] The focus of Rawls principal work is on the distribution of social structures to overcome existent social and economic inequalities. They are relevant in health although Rawls never addressed health in specific.

programmes show the positive effects of the intended outcome. Although these studies do give a productive picture of the programme's overall working, they were not able to describe the issues which were hindering or could fairly have effects on the outcome of the programme, such as behavioral choices, social networks on the equity dimension, and a contextual understanding of the programme. The thesis's focus would be to address these gaps concerning the JSY. It would help provide the understanding for designing decentralized health systems by including an appropriate evaluation of the same, which is amiss in the literature.

2. As understood from the programme evaluation literature, a point that needs to be considered here is that a welfare programme's evaluation might require a large population uptake to show its efficiency (Das *et al.,* 2005, p. 66). Often this fixation on achieving such an institutional outcome might, in turn, keep the needy and the vulnerable away, making the programme inequitable. Furthermore, a trade-off exists between a given programme's equity and efficiency (Das *et al.,* 2005, p.73; Andersson & Lyttkens, 1999; Culyer & Wagstaff, 1993; Reidpath *et al.,* 2012; Wagstaff, 1991). Thus, if one thinks of the programme's net effect, it will not achieve equity if it were spread too wide and thin[36] for efficiency. Often the focus is on achieving equity at the lowest price for efficiency concerns (since it is the governmental exchequer which would be funding it) might not be the most beneficial for all population

[36] By too wide and thin I mean when the programme is near universal in its reach (wide), it might be limited (thin) in its expected outcome.

groups (Ruger, 2009, p. 115). These occur due to a utilitarian view of equity which looks to allocations that produce the greatest good for the greatest number. The resource distribution across individuals or groups within the population does not matter. It subordinates the equity question to efficiency (Giacomini *et al.,* 2008, p 292).

Here I argue that these competing issues should not be addressed separately but include those systems beyond the health system. Thus, there needs to be an accommodation of constructs from other systems that contribute to overcoming inequity to improve the programme's efficiency when undertaking its evaluation. After that, process evaluation aspects of equity need to be considered to help account for these inequities contributing to the programme's outcomes. Keeping the focus on the population's 'needs' and incorporating the necessary 'trade-offs' in the programme design itself could be a way to address the programmatic aspects of equity. However, this solution raises the issue of the difficulty in accounting for the heterogeneity in childbirth practices or the social structures between and within states, especially in a country as diverse as India.

Accounting for these cultural variables (Feather, 1982) could improve process evaluations; often compromised against economic constructs. Also, moral dimensions of the programme's outcomes from a Rawlsian perspective, such as if it is fair or just or affects all individuals equally (Rawls, 1958), are not

directly considered in process evaluation[37] literature. Without these considerations, questions on the 'forms of inequity' are compromised, affecting the programme's evaluation.

3. Additionally, an institutional childbirth should not be equated to using a treated mosquito net or school enrolment programmes to give examples. However, much like bed net usage, an institutional childbirth might have the same targeted outcome of reducing mortality and morbidity in a target population group. Thus, a programme's process evaluation should account for the population's understanding of 'health' in line with the 'provisioned goods or service' if questions of inequity are to be answered. Another aspect that needs attention to ensure a programme's success is the 'fungibility principle'[38] because it could impede its success (Das *et al.,* 2005, p. 67). Contextualizing for the JSY, the fungibility principle could be seen in the light of childbirth as being considered a natural phenomenon[39] in the target populace. Considered to occur within the confines of the house for certain population groups (Vellakkal *et al.*, 2017), this aspect is not addressed in the JSY's 'institutional design[40]' and is not specifically addressed in the literature. A piece of contributory evidence here is the learning on limiting the role of traditional

[37] This is discussed in greater detail in the following chapter.
[38] The fungibility issue occurs when there is a close substitute for the conditioned substitute which individuals can uptake. This, in turn, would not cause the expected distortion to occur as expected by the programmes conditioned substitute (Das et al., 2005, p. 67).
[39] This is evidenced in Chapter 4.
[40] Although the JSY programme allows for payment for any form of childbirths given the push for institutional coverage, non-institutional childbirths are minimally covered.

childbirth attendants or midwives, which, in turn, affected the uptake of the programme essentially seen during the programme's monitoring, as stated by Rao (2017, pp.333–4)[41]. Thus, if not accounted for, such 'social processes' (Hamal *et al.,* 2018) might not demonstrate the programme's outcomes at a disaggregated level. In turn, questions of equity would be left unanswered (O'Neill *et al.,* 2014), limiting the programme's outcomes.

4. Another possible deterrent, which is not accounted for in the programme's current impact evaluation frameworks, is that institutional childbirths should not be equated to skilled childbirth attendance (Renu Khanna, 2013)[42]. Chaturvedi *et al.,*(2014) show that most service providers at public institutions are not trained in skilled childbirth attendance. The authors also argue that the 'passivity of the recipients versus the dominance of the providers'[43] is of prime importance, which, often, is not considered in evaluation processes. Other authors showed the characteristics of the individuals who participated in the

[41]Incentivizing the traditional childbirth attendants could perhaps effectively increase coverage, efficacy, and equity of the programme. Rao (2017, p. 333) states, "With the focus on promoting institutional deliveries, home deliveries were missed out from the policy radar and MIS formats as did the implementation of the Supreme Court order to pay Rs 500 to pregnant women irrespective of the place of delivery. The implication was serious. Women who delivered at home were perhaps the poorest and were probably from the deprived sections of society, requiring priority attention. Part of this oversight could have been addressed by differentiating incentives for the first-timers or based on the residence that would have also enabled assessing the net incrementality in terms of behaviour change." Also, another important aspect on the limited outcome of such a policy prescription is described by Mayra et al.(2021) where one of the respondents says the following categorically: "*It makes no sense to have a government policy to move women to hospitals when the hospitals treat them so badly. The response will be 'oh but you should see how they are treated* (at home) *in India, at least they get food in the hospital*'."

[42] This is an important point in terms of what the evaluation frameworks can and cannot account for. The earlier paragraphs were largely a take on the programme's trade-off between efficiency and equity.

[43] This is examined in the 4th Chapter through ''care-giver violence'.

programme (Sidney *et al.*, 2012). Besides, the decline in maternal mortality in poorer districts has been slower due to limited Emergency Obstetric Care (EmOC). It coincides with the evidence provided by Chaturvedi *et al.,* (2015), who have shown the limited extent of EmOC training amongst service providers in institutions. Thus, an institutional childbirth might not be skilled childbirth[44]. It shows the need for a supply-side workforce strengthening health systems and a greater focus on community engagement (such as community audits) in requisitioning these services.

The systematic review of the impacts of the JSY programme (Hunter & Murray, 2017) is insightful for its account of 'social and institutional' processes as determinants of equity. The review identifies the enabling and limiting factors specific to the JSY programme. These barriers, however, have been seen in public health provisioning facilities and not in private, empaneled institutions in the JSY. Yadav *et al.,* (2017) have shown these variations in the case of private institutions and how they might differ from the public experience. These issues need to be viewed further from an inequity perspective, and they should be accounted for in the programme's evaluation framework as the programme accommodates both types of service providers, an aspect amiss in the literature.

[44] Institutional childbirth refers to the usage of an institutional health facility such as a primary health center, First Referral Unit, secondary or tertiary hospital. These facilities are provisioned by skilled health personnel such as doctors, LHV's, ANM's, Nurses and is accounted for as a skilled birth attendance (NFHS-4,IIPS 2017,p-202).However as mentioned in the point this definition is limited if there is an absence of EmOC services at these facilities, which refutes the focused outcomes of an institutional childbirth to reduce the IMR and MMR.

5. A point of concern here is that inequality and inequity should not be conflated since inequity has a moral dimension[45]. Therefore, the issues of concern should be the programmatic aspects of equity which need to be addressed in the programme design itself. My research necessitates its incorporation within the evaluation process and looks at ways to operationalise its multidimensional nature, which is amiss in the literature. I posit that there are two aspects to operationalizing the 'multidimensional nature' of inequity in evaluating public health programmes such as the JSY. First, there is a need to distinguish between 'horizontal' or 'vertical' inequity (Murray *et al.,*1999). Second, assessing whether the existing inequity is from the supply (Tudor Hart, 1971) or the demand side (Raine *et al.,* 2016, pp. 69–80) is necessary. Compartmentalizing inequity does not necessarily mean that one flows into the other but that all could be concurrently present and layered with the other[46]. This formulation highlights the issue of current impact evaluations being metric based alone. It shows that such evaluations are unidimensional, which does not allow for the adequate measuring of equity as a construct (Alonge & Peters, 2015).

   My perspective in this chapter overcomes the issue of evaluations as being range-specific (Astbury & Leeuw, 2010). I suggest if inequity is viewed as being multidimensional, then it would enable a better understanding of the

[45] Discussed as 'Philosophical understanding of inequity' in the following chapter.

[46] There has been a focus on undertakings of financial equity where the idea is to account for both the horizontal and vertical equity for financial inclusion (Jahangir et al., 2012).

effectiveness of the programme's outcomes and allow for better consideration of inequity in evaluations. From a policy perspective, I believe this is where the focus should be in ascertaining the true effectiveness of the programme. In light of the discussion above, and in line with the JSY programme's current design, the equity principle could become compromised by the very nature of the programme's operation: the exclusion of skilled childbirth attendants[47] (Ghoshal, 2014), not accounting for the needs of a heterogeneous population group, and the dynamics of power relations between public and private care and between the members of the household, alongside other 'social processes[48]. These aspects need to be accounted for in the design of evaluation frameworks. My review of literature on existing frameworks in implementation research (O'Neill *et al.*, 2014; WHO, 2016; Eslava-Schmalbach *et al.*, 2019) shows an absence of concurrent inquiry at various levels that contribute to different aspects of inequity in institutional childbirth in Odisha. A reason for these limits in understanding the observed programmatic outcomes, has been shown by Braveman (2006) when not acknowledging equity, hence augmenting my argument on operationalizing it. Overcoming inequity, thus, should be both a part of the means and the end of a welfare programme's outcomes which is not addressed in the literature.

[47] Another aspect is the difference between the uptake of skilled childbirth attendance by different wealth groups as shown by Barros *et al.*, (2012)

[48] Read Rao *et al.(*2020) to figure what is it that women or rather mothers opine on being important for the uptake of a CCT programme. This view is needed to understand the path dependency of the programme for evaluation and in turn would determine how limited it might be in the purview of the entire assessment exercise. This is exactly what would go onto indicate the limitation of the impact assessment and evaluation exercise

2.8 Understanding equity in institutional childbirth and the case for a 'multidimensional inequity'

The focus, as previously mentioned, on equity should begin with a more detailed understanding of what accounts for inequity.

From an equity perspective (Roemer, 1980; Musgrove, 1986), the defining characteristics of differences in health outcomes should not be 'unnecessary, avoidable, unfair and unjust'[49] (Whitehead, 1991, p.220). Health systems need to account for those most in need of healthcare since, in its absence, these individuals are most likely to be affected if they are inequitable.

Also, there is a need to overcome the one-dimensional treatment of equity (Freese & Lutfey, 2011). It furthers my argument on the need to invoke the 'multidimensional nature' of inequity in institutional childbirth and its heterogeneity across different social groups, which is amiss in current evaluations of the JSY programme.

Unfortunately, despite reliance on rigorous causal methods (Lim *et al.*, 2010; Joshi & Sivaram, 2014; Carvalho & Rokicki, 2019), impact evaluations remain limited in their ability to account for the 'multidimensional nature 'of inequity. These scaled-up studies could not reason the districts' selection and choices for the programme's roll-out. Although they do give a productive picture of the programme's overall working,

[49] This is discussed in greater detail in Chapter 3.

they are not able to describe the issues which were hindering or could fairly have effects on the outcome of the programme, such as behavioral choices, social networks, and a contextual understanding of the programme. This knowledge is necessary for the design process of decentralizing health systems to include an appropriate evaluation.

I also find that while there are several studies on the JSY, not many have examined the relationship between social norms, institutions, and childbirth in Odisha. To my knowledge, this thesis is the first study that does so. In doing so, it sheds light on the importance of an interplay of different aspects of service delivery in public health programmes such as the JSY, wherein there is an implicit vulnerability of the households expected to participate in this programme. Also, what is seen is if such a programme adheres to the 'inverse equity hypothesis.

It gives an important context to evaluating large-scale health programmes such as the JSY – a hitherto unexplored area in the literature. Furthermore, it sheds light on aspects of equity that demand a concurrent rigorous 'meso and micro' evaluation, including examining the 'processes' that determine these outcome indicators to make health systems equitable.

Overall, the JSY as a programme has improved by increasing institutional childbirths. However, what it has also done additionally is cause a 'crowding out effect[50]' at the institutional level since all childbirths are now necessary to be done there. However,

[50] This is discussed in the 4th Chapter as well.

it has been seen that a large number of mothers do not remain for the given post-childbirth period in the hospital. Rahman, Pallikadavath, & Khatoon (2019) have shown that this causes complications and could be detrimental to utilizing the JSY programme. Thus, the health system's functioning needs to be considered for evaluation even in the post-childbirth period. Gupta *et al.,* (2018) have shown vide their qualitative study how poor institutional capacity prevents a programme's utilization as viewed by the health systems respondents.

Thus, I find that there are intrinsic processes within which the health system operates, which determines perhaps the utilization of the given programme and its ability to address equity. Thus, limiting it to a financial incentive alone would not help the programme's evaluation. The institution's functionality becomes a key determinant of its utilization, especially when there is a possibility of needing emergency obstetric care, as shown by Sabde *et al.,* (2018), more in the lower childbirth order.

In their study, Rout & Choudhury (2018), in the context of the JSY in Odisha, show that despite the high programme coverage, there is a high OOPE. Also, Thongkong *et al.,* (2017) have shown that poorer women using government facilities for childbirth are the least benefitting from the JSY programme in Odisha. A similar result is obtained from my empirical data, showing that the 'inverse equity hypothesis' exists.

The evidence shows that individuals and the health system do not act or behave as passive providers or recipients. Concurrently there exists an interaction between them through varied processes. These interactions can lead to inequities determining

the programme's outcomes, such as reducing maternal mortality or increasing institutional childbirth.

Also, these interactions can show how governmentality (Li, 2007) exists and imposes its presence in the form of biopower (Genel, 2006, pp. 45–51) on the individual, which can limit their 'self-agency' (Weik, 2009) to uptake these services.

As seen above, the literature gap shows that the equity principle is not addressed in impact evaluations. My argument is that there is a need to account for the 'multidimensional nature' of inequities in such evaluations of maternal health programmes. Such an undertaking would show the relevance of 'social processes' and 'outcomes' (Zall Kusek & Rist, 2004, p. 54,122) in determining health policies and the limitations when not accounting for them. As part of the thesis, this research aims to see how inequity exists in the programme and build a case for its inclusion, thereby improving process evaluations.

2.9 Evidence from Evaluations of the JSY for uptake of Institutional childbirths

The overall evidence from the evaluations of the JSY indicates that the programme has significantly reduced maternal mortalities at the national and state levels (Ved *et al.,* 2012). Randive *et al.,* (2014) have shown that the programme has effectively increased institutional childbirths. The channel through which the impact has materialized has been argued as follows: the JSY caused an increase in facility usage for childbirths in both the public and the private sectors, which reduced the associated catastrophic expenditures (Rahman & Pallikadavath, 2018).

However, the extant programme evaluation literature has not been able to show whether the JSY has genuinely reduced maternal mortality at the district level (Lim *et al.*, 2010; Joshi & Sivaram, 2014; Powell-Jackson, Mazumdar & Mills, 2015). A recent study (Rahman & Pallikadavath, 2018) shows that given the data used in these studies from the DLHS 2 (2002-04) and DLHS 3 (2007-08), it might not have allowed for the programme's maturity. It could have prevented a more substantial uptake from fulfilling the efficiency criterion, as Das *et al.,* (2005) required.

Also, there could have been endogeneity issues because participants who responded as beneficiaries of the JSY were beneficiaries of state-specific programmes[51] (Carvalho & Rokicki, 2019). Das, Rao and Hagopian (2011) challenged the conclusions of the Lim study (2010) in the light of these issues; emphasising the need to understand further the causative factors in the uptake of the programme. In response, the authors (Lim *et al.*, 2011) responded that understanding the deterrents to the programme's uptake was not the intention of their paper.

Furthermore, as Rahman & Pallikadavath (2018) discussed, selection bias is a concern in programme evaluation. Ignoring it could compromise the equity principle as a financial incentive is only given if institutional childbirths alone are considered. Considering India's varied population responses to childbirth practices, institutionalizing could keep the most vulnerable women away. It shows the limits of

[51] Also seen in my qualitative results in Chapter 4.

policy outcomes to addressing inequity when the econometric evidence alone is considered during evaluation.

Similarly, Thongkong *et al.,* (2017) have shown in their comparative study of the neighboring districts of Jharkhand and Odisha that, in Jharkhand, the scheme's beneficiaries were in the higher wealth quintiles and that they had undergone previous pregnancies, similar to those in Lim *et al.,*(2010). They showed that the populace had a high percentage of awareness of the programme in the study districts of both states; however, the uptake was lower in the lower wealth quintiles. Randive *et al.,* (2013) have shown that, in Odisha, like Madhya Pradesh (the other poor-performing state in which the study was undertaken), there might not be a direct correlation between increasing institutional childbirths and the reduction in maternal mortalities. However, this was the intended outcome of the JSY programme.

Singh *et al.,* (2012) have gone on to discuss that the expected reduction in MMR is not to the given of 5.5% per annum and that this had led away from the focus on the childbirth aspects, and the JSY was not well designed enough to account for these limitations. They suggest a package of the continuum of care that can help overcome these limitations. What this could mean in my context is that there are inequities that limit these outcomes. Devadasan *et al.* (2008) discussed the issues when evaluating

the JSY in 2008 across four states. They mention issues of pilferage and delays, and partial cash payments[52].

The discussions above show that several factors can affect the programme's outcome. Most of the literature on the programme's impact evaluation fixates on the MMR issue, while the aspects of what determines institutional childbirth and for whom is amiss, which I intend to address in my thesis. In impact evaluations of programmes, while the focus is on the causal impact of the programme on well-defined outcomes of interest, the 'multidimensional nature' of inequity is not explicitly addressed. Given the narrow focus of impact evaluations on statistics such as the Average Treatment Effect (ATE)[53], it is primarily by design that impact evaluations cannot capture the 'multidimensional nature' of inequity; hence I argue for its inclusion.

Disparities of wealth, social receptivity, power relations and a contextualized understanding of childbirth could help improve the contextual understanding but are

[52] This is prior to the DBT (Direct Bank Transfer) scheme being implemented and in turn this is a prime cause of the overcoming this limitation whereby it is a requisite for the scheme's beneficiary to have a self-bank account and not a joint bank account. They also found issues on knowledge of what is expected of the scheme. However, there are issues and delays which occur with the opening of such accounts and turn these acts to keep the beneficiaries away. The authors show the variation in the programme's implementation across states. The scheme was visualized to bring in the most vulnerable who due to the paucity of funds would abstain from undertaking an institutional childbirth.

[53] ATE is a statistic that compares the levels of the outcome in treatment group(s) with that of the control group(s) in evaluations. It captures the difference in means of outcomes of units whose treatment status is randomly assigned. Related statistics such as average treatment effect on the treated (ATET) that considers compliance with treatment status or intention to treat (ITT) that considers the mere effect of treatment assignment also are devoid of equity considerations, by construction. A fine critique of limitations in provisioning for health policy when dependent on methods such as RCT's is provided by Basu,(2018) where the bottom line remains ; ask a simple question might also lead to a simple answer. What remains of concern is this simple answer enough to provide for a policy question? A good take on the 'over dependence' of RCT's is discussed in Morduch et al.,(2021)

usually not delved into in impact evaluation studies. These require multidisciplinary inferences such as those from a Foucauldian analysis of the medicalization of childbirth[54], in which a fixed 'medical gaze' (Scott & Firm, 2017, pp. 42–45) reduces the individual to a mechanistic view, impairing their 'self-agency' rather than considering the individual as a whole.

Additionally, the bringing of 'childbirth' into the public space as an act of biopolitics and biopower (Wilmer & Žukauskaite, 2015, pp. 1–16; Weik, 2009) needs to be considered in process evaluations. The research proposes that power determinants (Haberland, 2015) of inequity at the intersections of the individual, the household and the health system should be considered, thereby making for my choice of using the lens of intersectionality theory. It shows the need to evolve current evaluation frameworks from a post-positivistic paradigm (Fischer, 1998) to better policy formulation.

2.10 Conclusion

In this chapter, I wanted to determine if an empirical exercise would be the best way to approach an understanding of inequity in the outcomes of the JSY. The results and the ensuing discussions show the limitations of existent programme evaluation approaches and how inequity is important as a construct for policy outcomes; thereby adding to the inquiry of the second objective.

[54] Also seen in my qualitative results in Chapter 4.

As an outcome of the issues discussed previously, I find that considerations of the 'multidimensional nature' of inequity in health are conspicuous by their absence in impact evaluations of public health programmes. Therefore, to describe the nature of inequity, it is essential to determine whether it is horizontal (the same targeted interventions within a population group, for example, class or caste) or vertical (varied interventions within the same population group, for example, more focus on a more vulnerable individual within a class or caste) or an interplay of all. It also brings me to the question if the JSY programme can address such questions of equity[55] or whether, much like the experience of other countries in welfare programmes, it complies with the existent 'inverse equity hypothesis' (Ahmed & Khan, 2011; Sen *et al.,* 2018, p. 10). The 'inverse equity hypothesis' suggests that the inequity worsens over time with any programmatic intervention before it improves (Victora *et al.*, 2000; Lee *et al.*, 2015)[56]. Also, Gupta *et al.,* (2018) have shown through their qualitative study how poor institutional capacity becomes a deterrent to the utilization of a programme, as viewed by the health system respondents.

The above evidence from the literature shows that health systems operate through intrinsic, myriad processes and is influenced by other social systems as well. The

[55] The thesis is not proposing for financial equity for which methods of empirical estimation using the Gini co-efficient and the Atkinson distribution model exist. Waters, Hugh R. "Measuring equity in access to health care." *Social Science & Medicine* 51, no. 4 (2000): 599-612.,Van Doorslaer *et al.*, 1999.

[56] A decade should be a good duration to consider if the inverse equity has been overcome or not. My data supports that in the case of Odisha this has still not occurred, and the inverse equity hypothesis continues to remain true.

institution's functionality alongside existent social processes become a key determinant of its utilization, especially when there is a possibility of needing EmOC, as shown by Sabde *et al.,* (2018), more in the lower childbirth order. These, in turn, determine the utilization of the given programme. Therefore, limiting it through the metric of a financial incentive would not help the programme's evaluation for considerations of the 'multidimensional nature' of inequity.

I reiterate the need to exercise caution from concluding based on the empirical evidence alone while undertaking programme evaluations. Improving the understanding of the programme by using other methodologies could help contextual policy formulation by accounting for these biases. My focus here has not been on inferring causality, which is not possible given the cross-sectional nature of the data and providing fixed estimates. The correlations help determine causal pathways. In turn, it could be done by accounting for programmes as being complex systems and providing an 'emergent causality' (Greenhalgh & Papoutsi, 2018).

What is essentially needed is finding the factors that contribute to these inequities, which cause differential effects in uptakes amongst and amidst different population groups. Thus, it is essential to figure out the "causes of causes" (Braveman & Gottlieb, 2014; Marmot, 2018; Rose, 2001), as these would enable one to determine what is more needful, singular causation or the allowance for an 'emergent causality' (Dixon-Woods *et al.,* 2006).

The above discussion brings me to my second research objective, that of understanding the 'multidimensional nature' of inequities in institutional childbirths and my reasons for choosing a mixed-methods approach (Hammarberg *et al.,* 2016; Kitto *et al.,* 2008; Pluye & Hong, 2014) for it.

A mixed-method approach can help visualize the problem from multiple 'disciplinary' perspectives. It would also show a system's macro and micro picture and help better understand a problem. The utmost contribution of such an approach would be that it would help in comparing, validating, triangulating, illustrating, and examining a problem (Aryton.D, Braaf.S;2019 Manual on Qualitative Research Methods for Public Health pp-49) and concurrently maximizing the strengths of different approaches.

It is important to consider the pluralism of epistemologies, often amiss in the research engagement and becomes even more important when considering interdisciplinary research to help overcome methodological differences (Abrams, 2006). Thus, often the evidence is made to fit in to ratify one's argument rather than best explain the observation. It leads to the dilemma where a philosophical stance might seem best vetted by empirical evidence alone (Caldwell, 1984) but can perhaps have a deeper understanding by using another contemporary approach. The central idea is to best explain the phenomenon under query using what Public Health and Development Studies as contributing disciplines had to offer. The axioms of each discipline could help in a bettered understanding of social reality.

Another reason for such a choice is that there is often a fixation on 'empirical models' for explaining a social reality (Winker & Degele, 2011), but then there is an inherent need to understand whether this alone is the best plausible way to explain the observed reality (Freedman, 2009, chap. 7). Thus, one needs to exercise caution from concluding based on the empirical evidence alone, making it even more important to understand the observed reality. There needs to be a concurrent improvement in understanding the programme from additional evidence. The intertwining of methods could help imbibe ways to answer the research questions at hand and consider the trade-offs of each.

My research can be considered more specifically as part of a post-positivistic multiple realism (Cook, 1985), which would be more apt in my case. The defining reason for this is that there could be varying levels of interaction between the given constructs which define the programme's outcomes, and in turn, this could allow for a better presentation of the reality.

While quantitative research is often considered eponymous as being more valid, there are additional means by accounting for the same in qualitative research (Dixon-Woods *et al.,* 2006;Whittemore, *et al.,* 2001). These are explored in the fourth chapter of my thesis. It is necessary to account for them since there is often an argument on explanatory qualitative methods (Greenhalgh *et al.*, 2016), allowing 'anecdotalism' in its evidence presentation (Braun & Clarke, 2006). Another often pronounced rebuttal

is its lack of a sample estimation and an absence of generalization (Blaikie, 2018; Guest, Bunce, & Johnson, 2006).

Before moving further, I must inform the reader that I intend not to put one methodology versus the other (Bryman,2006b) but to note how each can best contribute to understanding the observed reality[57]. The qualitative analysis would be approached in subsequent chapters to improve the thesis rigor[58] and how it has helped approach my research objectives.

The iterative process used in qualitative research needs to be thought of and considered and brings in the view on how to best observe the reality. The credibility of qualitative research is through its rigor, much like the statistical significance for the validity of quantitative studies (Ramanathan, 2017). In conclusion, this chapter developed what is needful when considering equity in programme evaluation as contributing to health policy in India. The following chapter would allow a better inspection through a philosophical foundation into the 'multidimensional' nature of inequity.

[57] Oakley,(2000, p. 72) states her stance on what makes for the qualitative research and the need to end the paradigm wars and why it is necessary to understand the demerits of poor-quality research amidst both methodological approaches whereby the fixation is on what makes for the truth and which version of the truth is worthwhile and needs to be accounted for.

Lincoln (1985) cautions against the use of *a priori* theory and hence the limitation which can occur with the deductive stance especially on the nature of reality. This is an aspect which is often amiss when undertaking policy specific research.

[58] Questions on the rigor of a research using either a quantitative or a qualitative approach have been well described in Greenhalgh, 1997; Greenhalgh & Taylor, 1997.

Chapter 3: A Conceptual framework for understanding 'multi-dimensional' inequities

Chapter Synopsis

In concordance with the previous chapter, here I introduce some important interpretations of the empirical results specific to the JSY in Odisha; as a continuation to answering my second research objective. Following it, I bring to light the pitfalls of using an empirical analysis alone as a choice for examining inequities in maternal health outcomes. Subsequently, I outline various principles of equality, their merits, and contributions to defining inequity. I follow it by a discussion on the need for assessing inequity in addition to inequality and its importance in my thesis. Additionally, different philosophical stances are discussed for a theoretical understanding of 'intersectionality', which could help understand the social norms and processes related to institutional childbirth in Odisha.

Subsequently, I describe inequity by including both John Rawls's justice framework and Amartya Sen's capability approach in my work. Finally, I argue that a 'prescription' rather than a 'description' of context-specific inequities in maternal health programme evaluations are needed. Such an approach can help enable the parametrization of 'multi-dimensional' inequities later by a weighted approach of the contributory constructs. The central problem I find in my enquiry is that 'power' determinants of inequity are not considered in evaluations, although they might account for differences in the observed outcomes.

I theorize that differences could be introduced in estimates of inequality without considering such explicit and implicit biases. In turn, it could limit a normative understanding of equity for policy purposes, thereby hindering a better understanding of the context-specific contributory constructs of 'multidimensional inequity'. Thus, what should define the constructs of a 'multidimensional inequity' as a research objective are also discussed. They would help in the 'prescription' of

inequities for further examination. I conclude the chapter by proposing different methodologies for examining the 'multidimensional inequities' in institutional childbirth in Odisha, which are undertaken in the forthcoming chapter.

3.1 Introduction

As presented in the previous chapter, the empirical work examined covariates for the uptake of institutional childbirth in the state of Odisha using a nationally representative survey (NFHS-4). To summarily put, the findings indicated the Odisha state-specific performance of the Janani Suraksha Yojana[59] .

The probit regression showed that with every additional year of age, the probability of undertaking an institutional childbirth reduced by 15 per cent compared to the previous year[60]. Additionally, relative to the reference group with no education, there is an increased probability of undertaking institutional childbirth with increasing levels of education (a finding similar to that of Thongkong *et al.,* 2017). I also found that compared to mothers practicing Hinduism, the probability of institutional childbirth reduces significantly for women belonging to minority religious groups (Islam and Christianity).

Also, this probability is reduced when mothers belong to a Scheduled Tribe and have large families. Another important study finding is that the probability of an

[59] The Janani Suraksha Yojana is a federally sponsored CCT programme for the universalization (since 2011) of institutional childbirth in India. It is an improvement on the previously existent National Maternity Benefit Scheme (NMBS) (Vellakkal, Gupta, *et al*., 2017) whereby cash incentives are provided for a targeted reduction in maternal and infant mortality. The programme has variations in its incentives depending on whether it is a high or a low priority state or an urban or rural region. For more details in the programme's outline and implementation guidelines read Government of Odisha, n.d.; Ministry of Health and Family Welfare, 2006; Ministry of Health and Family Welfare GoI, 2005;MoHFW India, n.d.

[60] Qualitative insights into these findings from fieldwork are discussed in Chapter 4 and 5.

institutional childbirth increased with each improving wealth group[61] as compared to individuals in the poorest wealth group.

Reviewing these results, I find the continued existence of the 'inverse equity hypothesis[62]', for institutional childbirth (a thesis find), despite the Janani Suraksha Yojana's implementation for over a decade at the time of the NFHS-4 survey. In addition to those mentioned above, another interesting observation, I find is that the probability of undertaking institutional childbirth reduces with the increase in the total number of childbirths[63].

Overall, these results show an unequal uptake of institutional childbirth in Odisha. It becomes an issue of principal concern with an urgent need to overcome, given that Odisha has a significant vulnerable population (CTRAN Consulting, 2009;Mishra & Sarma. 2011; Rout & Hota 2016) and lags considerably behind other states of India in the uptake of institutional childbirth (IIPS, 2016). Furthermore, using concentration curves of different sociodemographic indicators in the previous chapter, I showed that one would be unable to comment or ascertain the contributory effects of the

[61] This is directly calculated in the NFHS by a Principal Component Analysis (PCA) on ownership of different assets as mentioned in https://dhsprogram.com/programming/wealth%20index/India%20DHS%202015-16/IndiaNFHS4.pdf

[62] Succinctly put, the 'inverse equity hypothesis' shows how the welfare outcomes of a health programme are better utilized by the more well off than the more needful. For a more detailed reading, refer to Ahmed. Shakil & Khan. M. Mahmud, 2011;G. Sen, Govender Veloshnee, et al., 2018, p. 10;Whitehead et al., 2007.The hypothesis is derived from the original argument of Tudor H. called the 'inverse care law' (Hart, 2000;Tudor Hart, 1971).

[63] A qualitative insight to this finding is provided in the following chapter from the fieldwork undertaken.

processes that govern these differential outcomes and hence limit specific policy interventions.

For example, an indicator for the school enrolment for a child belonging to a given wealth-based group will not show how it might help or impair the intersections of the existent power asymmetries (Kelly, 2009). The complexity is less depicted by the indicator alone, more so when beneficiaries of different wealth groups interact with the education system and vice versa. The dimensions of 'self-agency' and belonging to a social group could be a significant factor in allowing a complex system to operate for school enrolment.

Thus, in my setting, using the empirical analysis alone would provide a limited understanding of why a poor, vulnerable woman might have a worse outcome in institutional childbirth than someone belonging to a higher wealth group and having a better educational qualification. The systemic allocation of financial resources provided to account for her vulnerability might not be able to account for the difference in observation. The distinguishing point here is that interactions of 'power' which might limit these outcomes are 'layered', hence not captured in a survey unless specifically accounted for. It might not be possible to infer directly from such empirical analysis alone what causes the inequity in uptake.

Another finding from my results finds likeness to those of Mishra *et al.*,(2021), whereby the authors commented on the spatial clustering of childbirth facilities using the NFHS-4. They comment on the inequalities between well and poorly-performing

districts on institutional childbirth, including for states like Odisha[64]. The study's important point of discussion for my thesis is that better-performing districts with greater urban areas share commonalities in using institutional services. Poor-performing districts with a greater rural population remain behind. The empirical results show similarities when I account for district-specific controls in my model. These districts have a greater rural populace of women, and there is a 'marked' demarcation of a lowered institutional childbirth uptake across the southern districts of Odisha.

The econometric results also show inequalities in institutional usage for childbirth across sociodemographic indicators. However, my empirical analysis is limited in contesting if these are 'fair and systemically avoidable via health systems' (Abimbola, 2021). It brings to question if institutional childbirth in Odisha requires a finer examination of inequity.

I find evidence for this query from Afulani *et al.,* (2021), where the authors discuss how implicit and explicit biases can be introduced in the outcomes of a health system. These are important dimensions not captured by a survey, yet they determine the outcomes of a health system. I concur from my empirical analysis and review of the data that gaps remain in understanding the normative processes that contribute to these inequities against observable inequalities. It makes for my argument that there is a need to understand the different contributory processes of

[64]A point to be mentioned here is that Singh *et al*,(2014) pointed out similarities using another similar dataset (DLHS-2) where they commented that rural districts had lesser facilities than more urban centric districts which shows an existent supply side inequality.

inequity (Angelucci, 2017, p. 15), which could help parameterise them for a district-specific evaluation of the JSY or other similar maternal health programmes in Odisha. Thus, overcoming inequities should be the greatest concern of any health system (Topp *et al.,* 2021).

3.2 A philosophical understanding of 'maternal health inequities'

Leading from the previous section, I discuss here whether there is a one size fits for all approach or if there is a need for a contextual understanding of inequity.

Before moving further, I would sequentially discuss the debates on defining inequity and describe for the reader what a *normative* understanding of inequity could consist of. As a learning, it would require a description of what comprises or should comprise as fair in the context of equity, followed by its 'positional objectivity'[65] (Sen, 2001, p. 71); this would become central for the study undertaken in the following chapter. Such a description would help one know why these differences are unjust and amoral and, in turn, are causes of inequities in health. This way, one can define what makes for inequities specific to the programme to parameterise them (Smith, 2021). It, however, requires me to bring to the reader's attention that there needs to be a' definitive' understanding of what accounts for inequity in my context. Later in the chapter, I will discuss my reasons for what could make for the 'multidimensional'

[65] 'Positional objectivity' brings to light the outsiders perspective (*etic*) versus the insiders view (*emic*) of the same phenomenon. Sen argues that it's not the weighing or the contesting of one perspective against another, but rather draw a complementarity between the two to understand the phenomenon as a whole. This becomes especially important when one inquires what conditions are necessary and perhaps sufficient for 'inequity'.

inequities and could possibly be included in empirical evaluations of maternal health programmes.

Historically, there has been much debate on what makes for equity in health and its measurement (Mooney, 1987; O'Donnell *et al.,* 2007; Wagstaff, Paci, *et al.,* 1991; Wagstaff, van Doorslaer *et al.,* 1991). Here definitional concerns arose that needed to account for whether it was inequity or inequality being measured by varied approaches. Hence, there is a need to determine the difference between the two.

My literature review showed that the central distinction between equity and equality is that questions of health equity need to be connected to frames of justice (Asada & Hedemann, 2002; Kawachi, 2002; Pereira, 1993; Starfield, 2006). In the words of Kawachi *et al.,*(2002, p. 647,649), "*health inequality is the generic term used to designate differences, variations, and disparities in the health achievements of individuals and groups,*" "*while health inequity refers to those inequalities in health that are deemed to be unfair or stemming from some form of injustice*". This difference, however, is not the understanding of health equity in praxis.

The most commonly used definition of health equity is the one provided by Whitehead (1991,p.220), which states that "*the defining characteristics of differences in health outcomes are that they should not be "unnecessary, avoidable, unfair and unjust*". However, using this definition to understand health inequity has a limitation. It obfuscates a contextual account of what is considered unjust since using this

dictum; the corollary should suffice where the conditions for health equity are 'necessary, unavoidable, fair, and just'.

Despite this, however, it remains attractive by way of its definitional simplicity (Norheim & Asada, 2009). Thus, I find that the foundational concerns on which constructs to choose for an empirical analysis of inequity limit their inclusion in policy prescription.

In my context, a possible way to overcome this 'choice dilemma' could be undertaken from the learning provided by the strong principle of health equality (Norheim & Asada, 2009). The principal essentially states that all individuals should have the same outcomes in health except under two conditions (a) when making an individual equally healthy[66] requires a concurrent deterioration in the health of another (by way of a health transfer of sorts) and (b) when it is technologically not feasible to improve one's health further. This approach, however, has been objected to principally on the fact that (a) there is a possibility of impairing one's health to improve those of another individual, and (b) social inequalities alone are considered unjust, thus leaving other forms of inequalities which could cause inequities outside the purview of examination (c) the focus on individual responsibility and (d) the limitations of both technologies currently existent and biological limits.

[66] Equal health is meant as equal outcomes in health considering the gender and age-appropriate health outcomes as seen in a healthy individual. Thus, each individual should have means or equal units of health as ascertained from a population understanding of being healthy.

In effect, this shows that inequalities in health need to be affected by human action, which is fair and just, without which the individuals' health outcomes are limited. Thus, health inequalities could be precursors to health inequities (Ruger, 2009), needing due address.

Also, using the principle of fair trade-off, if I were to resort to weak equality of health instead of fulfilling my requirements of equity, then it becomes amoral if (a) the attainment of this weak inequality requires a reduction in the average levels of health of the population of concern and (b) this increased reduction would require compromising on other requisite goods such as employment, education, and social security (Asada *et al.,* 2014).

Thus, the moral dilemma is to improve the baseline health outcome of the subject population (as discussed in the first chapter) and not reduce it so that the equity assessment of choice fits. Also, it might not be right to consider equity as being equivalent to strong health equality since there cannot be a redistribution of good health in the same manner as another good, such as income[67].

Simply put, health inequities could result when the strong principles of health equality are sidelined or not acted upon. However, adherence to these principles alone might not be the only way of addressing health inequity. What matters is which ones to choose in one's equity assessment. Similarly, for policy prescription,

[67] What this means is that units of good health cannot be exchanged on a market and improved upon by ones having a deficit of it. What it cannot do is state if the means to attain this reallocation is fair to all or does it unfairly improve the health of some at the expense of other (as seen by the inverse equity hypothesis).

my econometric analysis alone can comment on resource reallocation for overcoming inequalities, not if this reallocation can contribute to overcoming inequities in maternal health. It makes the problematization of financial equity alone as being requisite for overcoming health inequities.

The need for this understanding can be attributed to the distinction brought by John Rawls (Fishman & MacKay, 2019), who suggested the consideration of health outcomes as a social good. The principal reason for it was that both the individual and society could complement each's capacity to overcome these limitations of inequality (Norheim & Asada, 2009). However, the key problem here is that health inequities are not directly considered in this definition of social systems for reallocation, which impedes its address.

Thus, it is pertinent to consider how the individual and the given society views the good (in my case, the usage of institutional facilities for childbirth) under consideration, while evaluating a health programme. It would lead to a socially mandated response and, in turn, allow for a contextual understanding of inequity by evaluators.

An important point to be mentioned here is that health is not value-free; hence its attainment is not value-free either. It consists of making moral choices and, more specifically, to make this attainment fair, it needs to evaluate justice dimensions that account for social norms, processes, and institutions.

My argument for this central tenet is that provisioning of financial and facility services alone may not help overcome an individual's inequity status but rather improving one's capabilities or 'self-agency' (by a concurrent improvement of the capacity of both the society and the individual) to access them could be the way. Thus, the programme's focus on addressing equity should be more dependent on improving the access of the least equitable, while not dissuading the more well-off from the distribution (Norheim & Asada, 2009). Additionally, it should go on to level up the differences in health outcomes between the groups and not level down these differences. What this means is that rather than worsening outcomes so that the better off dropout, it should improve the accessibility of the more vulnerable.

Hence, on these lines, if a maternal health programme's outcome is considered a social good (in my example, increased institutional childbirth), as Norheim and Asada (2009) argue, then there is an implicit need to furnish the equity principle by it. The existent limitations of biology and technology that cannot be improved upon should not be considered impediments to this effect. What matters is if the social processes and institutions that can improve the programmatic outcomes of individuals be acted upon.

It also requires a concurrent need to distinguish which of these 'social processes' contributes to 'unfair health' (Asada *et al.,* 2014; Fleurbaey & Schokkaert, 2009). What is essential to determine is whether the outcomes of the intersections of 'social

processes' or individual behaviour are responsible for the observant inequities and whether they are truly unfair and unjust (Rawls, 1958)[68].

This approach could give a perspective on the limits of the programme's intervention. Through my previous empirical inquiry, I have shown that problems of health inequity cannot be addressed by simplistically reducing them to utilitarian arguments on the distribution of healthcare, which is what health equality is (A. Sen, 2002).

Accessing healthcare (Hofrichter, Bhatia *et al.,* 2010, Chap. 4 Health Equity and Social Justice: Fabienne Peter); in my case, maternal healthcare is just one aspect of the programme's outcomes that can become more equitable. Any maternal health programme's prime mandate should be to help improve an individual's 'self-agency' (Ruger, 2009). A point to be noted here is that while examining the need for equity,

[68] A very good argument is the following: "*A utilitarian view of equity looks to allocations that produce greatest good for the greatest number. The distribution of the resource across individuals or groups within the population does not matter. This subordinates the equity question to efficiency, a criterion likewise concerned with producing the greatest amount of benefit possible with limited resources. For the utilitarian, inequalities are tolerable and even desirable if they have the effect of making the population as a whole better off. In the extreme, a utilitarian view would even condone the sacrifice of individuals' health or lives for the net benefit of the group. Strict utilitarianism is broadly rejected in health policy. In most legal and ethical systems, it would violate human rights to require some individuals to sacrifice for the benefit of others.*
An equality of health view aims not to maximize net population health, but to equalize the distribution of health in the population, that is, to decrease the differences between the least and most healthy. The maximin criterion focuses only on the degree to which an allocation improves the lot of those worst off, without regard to net benefit for the population as a whole. A more utilitarian variant maximizes overall population health conditional on a minimum standard of health for all. It establishes a floor beneath which nobody can fall, while it raises the overall average health for the group as a whole. These models are consistent with a contractarian approach to social justice, which asks policy makers to allocate goods as if they themselves could be in any of the receiving positions, but do not know which (Rawls, 1971)." (Giacomini,2008 pp 292-93)

Ruger (2004) drew on the limitations of a Rawlsian perspective of social justice and invites an alternative that uses Sen's capability approach.

The shortcoming of the Rawlsian perspective is that it allows a fair distribution of primary goods, which can help overcome the 'veil of ignorance' of individuals by understanding the limitations of their existent circumstances (Andersson & Lyttkens, 1999). However, there is no mandate on distributing these goods whereby their allocation can help improve these individuals' capabilities (self-agency) and health outcomes.

Thus, the focus of addressing inequities should be to help the individual overcome programme-specific structural problems to accessing maternal healthcare as a Rawlsian' social good' (Fishman & MacKay, 2019). Another important aspect I find is when I view the programme using the learning of Sen's '*capabilities approach*'.

As Sen (in Beckfield *et al.,* 2015) mentions, I could draw parallels of my proposed 'multi-dimensional inequity' to his' *conversion factors*'[69], which improve an individual's capabilities. Thus, providing goods alone should not be the only focus of a welfare programme such as the JSY. Overcoming inequities by addressing various 'conversion factors' so that women can improve their ability to uptake institutional childbirth should be the focus. The approach to attain this should be to consider different ways to improve one's health capabilities required for examining the

[69] These are factors which allow or rather improve the individuals self-agency, which in turn improve their ability to uptake the services. Thus, they improve the equity outcomes of the programme.

existent inequities (Venkatapuram & Marmot, 2013, p. 43,68) in achieving the outcomes of the programme.

Additionally, Daniels (2012) argues that identifying these causes of inequity should not come alone from the domain of health but the outside. He argues that if the structural drivers that help overcome health inequalities are not fairly distributed in society, then the principles of justice are compromised. I have used the learning of the above perspectives to justify my choice of methodologies to examine inequities in institutional childbirth in Odisha. The following chapter investigates overcoming the empirical limitations of understanding the contributory social norms, institutions, and processes by a qualitative approach.

Thus, I find that one should focus on the processes and factors that cause these 'unjust' health inequalities (Ruger, 2004). Accordingly, if the "capabilities approach" lens is undertaken, then the focus on a singular measure is overcome by the compartmentalized view that it brings in (Lorgelly *et al.,* 2015). It can also help make more intrinsic programmatic changes by understanding domains other than financial allocation or service provisioning, where health inequities can be reduced.

This reduction of health inequities should also form the prime mandate of health systems, whereby the focus should be to improve upon institutional structures. Daniels (2012) gives examples of such alleviation exercises positively impacting health outcomes. The limitation of the Rawlsian perspective is that it is mainly descriptive in its application in the context of improving health outcomes. The

prescription of fairness in health outcomes has not been the foundational construction of health injustices as these cannot be determined to be similar to other social and economic injustices that can be improved upon.

Hence, health inequity as a 'multidimensional' construct needs these 'prescriptive' investigations to ameliorate health injustices and overcome them. One also needs to determine if this 'prescription' is context-specific. Thus, the same metrics used to evaluate maternal health inequities would limit one's understanding of the programme in a different regional background.

I propose that the institutional provisioning of goods as the pre-defined outputs of a programme might not be the only way to overcome these health injustices. In the case of the JSY, it cannot be that the simplistic provisioning of services for institutional childbirth will help overcome trust concerns (Jeffery & Jeffery, 2010).

These provisions can make for equality in health outcomes; however, they remain nonspecific pallbearers, when addressing equity. The capabilities approach focuses on finding means to improve an individual's self-agency, introduced by the state and society (Ruger, 2004) as the end of any public policy, which is the intention of this thesis.

To attain it, a dependency on different social indicators alone might limit understanding of an individual's health outcomes. For example, the level of employment might not be a true marker of the resultant inequities in health as the health outcomes could be different between the groups (Jayachandran, 2021). The

choice indicator must be consistent with Whitehead's argument if this difference is socially acceptable, if there are technological and biological limits, and if it is unfair to the individual's 'self-agency'.

Thus, in the context of my second research objective, if I am to argue that health equity requires the absence of remedial differences between different social groups, then it needs one to ask, how are these 'differences' defined? Secondly, what are the challenges in identifying these 'multidimensional' differences and if they are avoidable and remediable for achieving an increase in institutional childbirth in Odisha?

It is appropriate to state that ideas of justice and fairness become important in distinguishing between equality and equity. It shows that health equity concerns processes, as seen in the following chapter. Health equality, on the other hand, focuses on differences in the measured outcomes, as seen from the empirical analysis in Chapter 2. Hence, the objectives of policy formulation, specifically of health policy depending on the programme theory, should have both considered for. A multiplicity of stakeholders can benefit from attaining these objectives, which overcome the limitation of state-induced redistribution policies alone by making away with the importance of others (Li, 2007).

Also, since women are often considered as 'instruments' to attain the ends of others (Nussbaum, 2000, p. 2), different institutional and social mechanisms should be accounted for that cater to them, thereby providing a 'net positive outcome' (ibid)

for others who act as receivers. Thus, if improved childbirth is the objective, then there should be institutional and social support for improving the 'self-agency' of women as well.

However, these support mechanisms (as will be seen in the following chapter) are often limited in character, and the expected outcomes are not fulfilled, thereby causing the observed inequities. They might work to improve the average outcomes of the target population (women in the childbirth age group in my case) rather than the outcomes of specific subgroups. It translates to a need to understand inequity's 'multidimensional' nature, the principal argument of my thesis.

3.3 Conclusion

In this chapter, I argue that more concurrent forms of evidence need to be utilized to understand the complexity involved in a programme's operation and its equity evaluation. It becomes all the more important if one considers health systems complex by nature (Marchal *et al.,* 2009), as discussed in the first chapter. These additional levels of evidence could help reduce the inherent biases in evaluating health programmes and make for better policy considerations to address health equity. The limitations of using large datasets such as the NFHS-4 (and by the same virtue the latest NFHS-5), are in line with other country-specific programmatic evaluations in LMICs, since data granularity is absent (Hailu *et al.,* 2021). One then must ask if policymaking in health requires dependence on such a macro-level

analysis alone. These findings are invariably valuable but using other methods for analysis at other levels could help improve their contributions to policy prescription.

I also bring to light in this chapter if a 'prescription' rather than a 'description' (Sen, 1980) of context-specific inequities in maternal health programme evaluations are needed. Such an approach can help enable the parametrization of the contributory constructs of these observed inequities later by a weighted approach. The central problem I will show in the following chapter is that the 'power' determinants of inequity observed from the fieldwork are not considered in evaluations, although they might account for differences in the observed outcomes. A prime concern would be to acknowledge them as well in evaluations.

Thus, in principle, without an understanding or accounting for a normative understanding of 'multidimensional inequity', 'biases' could be introduced in the estimates of inequality. They could hinder a better understanding of the contributory constructs of the observed inequality and if they are context-specific. It needs an understanding of the complementarity of varying (*etic versus emic*) perspectives[70].

Thus, there needs to be a theoretical interpretation of 'intersectionality' to define what should be prescribed to measure such inequity. An approach to the examination of 'multidimensional' inequities in institutional childbirth could be the way forward. For a 'prescription' of what should define the multidimensional nature of inequity as a construct, I propose the following:

[70] As seen from Sen's argument on 'positional objectivity', as previously discussed.

1. The good (in my case, the uptake of institutional childbirth) should be equity enhancing for both the individual and the society.
2. Resources from the health system and other systems are available to improve the equity-enhancing nature of this good.
3. The provisioning of this good is not reducing the equity of others.
4. The good is acceptable to a given individual or the selected population.
5. The usage of the good is not imposed, but its usage helps improve the users self-agency.
6. Institutions and social processes (such as power relations) help in making the good more equitable for the user to access.

Using these points, in the following chapter I will discuss why a qualitative design is chosen to understand the '*emic*' perspectives about 'institutional childbirth' in Odisha. In it, I would argue how such an approach could help better understand the 'multidimensional' inequities in institutional childbirth in Odisha for a policy prescription. Such a discussion on inequity would help draw what should fit the requirements for inequity assessment which would come in later chapters from a discussion of my fieldwork.

Chapter 4: A qualitative examination of 'multi-dimensional' inequities in institutional childbirth in Odisha

Chapter Synopsis

From the previous two chapters, I find an 'epistemic' lack in understanding inequity in institutional childbirth as applied to a policy evaluation of the JSY. Continuing from the last chapter, I introduce my arguments for choosing a qualitative methodological approach to understand the processes contributing to 'multi-dimensional' inequities in institutional childbirth. In this chapter, I will answer my third research objective by examining the 'multi-dimensional' inequities contributing to the observed inequalities in my empirical estimates.

Using the learning from the empirical exercise and the previously mentioned outline for the 'prescription' of inequities, I undertake fieldwork in Koraput district of southern Odisha. I find how these inequities, if unaccounted for, could cause inequalities in the uptake of institutional childbirth in Odisha. The remainder of the chapter includes a description of the field study undertaken, the impact of CoVID-19 on the fieldwork, data analysis, and results.

To summarize a discussion of the findings in the chapter, I find an interaction between macro and micro social processes (Makleff *et al.,* 2020; Smith & Petticrew, 2010) that determine the inequities in the programme's outcomes. My argument remains that there needs to be an improved understanding of the processes contributing to these inequities and suggest their existence as 'biases' that often limit the outcomes of empirical analysis. Accounting for them through such a qualitative approach could improve the empirics, programme evaluations and policy outcomes, including future surveys of the NFHS. The chapter concludes with an advocation for evaluating a maternal health programme with a contextual understanding, which would be limited when using a singular methodological approach.

4.1 Introduction

This chapter begins with a discussion of my reasons for choosing a qualitative approach to understanding the processes contributing to inequities in institutional childbirth in the state of Odisha.

It leads on from the previous chapter, where I had argued for the need to examine inequities in the JSY as understood from the empirical analysis. The main reason for this is that Odisha is a low-performing state on maternal health indicators, including institutional childbirth (CTRAN Consulting, 2009; IIPS, 2016.; Mishra & Sarma, 2011; Rout & Hota, 2016); thus, it becomes imperative to see if the mechanisms to address them are equitable to suggest a relevant policy prescription.

From a review of the literature, I find that although there have been previous studies that have critiqued the health system in Odisha as being inequitable (Contractor *et al.,* 2018; Thomas *et al.,* 2015), there has not been an attempt to see it from the perspective of a qualitative study which includes cultural, social and health system level factors to develop an equity evaluation framework. The understanding of the processes which lead to inequities in institutional childbirth and the plausible ways to address them in evaluations is absent in the literature.

Here, I reiterate that while emphasising the idea of equity being relevant to programme evaluations in the context of the JSY, the third research objective aims to explore the processes that determine childbirth at a cultural, social, and institutional (health systems) level.

To address this query, I first describe the philosophical stances in qualitative research methodology and how they helped answer my research objective. After that, I include a description of the field setting, the study design, and the impact of CoVID-19 on the fieldwork, followed by an analysis of the data and the conclusions from the results.

4.2 The argument for choosing a qualitative methodology

Usually, the epistemic and ontological stances are aspects that doctoral researchers bring beforehand rather than evolve with the research query (Pallas, 2001). I find that dimensions of experiential learning are often foregone in how the research query is undertaken. The query's (the research) design is often done *a priori* instead of evolving with insights, even when the research requires an explanatory design (ibid). This 'inflexibility 'that ensues often misses out on the considerations of the existent pluralism of epistemologies in one's research engagement.

It results in a 'rigid' epistemic stance for choosing a research methodology to best explain a phenomenon under inquiry. I argue that such 'rigidity' could limit the application of the research outcomes for a policy prescription. My previous discussions on the importance of the processes which cause inequities in maternal health have led me to choose a qualitative methodological approach to undertake my query. A defining reason for this stance is that from my literature review, I found that Bourdieu (1990, pp. 47–48) argued on the rigidity of mathematical models as

limiting the understanding of reality, whereby often, the model is considered as reality itself.

In turn, he states that the evidence is often made to ratify the author's argument rather than best explain the observation. It causes what is known as a 'fixation' on empirical models for explaining a social reality (Gerard Debreu, 1991; Storeng & Béhague, 2014; Winker & Degele, 2011). However, one must understand that there is an inherent need to understand if such an approach alone is the most plausible way to explain the observed reality (Freedman, 2009, Chapter 7). It also brings to the fore whether there could be additional ways of understanding reality and if this reality varies amongst the participants.

I find it important to discuss it at this juncture since it was an issue faced by me (the doctoral researcher) while trying to understand inequities in the determinants of institutional childbirth in Odisha by only using empirical analysis. The principal question which arose in trying to conclude from the empirical approach was whether there could be differences in understanding' inequalities in institutional childbirths' if different forms of data were sought (Daniels *et al.,* 2017; Greenhalgh, 2018).

Through a further reading of the literature, I realized that If I had retained a singular methodological approach, what might have occurred could be termed "fixated empiric abstractions" (Morgan & Smircich, 1980), which I believe might not help explain the observed social reality. Such thought also comes from a historical background where the paradigmatic stance (Bryman, 2006a) and the contestation of

the superiority of the choice of empirical explanation pits one set of methods against another (Sale *et al.,* 2002). However, the resultant pitting of evidence needs due scrutiny as, in its absence, the reality which is argued for undergoes much obfuscation (Booth *et al.,* 2003, p. 114). Here I must state to the reader that in my thesis, I intend to overcome this divide and try to address the query on understanding the processes contributing to inequity in institutional childbirth uptake to the best of my ability. Thus, I state the need to exercise caution from conclusions based on the empirical evidence alone. I believe there needs to be a concurrent improvement in understanding HSR from additional evidence. It could help contextualize policy formulation by providing the definitional limits of what accounts for inequity in the programme. Without these, one cannot incorporate the empirical outcomes for an additional parameterization in a regression analysis (Chatterjee & Smith, 2021).

Thus, the research objective for this research in the thesis is :

1. To examine the 'multi-dimensional' inequities in institutional childbirth in Odisha.

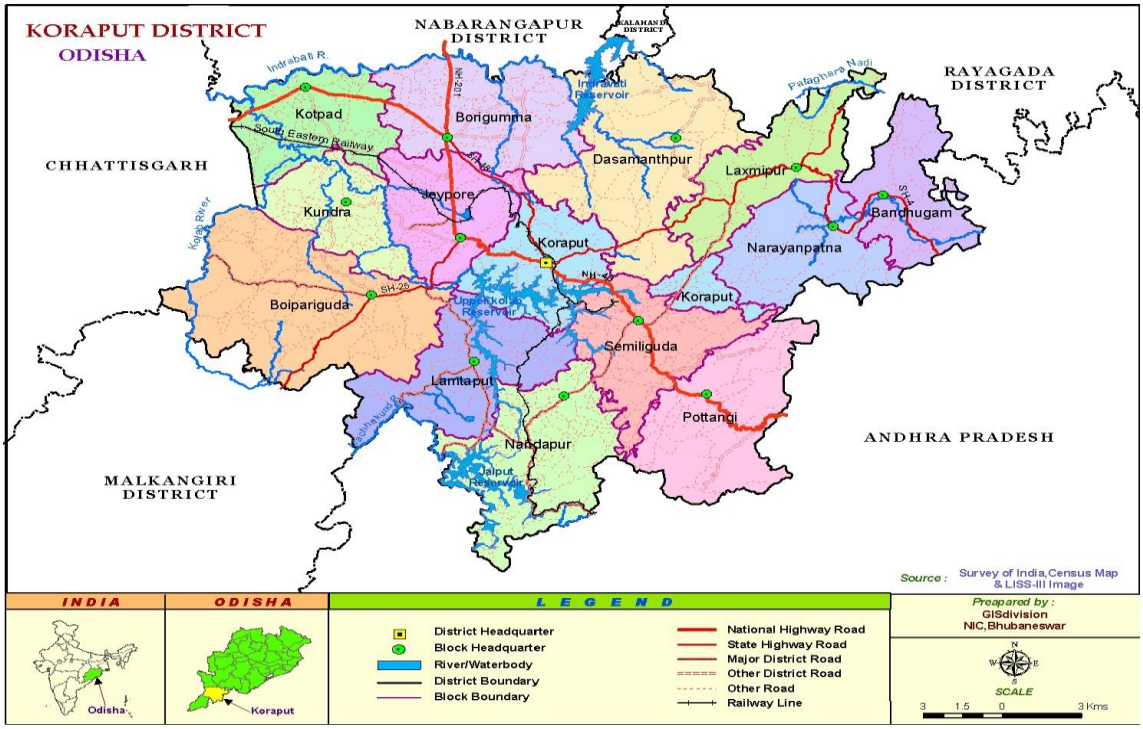
4.3 Study Site

My probit regression estimates on the uptake of institutional childbirth in Odisha showed significant variations amongst the southern districts of Odisha compared to its other districts. In line with this finding and as observed from the NFHS-4 Factsheets, I selected Koraput district after discussions with state officials and local community organisations on the feasibility of the study. In this district, two villages of

XXXXX block were selected under the catchment area of the same government block hospital for health service delivery.

Figure 4.1: Map of Koraput

District



Source: http://gisodisha.nic.in/District/Koraput/KORAPUTpdf/pdf/dist/Base%20map.pdf

4.4 Research Design

My case is for a better understanding of the variables not captured in the empirical data, but which contribute to the structural and non-structural inequities that limit the programme's outcomes. With this as a background, I use an explanatory sequential design (Creswell, 2014, pp. 81–85; Pluye & Hong, 2014), and this chapter justifies my use of a qualitative approach.

I situate this research within a constructivist interpretivist paradigm to understand these complex processes which cause inequities. As a paradigm, it uses a relativist ontology (the coexistence of multiple realities) to undertake a naturalistic inquiry (Denzin & Lincoln, 1994, p. 24; Lincoln, 1985) into the social processes causing inequities in institutional childbirths. I believe the outcomes of my query have applications in policy research which in turn would involve a post-positivistic paradigm (Fischer, 1998) since the amalgamation of both the empirical and qualitative evidence would be beneficial in better understanding reality for policy applications.

The fieldwork was planned across two population groups in two selected villages following a qualitative interpretivist approach of inquiry.

4.5 Inclusion and Exclusion Criteria

The inclusion and exclusion criteria for each participant group are described below.

4.5.1 Participant Group I

The **inclusion criteria** for respondents in this group would be adult women in the reproductive age group who had undergone childbirth in the past six to twelve months in the XXXXX block of Koraput district.

The reason for it leads from the empirical analysis in Chapter 2, whereby I wished to understand the processes causing inequities prominent amongst the population in the southern division of Odisha (Koraput is a district within this division). Although the NFHS-4 allowed for women in the age groups of 15-49 as the reproductive age

group, I desired to retain my focus on women 18 years and above of age at marriage, making them legally eligible for cash transfer in utilizing institutional childbirth services. It was my response during the ethics review to the Institution Review Board (IRB) panel at IIT Bombay when asked about the reasons for the age selection of respondents.

These regions also have ethnic groups classified as Particularly Vulnerable Tribal Groups (PVTGs). Post discussion with field organisations and supervisors, it was decided not to include them as it would be unfair to them[71] to engage within the limitations of the field in the current context of the pandemic and the doctoral timeline.

The **exclusion criteria** were as follows:

1. Women in the non-reproductive age group.

2. Pregnant women who have not given birth in the past six to twelve months[72].

3. Women who belong to a Particularly Vulnerable Tribal Group (PVTG).

[71]What the researcher means here is that from the NFHS-4 empirical analysis, he was unable to comment if the PVTG's were included in the analysis since any study on them requires higher government clearance from the Ministry of Tribal Affairs and most possibly, they were not included due to their small numbers and difficulty in access. Given the limitations of the doctoral timeline and not being trained in engagement with them, it was considered to abstain from including them in the study. The PVTG's mentioned here would be the *Bondo* tribe. A small insight into their cultural story can be sought from Devy,(2009, Chapter 3). However, this is not a conclusive outline since the *Bondo's* have significantly changed since the time of Elwin's writings. At the time of the fieldwork, it was told to the researcher by members of the community organisation that they are now seeking institutional services for malaria as well (Shah, 2022, personal communique_field diary)

[72] My reason for this is that longer recall periods introduces biases where more memorable and more major health events are reported (Ager & Pepper, 2005). Since birthing is considered as a major health event, the researcher in discussions with the supervisors, concluded that a 12-month period would be good enough to retain a valid recall and response.

4.5.2 Participant Group II

1. The key informant group's **inclusion criteria** were that they had to be a health worker or an administrative official in the government health system in the XXXXX block of Koraput district.

   The **exclusion criteria** for this group were:

1. Key informants who might not have expertise in health systems in the context of Odisha.

4.6 Recruitment of Participants

Semi-structured interviews with participants were undertaken using Interview Guides (provided in the Annexure) for the two groups. A purposive and snowballing sampling strategy was followed during data collection. Two different interview guides were used since this study had two (2) participant groups (types of stakeholders).

4.6.1 Participant Group I

For this part of the study with mothers who have given birth, the intention was to recognize why a woman does or does not undertake institutional childbirth. The information about participants belonging to Participant Group I and their pregnancy history[73] were taken from the Accredited Social Health Activist (ASHA)[74] or the community members in the respective villages by the researcher (doctoral candidate).

[73] A point to be noted here is that pregnancies are all generally reported as evidenced from the fieldwork, what might occur is a discouragement in the uptake of eligible services and in turn a deterrence of institutional birthing. Of the selected respondents as shown in the results, many individuals were registered with the ASHA and Anganwadi worker but had a home birth.

[74] they function as community health workers for primary healthcare similar to other low or middle-income countries.

With this information, the selected participants were contacted. The women were approached and invited by the researcher through community leaders and a translator from the Self-Help Group of the participating community organisation. During the field visit, fourteen women were approached, of which ten agreed to participate in the interviews. Most women gave reasons for not participating in the upcoming harvest of forest produce and their need to go for the monthly ration to the block town.

4.6.2 Participant Group II

For this part of the study with key informants of the health system, such as administrative officials and health workers, the aim was to know the factors which determine the working of a health system for institutional childbirth. The interview revolved around key informants' perceptions of the broader themes of systemic and cultural factors determining the pregnant woman's choice to opt for or opt-out of institutional childbirth.

Permissions were taken from the Mission Director of the National Health Mission (NHM) (the NHM is the overarching body that operates the JSY programme), Odisha, to conduct interviews with health providers (i.e., Participant Group II). Group II key informants provided their perspectives on the uptake of institutional childbirth. The researcher and the translator visited such participants and invited them to the study.

4.7 Procedure

4.7.1 Participant Group I

An Explanatory Statement (Annexure) that explained the research scope and the importance of the role of the selected participants, including what would happen to them if they participated in the study and the confidentiality of same, was shared with the participants before the onset of each interview. Since participants had difficulty comprehending English, a translated version (in *Odia*) was provided for record-keeping with the participants, while the entire statement was explained in either of the known languages (*Gadaba/Desia*) to the participants by the translator. Only after their consent did the researcher proceed with the interview process. The interviews were audio-recorded with the participant's written consent (in the form of signatures or witnessed left thumb impression[75]), then translated and transcribed. Considering the participants' schedules, most of these interviews lasted between 20 and 27 minutes.

4.7.2 Participant Group II

An Explanatory Statement (Annexure) that explained the research scope and the importance of the role of the selected participants, including their confidentiality for the information shared, was explained to the participants before the onset of each

[75] The reason for choosing the left thumb impression is because in India, most government documents especially land records require a right-hand thumb impression (as mentioned by the translator), these being matters of property ownership individuals are apprehensive on giving in a thumb impression for a document. Rapport building helped in overcoming this dilemma for the informed consent forms and the left thumb impression was chosen (RS_fieldnotes).

interview. A translated version[76] (in *Odia*) was also available for self-reading for the participants who had difficulty comprehending English.

In the case of two participants, the translator read it in the local language (*Gadaba/Desia*). The interviews were audio-recorded with the participant's consent, translated, and transcribed. If the participant consented, the interview was conducted or else it was withdrawn. Due to their busyness at work, most interviews lasted 15-20 minutes.

Participants in Group II are key informants, and as the availability of key informants cannot be pre-determined, the data from their interviews were used for triangulation. Hence, the number of key informants cannot be defined. A total of 5 interviews were to be conducted, but only three could be done as the other two participants were unavailable for interviews since they often had to go to district meetings during the fieldwork.

4.8 Respectful recognition of participation

4.8.1 Participant Group I

Each participant (Participant Group I) was given a sum of INR 150/- (USD 1.8) (payment in cash) to recognise the time and inconvenience of their participation respectfully. It would be the near equivalent of a day's wage for an individual.

[76] Both the informed consent forms along with the interview schedule were back translated into *Odia* from *English*. They were validated by experts who confirmed that the constructs as mentioned in the forms were culturally adept. The experts were linguistically trained in *Odia* and had a higher degree level of education. The researcher would like to thank them and the supervisors for their insights on improving the aforementioned forms.

4.8.2 Participant Group II

The key informants (Participant Group II), i.e., the government health system's health workers and administrative officials, were salaried and permitted by their employer to participate in their usual working hours and were not offered any financial recognition.

4.9 Ethics Approval

The IITB Institute Ethics Committee approved the study (IITB-IEC), vide **Approval No: IITB-IEC/2021/11**. The study is also registered with the Monash University Human Research Ethics Committee (MUHREC) through **Project ID:20100**.

4.10 Impact of Covid-19 on Fieldwork

The CoVID -19 pandemic led to the repeated cancellation of field visits. The fieldwork was ultimately undertaken from 1.10.21-15.10.21 when the pandemic had diminished to some degree but had not disappeared. The researcher does acknowledge that the duration of the fieldwork might appear to be too short for the reader.

Although the researcher intended to see if seasonality could cause a difference in the respondents' perspectives on the usage of institutional services (Hajdu & Hajdu, 2021; Nambiar, 2022), he could not undertake multiple field visits.

The reflexivity statement presented in the chapter would make an addition whereby the researcher's intention was to undertake a depth-wise understanding of the reality of the respondents.

4.11.1 Demographic Profile (Participant Group I)

The demographic profile of Participants Group I is mentioned in Table 4.1:

4.11.2 Demographic Profile (Participant Group II)

The demographic profile of Participants Group I is mentioned in Table 4.2:

Table 4.1: Demographic Profile (Participant Group I)

Participant Identification (Anonymised)	Age	Education	Language	Occupation	Social Group
AD_PG1	28	Primary	*Gadaba*	Smallholding farmer, seasonal agricultural worker	Scheduled Tribe
BB_PG1	24	Primary	*Gadaba*	Self Help Group (part-time), Seasonal agricultural worker	Scheduled Tribe
KM_PG1	28	Collegiate	*Desia*	School Teacher	Scheduled Tribe
MB_PG1	35	Pre-primary	*Gadaba*	Agricultural worker	Scheduled Tribe
SB_PG1	24	Primary	*Gadaba*	Seasonal agricultural worker, aquaculture	Scheduled Tribe
TK_PG1	27	Primary	*Gadaba*	Seasonal agricultural worker,	Scheduled Tribe

BDM_PG1	22	Primary	*Gadaba*	Seasonal agricultural worker	Scheduled Tribe
LK_PG1	23	Primary	*Gadaba*	Seasonal agricultural worker, forest produce aggregator (*tendu* leaves)	Scheduled Tribe
SM_PG1	25	Primary	*Desia*	Agricultural worker	Scheduled Tribe
MK_PG1	25	Primary	*Gadaba, Desia*	Transport of Minor Forest Produce to weekly market (*haat)*	Scheduled Tribe

Table 4.2: Demographic Profile (Participant Group II)

Participant Identification (Anonymised)	Age	Education	Language	Occupation	Social Group
JDM_ PG2	45	Primary	*Gadaba, Desia*	ASHA	Scheduled Caste
SS_PG2	32	Primary	*Gadaba, Desia*	ASHA	Scheduled Tribe
NM_PG2	27	Graduate	*Odia*	ANM	General

ANM=Auxiliary Nurse Midwife; ASHA=Accredited Social Health Activist.

4.12 Data Triangulation

Data triangulation involves using different sources of information from different participants' perspectives, thereby increasing the validity of a study (Hussein, 2009; Morse, 1989,p. 228; Thurmond, 2001; Guion *et al.,* 2011). The researchers' idea was to improve the richness of the data and get 'thick descriptions' (Geertz, 1973), thereby providing a more realistic understanding of the programme's working.

Interviews and photographs (included in the results section) have accounted for methods and data source triangulation (Carter *et al.,* 2014).

4.13 Robustness

As described in previous chapters, there is often an argument on qualitative research being 'anecdotal'. A reason for this argument about explanatory qualitative methods (Greenhalgh *et al.,* 2016) is that these studies lack sample estimation, and there is an absence of generalization (Blaikie, 2018; Guest *et al.,* 2006; Kitto *et al.,* 2008).

What needs to be brought to the forefront here is that 'generalization' is not the only aim of qualitative research (Hammarberg *et al.,* 2016). The nuances that it helps provide do help to improve health policy outcomes. Qualitative research often helps improve the understanding of the underlying reasons and explains the problem from the view of a researcher. As shown by Topp *et al.,* (2018), the authors discuss its merits in HSR by way of its ability to showcase the processes causing inequity.

Often a contested question when using qualitative analysis in addition to an empirical understanding is the question is on the reliability of the data (Sandelowski,

1986) and the validity of the same (Yardley, 2000). An often-well-quoted requirement is a need for a 'kappa statistic' or a 'Cronbach's alpha' (Lombard *et al.,* 2002).

To this query in the context of this research, my response to this 'quantitative analysis of qualitative data' (Syed & Nelson, 2015) is that even an inter-rater reliability index might not be the best explanative since the field experience might not be the same for different researchers and hence not undertaken in the context of this research. In turn, the given weightage by a rater on a particular theme could have a marked difference (O'Connor & Joffe, 2020). In this case, techniques to improve the data's robustness would be more relevant (Syed & Nelson, 2015), which is a way of addressing the quality of the study.

Qualitative research has methods of improving the robustness of the data (much like how bootstrapping helps reduce the standard errors in empirical estimation and makes for better estimates) by methods such as triangulation. Thus, what I present here is an attempt to best explain my research objective through the choice of my methodology. The research has reported the data according to the COREQ guidelines (Tong *et al.*, 2007) provided in the Annexure for reporting qualitative research, thereby addressing questions on robustness.

4.14 Reflexivity

Reflexivity acts as a defining characteristic of qualitative research, whereby it describes the positional stance of the researcher (Finlay, 2002) and gives clarity to the

reader as well. It essentially involves one's critical reflection on the research process and, in turn, is a documented account of the researchers' experience (Berger, 2015; Billo & Hiemstra, 2013). It is needful as an account to understand how the researcher influences the research process since qualitative data is subjective and inductive. It adds to the robustness of the research and allows the reader to account for the 'plausible biases' which might be introduced in the examination.

Before beginning the fieldwork, discussions with supervisors led the researcher to acknowledge an unequal 'power' relationship between himself and the interview respondents belonging to Participant Group I. The following ways show how this was attempted to be addressed.

1)The researcher is a man, and a birthing experience is encultured. Given that the study would assess existing inequities that lead to a differential outcome in institutional childbirth, the researcher would be empathetic to the responses of the individuals.

Mock interviews were undertaken prior to the field engagement to accustom the researcher. It made him understand the need for a contextual understanding which might need additional 'cues' from the research engagement through pilot interviews. An example of this is the gesturing of reassurance to the participants that they need not participate in the interview if they do not desire to, the usage of 'silent' or 'echo probing' when a response is difficult, and to listen and not interrupt when a participant responds.

The researcher was empathetic to their difficulties and tried his best to help translate their opinions and statements. It was discussed with the participants that their responses could improve the programme for others who might otherwise face the same issues. Another point was to make them understand that they were not dependent on the researcher for attaining health services or professional attainments and that they should voice their 'true' opinions.

2) An individual (female) from the community-based organisation was recruited prior to the fieldwork. She accompanied the researcher and was well versed in the given languages (*Desia/Gadaba*) and dialects of the study region. She has resided in the field region since 2015 and helped translate and build trust between the researcher and the participants.

A full day of undertaking mock training for interviews and translation was done with her. It helped her understand the 'cues' needed for the interview and accustom her to the interview process. Additionally, the researcher spent time in the community before the interviews to build a trusting relationship.

3)The researcher acknowledges that he is a male with a higher degree level of education, being trained in qualitative and quantitative research methods from an urban middle-class background in a major city in the eastern part of India. These influences might hinder understanding the difficulties of the social norms and practices of the field region, and the researcher would try his utmost to overcome his personal biases and prejudices. Additionally, the researcher would not treat any

response as a preconception of tribal identities being primitive and such individuals unwilling to undertake institutional services. The initial engagement with the community organisation and the translator helped him understand the field realities before the interview.

4) Given that the researcher is not trained in local languages and dialects (*Desia/Gadaba*), he undertook the following approach. The recorded interviews in *Desia/Gadaba* were first translated to *Hindi* by the translator. After that, the researcher translated these interviews from *Hindi* to *English* for analysis using NVivo. Each interview has been kept true to the original through verbatim and literal translations. Everyday discussions based on the interviews were undertaken with the translator, allowed a reflexive journal keeping for personal insights into the research process. These helped the researcher assimilate the cultural connotations of the interview transcripts to understand and clarify with the translator, thereby constructing an understanding of the social reality observed by the participants.

5) The field visits were planned during the day. The initial pilot interview was in the second village, where the selected respondent had undergone childbirth around 15 months prior and was not included in the interview sample. However, her responses and the interview exercise allowed the researcher to plan future undertakings. Usually, women and the elderly remain at home and lunch is already taken by mid-morning, as told by this respondent. The next meal is at sunset as dinner; it allowed the researcher to plan the interviews from mid-morning as more women would be

available post their morning chores and housekeeping. Some would have to go to the forested areas and be back by evening. Hence, they withdrew from the interviews.

Figure 4.2 : Pilot Interview

6) Most houses had a small courtyard within the household, and interviews were conducted either there or in a larger room. The researcher would sit behind the respondent, recording the interview while the translator conducted the interview.

Also, this positioning helped the researcher provide visual cues to the translator on the question sequence and skip if deemed unfit for discussion[77].

Although offered a chair in some households, the researcher chose to sit on the ground amidst the respondents to avoid translating a social hierarchy. When offered food or drinks or asked to name the child (considered a mark of respect), the researcher politely refused and wished their knowledge and practices as valuable to understanding how to improve the programme.

7) The researcher also attended the child while the interview was being undertaken so as not to distract the mother if another individual was unavailable within the household. No interview was pushed for, and since the field visits were planned, it was continued the following day when an individual had to attend to her livestock. It reinforced the understanding amongst the respondents that perhaps there is a genuine desire to understand the issues they faced, as conveyed to the translator later.

8) Village walks were undertaken on alternate days, and no interviews were conducted on two days. On those days, the researcher delivered health messages to the community organisation in one of the selected villages, which was not part of the sample villages. It was an important experience as a *dhai* whom the community organisation previously employed gave her insights (field diary).

[77] This was done more for the interviews conducted in *Desia* since the researcher had picked up some words over the course of the initial engagement and post interview discussions with the translator. This helped smoothen out the interview outline over time.

Figure 4.3 : *Dhai (Traditional Birth Attendant)*

9) Given the outbreak of CoVID-19, there was a fear of introducing the pandemic in the selected villages through the researcher since they had no reported cases during the previous 2-3 months. The villagers were reassured that the researcher was vaccinated, had remained in soft quarantine with the community organisation, and would remain masked when visiting households since the respondents' health were not risked. The village walks and informal conversations improved this dialogue, and more respondents agreed to enroll in the study vide a snowballing effect.

10) The researcher being from a clinical background, believed that institutional childbirths were beneficial and actively made an effort to 'bracket' (Tufford & Newman, 2012) his view during discussions with the translator post the interviews. It

helped him understand the depths of the issues faced by the respondents. Rather than feel emotionally depleted at the end of an interview due to their upsetting accounts of caregiver violence and difficulties in attaining services, he could lean into the discomfort of the participants' distress and not get emotionally embroiled. He channeled his abilities to understand better a new perspective that could benefit many other women. The researcher acknowledges that during his prior rural clinical experience, he was unaware of childbirth being so difficult in rural areas. While some difficult situations were similar, most of them differed from his experience. A principal among these was being exposed to clinical duties in rural areas before; the researcher had not directly seen or engaged with an individual account of caregiver violence which conflicted with his understanding of caregiving in rural areas.

4.15 Rigor

The appraisal of qualitative research framed in an interpretivist paradigm is gauged in terms of 'trustworthiness', which differs from the objectivity rigor of positivist research. I subject my qualitative research findings to rigor based on the four standard and time-tested factors laid out by Denzin & Lincoln (1994) and Lincoln & Guba (1985) to establish the trustworthiness of my qualitative research findings: **credibility, transferability, dependability, and confirmability,**

i) **Credibility (internal validity**), which refers to the confidence one can have in the truth of the findings, was established primarily through member

checking, reflexive field notes documentation and peer debriefing. These three methods allowed me to corroborate my research inferences.

Member checking involved telephonic conversations with the field translator, who assisted me throughout the interview process and with transcription and translation.

It was a time-consuming process of reading and re-reading the interview transcripts, followed by documenting any points for clarification to check the accuracy of my understanding of the participants' narratives which simultaneously led to a transition from data management to the data analysis stage. This exercise made me self-aware of slipping into any biases right from the earliest analysis stage while also helping me maintain reflexivity in writing the thesis.

As soon as the initial write-up of the analysis was started, I engaged a peer (doctoral advisor) with prior experience in qualitative health research specific to maternal and child health issues.

The peer examined my anonymized transcripts, methodology, and my primary ideas of analysis. Throughout the analysis, the peer checked for the coherence of findings and vague or inadequate descriptions while highlighting the areas that could be linked to a deeper and layered understanding of some of the narratives.

It was immensely useful as it helped me become more aware of the layered nature of my data and provided me with insights to start linking

the data and looping them together. It helped me reason out my ideas surrounding the narratives and increased my confidence to further the analysis while also helping me address my findings' confirmability.

The audit trail of my transcripts and brainstorming sessions with my peer, coupled with the reflexive journal writing, helped me state that the findings are the product of my qualitative research inquiry, devoid of any of my beliefs and bias.

ii) Furthermore, the aim of **transferability (external validity)** is to provide a 'thick description' which adds depth and richness to qualitative research findings so that other researchers can evaluate its potential to apply the findings from my research to their own.

The thick description of my results, 'saturated' with information on the research details, also includes the documentation of concordance and discordance with previous qualitative research studies conducted in this area.

Along with an in-depth and explicit description of the field context, the demographic and socioeconomic information of the participants where the fieldwork was conducted, the inclusion and exclusion criteria while choosing the respondents, and hindrances in terms of accessibility and language, have all been provided. These will help the reader align with my understanding of the field to reach a logical inference.

Likewise, I state that my findings bring to the forefront **representational transferability (generalization**) (Ritchie *et al.,* 2013, pp. 263–266), wherein the findings might be based on a smaller sample but are saturated with much information from the participants who share homogenous environmental, health systemic and social characteristics while also accounting for the varied behaviour of the health system workers. Irrespective of being a connecting link between vulnerable women and the health service delivery system, their conduct is determined by the larger societal structure they belong to, as seen from the results.

Such homogenous responses and common experiences act as a compass and point to the fact that the phenomenon studied in the research sample would similarly be found in the parent population concerning the views, experiences and beliefs shared by the participants.

iii)**Dependability (reliability)** which relates to **confirmability** of findings, i.e., if the outcome of the research is consistent, was best addressed by sharing records of the research process as participant selection, anonymized transcripts, and reflective notes at each stage of evidence with one of my doctoral supervisors who is an expert in the area of qualitative health research. They were also shared with a peer (doctoral supervisor) who helped me further tap into the nuances of the narrative description.

This process acted as an audit trail for them to assess my understanding of the participant's narratives. Here I must acknowledge that being an upper-caste

male researcher who was out in the fields researching marginalized tribal women, my supervisors correctly pointed out that the title of the thesis be changed to "childbirth" and not deliveries as it does not just reflect a 'medical-gaze' (Nagington *et al.,* 2021) but also brings to the forefront the 'male researcher gaze (Thomas, 2017),' i.e., the inability of the male researcher to be empathetic of the birthing process that women have to undergo with great difficulty.

It led to several discussions on the previously held title of the thesis and distinguished the terms' delivery' versus 'childbirth' or 'birthing'. It is because the thesis should direct the reader, the reasons for which are mentioned as a footnote in Chapter 1. I propose that the core undertaking of a welfare programme should be to improve the self-agency of the individual (women, in my case, using institutions for childbirth). It would require an appropriate examination of the processes that cause the equity difference being instrumental in understanding childbirth in Odisha.

At the same time, it should allow the reader to understand the complexity of the exerted institutional and societal norms, which intersects an individual self-agency across different socioeconomic parameters (Weik, 2009), which is missed in current evaluation frameworks.

4.16 Analysis

Given the outline of 'data saturation' amongst homogenous groups given by Guest, Bunce and Johnson (2006) and the needed choice of the qualitative sample size (Sandelowski, 1995), a thematic approach was chosen as the method of data analysis. Thematic coding (Braun & Clarke, 2006, 2014; Maguire & Delahunt, 2017) was undertaken in NVivo Version 20 (Release1.6.1). Prior to undertaking the analysis, all the interviews were de-identified.

The analysis was initiated with some *apriori* themes taken from the semi-structured interview schedules, following which additional themes evolved using an *iterative* method for coding the data during consecutive coding cycles. The researchers' codebook consisted of these *apriori* codes (themes). As new codes emerged, they were added during the successive coding cycles. The researcher chose the initial codes on what made the most analytic sense from the interview schedules. Further codes were generated based on code properties and refined using sub-codes. Thus, open coding was initially undertaken, followed by analytical coding to make for the themes (Saldaña, 2013). The researcher used an *iterative* process to draw themes from the data.

4.17 Results

The qualitative findings of this research helped unveil the plausible 'conversion factors' discussed in the previous chapter. I find them not to be independent per se for the uptake of institutional childbirth. A complex interplay exists between the

health service system and environment-related factors coupled with an inadequate support from the community health worker (ASHA), thereby causing inequities in the uptake of institutional childbirth in Odisha.

As discussed in the first chapter, the policy directives for maternal health in India have been on institutionalizing childbirth. It aimed to increase the proportion of women giving birth in health facilities, thereby reducing the associated maternal and infant mortality.

However, despite these efforts, in my field area, I found that most of the women interviewed chose a home birth. It made me question if this observed choice was independent of institutional, social, and cultural norms.

Although geographic isolation and the availability of an ambulance was a persistent issue, as seen through the emergent themes, they were not the only factors that prevented these tribal women from seeking institutional childbirth. These women gave different reasons for choosing a home birth, which showed the complex interplay of different processes that cause inequities (thereby fitting into my argument of multi-dimensional inequities) in the outcomes of institutional childbirth, which are discussed as themes below.

1. **Apathy and the lack of communication can be a major determinant in seeking institutional childbirth**

All the interviewed tribal[78] women mentioned a large gap between the Expected Date of Delivery (EDD) and the actual date when the birth happened. After the second trimester, when their pregnant bellies started showing, they were usually accompanied by their mothers-in-law or neighboring multiparous women to the health centre to meet the ASHA. The ASHA would then calculate the EDD based on the information provided by each woman about her last menstrual date.

As most of these women had low literacy, it is logical to understand that the calculated EDD was wrong in many cases. Although the EDD is never exact and has an error margin, community health workers are trained to calculate the EDD. The interviewed women mentioned during their interviews that there was no coherence between the calculated EDD and when they gave birth. Many women interviewed stated that they either went into labour too early (almost two to three months prior to their EDD) or late, mentioning their pregnancies lasting over ten months.

The importance of EDD lies in the fact that a precise due date helps in understanding if the baby is growing healthy in the mother's womb (if the duration of the pregnancy in months corroborates with the adequate pregnancy weight gain of the expectant mother) (Heckman, 2012; Heckman & Masterov, 2007). It helps the expectant mother and her family prepare in advance, especially when these pregnant

[78] It's important to mention that as the participant women were from the Schedule Tribe community, they stand socially (different culture and languages) and are economically marginalized which eventually compounds their disadvantaged status as they get geographically segregated as well (such as in my case a hard-to-reach, difficult terrains).

women are socioeconomically compromised and live in hard-to-reach geographies. Also, this raises significant concerns about the inadequacy of antenatal care for expectant mothers and new-borns, as most mothers mentioned that their children were born underweight and were extremely weak at birth[79].

"In most of the cases the pregnancy gets delayed and mostly in those women who choose to deliver at home. Such women undergo a lot of pain which can extend anytime between two days to more than a week. Many of the women are ignorant about the actual time of their delivery. The delivery date written in the card never matches with the actual date of delivery. In such a case, if ASHA and ANM didi come to help us women, then a lot of such pain that the pregnant women have to experience will be averted. The mother and child will also remain safe as the women aren't too educated in the village. Here the ASHA works role is completely missing which results in a lot of suffering else if she tells the woman her delivery date, she can be prepared and transferred to the hospital on time." (SB_PG1, age 24)

And;

"Most of the time the pregnancies get extremely delayed as most of the time the women remain at home for more than a week just waiting for the delivery to happen at home. There is absolutely no idea about how much time has passed and many a times they count the months incorrectly, wherein women complain that it has been more than ten months and that they have not delivered. The reason behind this is that most of the women are illiterate, so this is the responsibility of the ASHA worker and the ANM so that the women can prepare themselves. Also, the ASHA worker should coax them to go to the hospital and if they know the accurate time of the delivery then a private vehicle or a form of transportation can be made available in advance." (TK_PG1,age 27)

The accounts of these women relating their disdain towards undergoing institutional childbirth need to be understood in a continuum and not in a vacuum. It begins with the knowledge that they are pregnant during their first antenatal visit, as seen below.

[79] A point to be mentioned here is that although the thesis argues for the usage of 'childbirth' instead of 'deliveries', the respondents used the term 'delivery' in verbatim during the interviews. This shows how birthing is medicalized even in such a vulnerable population group by the terminology usage.

The tribal women often discussed their pregnancies with other women in their localities in these villages. The participant women in one of the villages felt that the other women could be relied upon more to understand their experience of the entire birthing process than the ASHA present there. They stated that the ASHA did not counsel them about the dietary practices, vaccination, and multivitamin schedules to be administered during pregnancy, l*et al.,*one the importance of the same.

Figure 4.4 : Interview Respondent (Participant Group I)

From the interviews, I found that the women were altogether unaware of their pregnancies due to the lack of trust between the women and the ASHA worker. It also was why they were often shy about revealing their pregnancies. Thus, these pregnant women did not only miss out on the initial and crucial time of getting antenatal care but also on timely support (from the ASHA worker) on the advice to carry the pregnancy to full term.

"when I was pregnant for four to five months, I did not take any vaccinations for myself since I was feeling shy. During the fifth month, I went to the ANM didi to take vaccines and medicines. The ANM didi get annoyed with me since I did not tell her on my pregnancy and that I had missed out on my previous vaccination doses. There are many women in the village who feel shy and hide their pregnancy and miss out on the vaccination. For this reason, the ANM didi and the ASHA worker should keep awareness programmes on vaccination and on how the pregnant women should convey about their pregnancies to them without feeling shy so that they can take vaccination on time." (LK_PG1,age 23)

And;

"…When ANM didi comes, not many pregnant women are aware that she has reached the village. During the first month of their pregnancy, the women feel embarrassed to tell the ANM didi that they are pregnant, and she also doesn't make any effort to make them comfortable so that they can speak to her. After a few months when the stomach starts showing, then they go to the Anganwadi and get themselves registered. By the time they reach the ANM didi, they are already seven months down the pregnancy and have already missed a few doses of vaccination. This is known to the ANM didi and the ASHA worker both, however they do not responsibly try to change the situation." (SB_PG1,age 24)

Also, attending antenatal care services helps establish trust between pregnant women and the ASHA (and the health system, in turn). It allows the ASHA to know about the evolving pregnancy-related requirements of each pregnant woman who seeks these services. The women referred to the ASHA as "ASHA Didi" (elder sister,

which is a mark of respect and trust), as the ASHA is often visualized as an interphase between the community and the health service system.

"We have an ASHA worker in the village who is never available for any woman when she is in labour. Whenever anyone goes to call her, she either sends in a message that she is in a meeting, or she is busy with her daily chores. When I was in labour my mother-in-law went to call the ASHA worker, however she was not at home. The biggest problem is that we are all illiterate in our family, and nobody knows anything about the hospital. We wish that if the ASHA didi would accompany us to the hospital, we would feel it to be of much help in such a difficult situation." (TK_PG1,age 27)

And;

"There is an ASHA worker in our village who is supposed to help pregnant women. Once the ANM didi comes to the village she is supposed to go to every house to get all the pregnant women together so that they all come to attend the awareness programme conducted for them. However, she calls a few and does not go to the others. The pregnant women who are left out do not receive any vaccines or medicines. Most of the women are anemic and weak here. The children born are also weak. In case pregnant women have any difficulties, the ASHA worker is responsible to help them. However, she doesn't do anything to help them out. If the ASHA worker works well, the suffering of the pregnant women in the village would be reduced." (SB_PG1,age 24)

And;

"There is an ASHA worker here but sometimes she helps pregnant women and most of the times she doesn't. She asks us to go to the hospital on our own." (BB_PG1,age 24)

Hence, the unempathetic astute behaviour of the ASHA (in one of the villages) made the entire process of seeking pregnancy-related help seem dubious and challenging to these expectant women there.

Figure 4.5 : Interview Respondent (Participant Group I)

The issue further intensifies and adds to the inequities when these women go into labour, as most often, it is an unexpected birth due to the discussed inconsistencies in the EDD. The family members or the other village women find it difficult to convince the ASHA (in one of the villages) to get her to help the woman in labour pain. The participant women shared many incidences wherein the ASHA bluntly refused to go and help the expectant women in labour.

"…ASHA worker informs the village women, but they do not see XXXXX didi for check-ups or vaccination doses and hide their pregnancy for five to six months until their pregnancy bump is visible. It is only after XXXXX didi tells them do they take proper medicines and vaccination. This is why they suffer from physical weakness and low haemoglobin levels. Some women do not even gain weight in nine months and give birth to babies with nutritional deficiency." (MK_PG1,age25)
And;

"It takes a long time for the women to deliver. I am illiterate and I am unable to read whatever is written in the MAMTA card. There are many women like me who cannot read and write and do not know our delivery dates. We do not know when we are pregnant and when we will deliver. So, it becomes more than ten months at times because the pregnancy date is calculated wrong at times." (LK_PG1,age 23)

2. Caste-based discrimination and the lack of trust in the ASHA worker act as an impediment to women seeking pregnancy-related services

On further probing to understand why the ASHA refuses to help these women when they are in labour, I understood that this stems from the socially prevailing caste dynamics that are extremely predominant in India's remote and rural areas.

The ASHA against whom the women expressed resentment belonged to a Scheduled Caste, whereas the participant women belonged to a Schedule Tribe.[80] The fact that the ASHA belonged to a so-called upper caste as compared to the tribal women and was unwilling to help these women while they were in labour could best be explained by relating it to the concept of 'untouchability'[81] and the notions of 'purity and

[80] In the Indian caste order, the Schedule Tribes are considered to be the most marginalized. The caste system is prevalent and rampant especially in the remote and rural areas and a lot of their daily routines including the jobs that they do, and culture revolves around their caste which cumulatively converts to the social oppression that they face. Irrespective of both the STs and SCs belonging to the lower caste category, this could be a case of discriminatory practices among the lower castes wherein a member identifies the self as a relatively so-called higher caste.

[81] Untouchability and caste dynamics are deep-rooted, and this reveals the layered manner in which people face caste-based discrimination.

impurity' associated with the caste system. Assisting a woman in labour would also require dealing with the woman's bodily fluids while also touching her. Touching the people who belong to the lowest class group, l*et* alone dealing with their bodily fluids, is still considered taboo in most regions of India.

As observed during my field visit, even the villages and settlements are segregated according to caste groups in rural areas. The house of the ASHA was further off from the houses of these tribal women. The participant women also mentioned that the ASHA used to selectively refuse to extend any help to the women belonging to the tribal community.

In contrast, on village health and nutrition days (VHND), wherein some awareness programs are held for expectant mothers, she would choose to go and inform pregnant women from her community or other community women in their village to attend these programs while never informing or inviting these tribal women. This segregated behaviour made these tribal mothers deeply distrusting of institutional services.

"...we do have an ASHA worker in our village who is supposed to create awareness amongst pregnant women. Whenever pregnant women are about to deliver; she is supposed to accompany them to the medical (sic) however this rarely occurs… She doesn't provide us any information about vaccinations, doesn't provide us any medicines. When the ANM comes to the village, she gathers a few women while the others are left out." (AD_PG1,age 28)

And;

"In our village there is an ASHA worker, and she is supposed to be making these pregnant women aware, however she doesn't do her job properly. … Many a time the ANM and the ASHA are unaware

as to how many women are pregnant in the village. Lots of women are left out in the village from seeking services from them. Finally, during the fifth or the sixth month when the stomach becomes big and starts showing is when the ANM or the ASHA cross paths with them is that they get to know this woman is pregnant. It is then that they give them some medicines, (*iron and folic acid supplements*) but the important time is already gone. Many women in our village suffer from anemia during their pregnancy. So, if the ASHA would be more proactively involved with the women in the village, this would not be the case. But the ASHA does not do a good job of things, although appointed by the government to help us pregnant women. She takes her entire salary, however, does not do her job. In the end the women loose faith in the medical system while also having to suffer from poor health for both the mother and the child. " (KM_PG1,age 28)

It was well-known among the tribal women that this ASHA would avoid being of any help after the onset of labour pains, as previously discussed; they would call the *Dhai* (traditional birth attendant) instead since they trusted her.

The *Dhai* was considered relatively reliable as she is usually an elderly woman with years of experience assisting in home-based normal births. However, she holds no formal training. In recent times, even the *Dhai* are less in number because of the government's effort to streamline institutional birth through a recognized Accredited Social Health Activist (ASHA), principally due to the *Dhai's* lack of formal recognition in the health system. The resultant issue this causes in the uptake of institutional childbirth in India is discussed as a footnote in the second chapter.

"… my mother-in-law herself is a *dhai* (traditional birth attendant). During my delivery she tried a lot that it should be done at home but then it could not happen. Thereafter I was sent to the medical (sic), where I underwent a surgery...If it is a home delivery then the *dhai* comes in with other elderly women to assist with the delivery." (AD_PG1,age 28)

And;

"In our village unlike before there are few elderly women (*dhai*, traditional birth attendants) who come and assist during delivery. The elderly women are the ones who usually assist us during the delivery. However, a few of them are dead whereas the others are old and busy in their work, so it becomes

difficult to rely on them to get the child delivered. So many women belongings to my era are forced to deliver at a hospital."(KM_PG1,age 28)

And;

"there is a *dhai* in our village and she comes and helps the women who deliver at home. I also delivered at home so the *dhai* and other women came and helped me. But these days dhai's are not much aware and in case they are unable to help then we have to go to the government hospital." (LK_PG1,age 23)

And;

"There is no one in the village who assists the woman when she is labour. The elderly women help. Else we have to go to the hospital. Now if one decides to give birth at home, I have seen of many women having to suffer a lot while they deliver." (SB_PG1,age 24)

3. Rather than being subjected to hostility and suffering, preference is given to home birthing

From the interviews, it also emerged that birthing[82] at home was a culturally accepted practice by the elderly. This finding shows consonance with the discussion on the 'fungibility principle' in Chapter 2, thus contributing to limiting the outcomes of the programme.

The reasons for such a choice, however, varied.

Quite a few women felt it was more comfortable and reliable than giving birth in a hospital. Another common belief, as understood from the interviews, is that an institutional childbirth service should only be undertaken if there is a complication in the birthing outcome and not otherwise.

This misconception gets further imbibed in the women from the tribal community due to the inadequate support services from the ASHA worker. The reluctance to

[82] The description was of the last birth experienced within the last year at the time of the interview.

seek hospital-based birthing was also because of the lack of support from the ASHA, whom these village women also see as a link between them (community) and the hospital (the public health service delivery system).

During their crucial times when the women were in labour, there were several instances (as previously shown) of the ASHA refusing to be of any help, thereby making them doubt the utility of institutional childbirth.

When asked during her interview about her reasons for avoiding such help, the ASHA stated that if they had training programmes, they would not be available to assist the woman during childbirth. These health workers (ASHA's and ANM) also stated that the pregnant women failed to confide in them while not disclosing their pregnancies until the end of the second trimester. They affirmed that it was not their fault if these women had difficult pregnancies.

The ASHA of the village against whom the women expressed resentment was also quick to mention that she was unsatisfied with her remuneration and that her job did not require her to work round the clock, but she could be available on call if needed.

"Sometimes because the women in the village do not understand the importance of regular check-ups. They do not inform me about their pregnancy till four-five months, neither do they tell me about their stomach pain." (SS_PG2)

And;

"However, pregnant women in the village do not go for regular check-ups until the fifth or sixth month; it is only in the later stage that they visit XXXXX didi leading to a delay in health check-ups. As a result, their babies do not get proper nourishment and experience weak growth. Further, the women do not gain adequate body weight, face lower haemoglobin levels, and feel weak and enervated. They should be made aware of the vaccines and medicines since they do not understand the importance of medicines for the mother's and child's life." (JDM_PG2)

They also stated that awareness should be created among the pregnant women of their villages to increase the uptake of antenatal services. However, this is one of the prime duties and responsibilities of the ASHAs to do so, along with help and support from the ANM, which was absent as seen.

Though, under many difficulties, when the woman in labour reached the hospital and gave birth, the ASHA would reach the hospital and claim her remuneration under the guise of having helped the expectant woman by encouraging institutional birth.

"There is an ASHA worker here but sometimes she helps pregnant women and most of the times she doesn't . She asks us to go to the hospital on our own. After we go to the hospital, she comes the next day signs and takes her payment, without bothering about anyone and leaves."(BB_PG1,age 24)

The ASHA's shrewd behaviour resulted in the lack of trust among the tribal village women while also being one of the important factors in impeding institutional childbirth.

A piece of contrasting evidence was that the ASHAs from the other village of whom the women spoke highly always used to assist the women in the uptake of institutional childbirth, never mentioning that the pregnant women were not disclosing their pregnancies to her. She mentions that not just antenatal care, but the women should receive adequate postnatal care too.

"We ask the women in our village to stay at "*Ma-Gruha*" (home for safe birthing) explaining that it enables them to use the ambulance facilities (back home) without any delay. Further, we also tell them that they get respite from work for four to five days if they stay at the maternity centre. Despite our repeated requests, some visit the centre, and others do not." (N_PG2)

She further said that the health officials need to consider and accommodate these women's food choices in these *Ma-Gruha's* if they wish to keep them for postnatal care, without which the women will not choose to give birth at the hospital and seek postnatal services after that.

"They do not feel full after eating a meal if they are fed with *sooji* (semolina) or *semiya* (vermicelli). They only like to be fed with what they like to eat. If we serve them according to the provision, they will return to their house, so we give them what they like for a meal." (N_PG2)

Thus, the difference in the trust building by the health workforce at the community level becomes a building reason whereby recipients prefer a home birth as against institutional childbirth.

4. Barriers of distance and inadequacy of transportation facilities

Most of my participant women, being unable to undergo birth at home (due to complications), revealed that they had their initial births in the government hospital situated at a distance of approximately 30 km from their villages. However, a noteworthy finding is that, for the subsequent births, almost all these women had chosen to undergo home births. Multiparous women who had previous experiences undergoing institutional childbirth showed no interest and dreaded the entire experience.

The only time the woman and her family decided to opt for institutional childbirth was when an emergency was anticipated in-home birth or if the woman was suffering for too long.

If she was in pain with delayed labour wherein an emergent complication related to labour was anticipated by the other village women or the *Dhai,* institutional services

were sought. In such situations, household decisions in undertaking such transfers caused long hours of delay in seeking timely institutional services.

"During my delivery, the birth attendant left the umbilical cord in my body after taking out the baby. It became complicated for me, but I survived the fatal accident. I suggest every pregnant woman go to the hospital to avoid a similar accident and refrain from childbirth at home." (SM_PG1,age 25)

Also, as these tribal areas are hilly terrains, the ambulance takes a long time to reach the woman's house to transfer her to the hospital when such services are sought. Additionally, there is always a network issue when connecting to the ambulance driver. Only one ambulance serves the entire block; it is already too late when the family members try to reach out to the ambulance for help. Considering all these challenges, the probability of the ambulance reaching the woman on time diminishes further.

"We had called in the ambulance, but it got very delayed and by the time we were waiting for it to reach us, I delivered at home." (AD_PG1, age 28)

Even the interviewed ASHAs expressed a similar opinion about the block having only a single ambulance resulting in a long waiting time for the pregnant woman. The ASHAs expressed that this was a prime reason why pregnant women chose home births, as there were many instances wherein the pregnant women had to suffer a lot of pain and discomfort till the ambulance arrived.

"As the expectant mothers wait for the ambulance, they go through the process of delivery with utmost labour pain under difficult conditions at home. Due to a long wait, many times the baby dies in the womb or passes stools making the delivery very complicated…whenever we telephone call the ambulance, it takes more than two hours to reach us." (JDM_PG2)

And;

"Whenever the family members of pregnant women in our village telephone/call the ambulance, it takes around two-three or even four hours. Sometimes, the ambulance does not even reach our place, because that single ambulance also goes to the nearby villages of XXXXX, so it gets late to reach the patient on time." (N_PG2)

Another important reason the ASHAs stated why the pregnant women and their families preferred home births was that if the ambulance could not be reached, then the private vehicles that would be booked charged exorbitant amounts.

"Whenever the village people make a call to the ambulance service, it is present in another village at that time. Due to long waiting hours, the delivery process happens at home. Our block must have around three to four ambulances to visit multiple villages and avoid unwanted delays. If the ambulance reaches the village swiftly with a phone call, it would be beneficial for pregnant women to visit the hospital directly and avoid childbirth at home. If people rent a vehicle on their own, they should be given a reimbursement because the hospital is 30 kms from here. The vehicle on hire charges 1000 rupees. The village people do not have that much money." (SS_PG2)

ASHAs from the other village also shared the same sentiment; however, as their village was still further off, the distance to the government hospital was more than 60kms, and the private vehicle charges were as high as 4000 rupees to transfer the pregnant woman. All the ASHAs believed that if a woman in labour is taken to the government facility through a private vehicle, there should be some reimbursement mechanisms for the amount paid.

"We need to hire the vehicle on rent. If someone has to go during an emergency, it becomes very difficult, because the people here are extremely poor, and XXXX is 60 kms away from this place. It takes 4000 rupees to reach there. In such cases, some people have money, while others do not…some go to the hospital, while others do not. If the government hospital is provided with the facility of more emergency ambulances, it would be beneficial to all pregnant women in the village." (SS_PG2)

Through the interviews, I found that pregnant women give birth while enduring immense suffering. If the birth got delayed and the woman's suffering worsened, then the other male members of her house and village would help arrange for private auto services. My interviews showed a reluctance to hire private vehicle services because of the huge expense of transporting the woman to the hospital. The lack of ability to pay for the private vehicles also acts as an impediment wherein the private vehicle drivers demand extra money for the woman to be transported to the hospital.[83]

"My delivery happened at home because we could not afford to visit the hospital. Those who cannot do it at home are sent to the hospital but the private vehicle driver charges at least thousand rupees to take us to the hospital and we can't afford so much. Also, there is no mobile network to call the government hospital ambulance and if we have to go to hospital to deliver, we need to rely on private vehicle. In many cases, the mother-in-law and the women in the village force the pregnant woman to deliver babies at home, citing their life instances...the expenses involved in travel discourage women from visiting the hospital and make them consider delivery at home instead. If she delivers at home properly then fine otherwise, she has to suffer a lot in the process. Child born is also usually weak and undernourished." (MK_PG1, age 25)

And;

"...it happens that after coming from the farmlands, the women deliver at home. This is also the reason why many women deliver at home although delivering at home is not an easy process because sometimes the delivery becomes difficult as there is no person who has skills to deliver. Once the suffering becomes too much and the woman can't bear anymore, they have to be taken to the hospital and all the while the women have (sic) to suffer. Again, one reason is that we have to pay a lot of money for private vehicle transportation as the driver charges thousand to twelve hundred rupees. How can poor people afford so much cost? In all this the woman has to undergo a lot of

[83] It is a significant amount for these people most of whom are seasonal workers and the minimum wage rate per day for unskilled workers in Odisha is around INR 315 as on 1.10.2021 (as per Notification No: 5639/LC, Bhubaneswar dated 02.11.2021). The cost of transportation is almost fifteen times this wage, this can give an idea on the costs involved as OOPE.

pain."(BDM_PG1, age 22)

Figure 4.6 : The road connecting the villages

Figure 4.7 : A motorcycle ambulance (driver shortages keep it parked)

5. **Cultural and ritualistic barriers coupled with inadequate antenatal care impedes institutional childbirth**

Through the interviews, I found the belief that birthing is a natural procedure (adding to the fungibility principle) and can be conducted at home with help from a few other village women to whom the pregnant mother feels closely bound. A prime reason for this reinforcement was the decision-making of the mothers-in-law who had undergone home births during their times, thereby playing a key role in deciding against institutional birth.

I found that the understanding of birthing as a natural process gets enmeshed within cultural beliefs, adherence to culturally appropriate practices to bring the foetus to a full term and inadequacies of the health system.

The practices predominantly followed, as emergent from the interviews, was the worship of "*Rahu* and *Ketu*" (the demon planets according to Hindu mythology), while the participants also mentioned goat and hen sacrifice as other common practices.

Usually, a *shaman* is called who performs the rituals known to help keep the evil eye off the pregnant woman and her foetus in the womb, and in return, the Shaman demands money and animal sacrifice.

"whenever we come to know that the woman is pregnant, she is taken to the village priest who performs a *pooja*. Irrespective of performing this pooja if something difficult or bad arises then they justify saying that *Rahu or Shani* (celestial influence) has cast an evil eye on the woman. Everyone in this village has a belief that once such a procedure is over, the pregnant woman will become better.

This is the reason why everyone diligently follows it. I really don't know if this procedure benefits anyone or not. However traditionally it has been going on. In fact, people rather choose to do than going to the hospital. Irrespective of conducting these rituals, I have seen that many women become anemic and extremely weak. None of this procedure involves any belief in medicine or vaccination. Women skip vaccination and medicines and many women become weak and anemic." (SB_PG1,age 24)

And;

"During my pregnancies, we have gone to the village priests, and this is a ritual which is traditionally followed by all pregnant women in the village. There is a strong belief amongst all of us that if we follow this ritual, then the mother and child would be protected throughout the pregnancy. However, this doesn't stand true in many cases as many women in spite of this suffer from miscarriages. Many women also become extremely weak throughout the pregnancy and the child born is extremely under nourished. Irrespective of that women choose ritual over vaccines as the belief is very strong in them." (BDM_PG1,age 22)

Some women also admitted that although these are traditional beliefs and questioned the dubious nature of these practices, many women's pregnancy outcomes have been bad irrespective of adhering to these practices. The women also mentioned that the new-borns they birthed and the other women who undergo childbirth are extremely weak and underweight most of the time.

They attribute this to the fact that most of the women in the village are anemic to their knowledge. It helped me realize that being anemic is an important reason for the undernourished children being born to them and adhering to these cultural rituals due to the fear of unknown negative consequences. Thereby, it reflects that the women were aware that they were anemic, and one of the factors was poor nutrition during pregnancy.

The women also questioned these dubious cultural practices as they saw severely undernourished children being born to mothers in their village. Thus, this interplay of social and cultural norms gets reinforced due to health systemic issues, thereby adding to the observed inequities in the uptake of institutional childbirth.

It is indicative of the layered nature of how it becomes challenging to overcome cultural practices to tether the attention of beneficiaries to comply with the healthcare system. A lack of adequate support and response from the community health workers results in a lack of trust in the medical system. Inadequate support and the fear of the pregnancy outcome make these people further vulnerable to the traps of traditional beliefs, which do little to salvage them from their difficulties.

Difficulty in reaching the hospital on time, absence of support from the ASHA worker, exorbitant transportation costs and a fear of hospital procedures were also cited as reasons for such deterrence in choosing institutional childbirth, as seen below.

6. **Health services delivery issues: lack of trust due to adverse experiences from caregivers**

Several reasons were stated as contributory to the avoidance of an institutional birth. All references, however, were for choosing a government facility for birthing. The situation becomes even more challenging for the pregnant woman when she reaches the government hospital to seek institutional childbirth if it involves complicated labour. The government hospital is the only nearest one, about 30 km from the first village.

All the women interviewed unanimously reported being mistreated once they reached the hospital and were admitted into the maternity ward. Irrespective of them being in immense distress due to the onset of labour, they reported that the nurses start verbally abusing them if they moan too loudly owing to labour pains. The doctors did not even come to check on them for anything while awaiting a normal birth.

The participants further revealed that they were stared down in disgust by almost all the staff at the government hospital, including the nurses and the doctors. It was not an unexpected response from the medical team at the government hospital as the staff behaviour at this hospital is infamous amongst the village women because of their prior interactions with this hospital.

It usually takes longer for a primigravida woman (the first time being pregnant) to give birth as the cervix takes time to dilate, and the woman could be in labour for about two hours or a little over two days. Their own experiences and the health-seeking experiences of the other woman in their village are exactly similar because of the unfriendly and abusive behaviour of the medical staff. Pregnant women opt for institutional services only during their first birth, wherein they might take too long to give birth at home, or when it is a complicated subsequent birth, to avoid the apathy and hostility they are subjected to in the government hospital.

Several respondents stated that the absence of bedside care in government institutions was a deterrent to choosing an institutional birth.

"I felt really bad because the government hospital doctor did not touch (sic) me, neither did the doctor check me. In government hospitals, if the doctors treat us well, then there also we can go and deliver." But then there (sic) doctors do not intend to work, and they do not intend to touch the patient. They immediately tell you that the delivery would not happen in the government hospital so that they reduce their workload and at the last moment they refer us to other hospitals. The doctors there ill-treat the patients and also there is no cleanliness in the hospital. The hospital stinks a lot. If the medical (sic) is good and the doctors treat us well, I am sure women will prefer to go to the hospital...I went to the government hospital and was there for only half an hour and for that short span of time I realized that the doctors do not treat the patients well at all. They are extremely impolite as if they are carrying a huge burden on themselves. They don't even touch the patient and just say that we can't conduct your delivery here and refer us to other medica (sic)." (AD_PG1,age 28)
And;

"... don't like the doctors in the government hospital as when I reach there, they did not even speak to us forget about touching and checking me. They straight away told me that my delivery would not be conducted in the hospital. If the government doctors start behaving well and polite with the pregnant women, most of them will prefer to go to the government hospital. In the government hospital the patients are ill-treated as the government doctors are impolite and they don't even speak to the patients. In case if we go to the government hospital, even before touching us they say to us the pregnant women cannot be delivered in the hospital. They do not even check us. They straight away tell us to go to XXXXXXXX hospital."(BDM_PG1,age 22)
And;

"Honestly speaking, I hate to go to the government hospital. Because even previously when I had got fever, I had gone to the hospital the doctors did not even check me and asked me to go to the XXXXXXX hospital."(LK_PG1,age 23)
And;

"The doctors and nurses from the government hospital do not behave properly with the village inhabitants. They do not speak to the patients properly; even before diagnosing the patient and conducting check-ups, they send us to XXXXX for delivery. They do not take care of the patients, so I do not prefer going to the hospital."(MK_PG1,age25)
And;

"And god forbid even in the worst-case scenario, no woman should go to the government hospital for her delivery. The doctors behave extremely bad and disrespectfully there and so do the sisters treat the patients badly."(SB_PG1,age 24)

A point which consistently came up during the interviews with participants is the consistent ill-treatment by the government hospital staff. An important point here is that in the violence perpetration, nurses also go on to discriminate and ill-treat the pregnant tribal women which they felt as being wrong. They emphasized on the nurses, since they were women themselves in this setting and were better situated to understand the more vulnerable social standing of these tribal women. The reasons are well identified by the participants and are discussed as strong reasons for avoiding facility usage. Many participants shared their bitter experiences of facing extreme emotional and physical torture. Their trauma was palpable when they vividly described the violent and atrocious nature of the medical team.

"They talk very rudely with us and while we are in labour if they get angry, they hit us on our legs and feet. That is why I just hate to go to the government hospital….when we go to the government hospital, we are ill-treated by the doctors. If the pregnant women cry out in pain, the doctors in the government hospital get really angry such that they start hitting the women on their feet and legs". (BB_PG1,age 24)

And;

"Women in the village also feel it is better to deliver at home as against the government hospitals as many of the women feel that many of the doctors ill-treat the patients. …delivered my initial three children at home where the *dhai* assisted me and she did not ill treat me. However, when I delivered the next two children in the hospital, they ill- treated me. It felt as they did not care about my existence. They started screaming on me while I was about to deliver and during that time, I felt that it was a big mistake. It would have been better if I had delivered at home itself. If these doctors would treat women well then, most women would choose to deliver at the hospital. But in the government hospital, the sisters are worse to behave as compared to the doctors." (MB_PG1,age 35)

And;

"In case we visit the government hospital the doctors do not touch us neither do they check us. They treat us very differently. When we are in labour and when we scream, they get very angry, and they start beating the woman who in labour. Somehow when the woman delivers in the government hospital, even post-delivery she is completely ignored." (SB_PG1,age 24)

7. Inadequate postnatal care

The women also expressed disgust about the overall unhygienic surrounding conditions in the government hospital. It is one of the most crucial reasons pregnant women and family members try their best to avoid institutional birth and exit it at the earliest if required. Thus, this shows the 'crowding out effect' discussed in Chapter 2.

"The government hospital is extremely filthy, and the bed stinks and it is impossible for a woman to lie down on that bed. The bathrooms stink and are in an extremely poor condition. This is the reason why women in the village are extremely scared of going to the hospital. However, if this was not the scenario, and the government hospital was better with more cleanliness and well-behaved doctors, more women in the village would be willing to go to the government hospital."(SB_PG1, age 24)

And;

"The hospital itself is extremely unclean such that it stinks and none of us like to be in the hospital."(BB_PG1, age 24)

The postnatal care in the government hospital was provided through the centre adjacent to the hospital called the '*Ma-Gruhas*' (safe birth homes).

The women unanimously complained about the extreme unhygienic conditions and stink they had to live through while being admitted to these centres. Food is supposed to be provided free to women patients under postnatal care. Although the women agreed to the food being provided, the quantity was extremely less and not to their taste. Additionally, they stated that the quality was severely compromised to

the extent that some women mentioned staying hungry rather than eating the food served. Moreover, the lack of caretakers at home to take care of their previous small children also contributed to these women opting out of seeking care services at the '*Ma-Gruha*'. However, most believed that women would prefer to seek '*Ma-Gruha*' postnatal services if the premises were maintained hygienically and had adequate food.

"I did not go to the *Ma-Gruha* as many women told me that it is extremely unhygienic and unclean. The food quality is very bad and that is why I chose to be at home. Neither did the ASHA coax me, nor did anyone from the *MaGruha* come for me. If it would be good, then I and other women would choose to be there. Sometimes it feels good that there is no mobile network in this village because sometimes they reach out to a woman who has delivered and keep her for a long time in the *Ma-Gruha* which is unhygienic and unclean. To avoid such a situation, it would be good if the hygiene and cleanliness of the *MaGruha* is maintained and people of the *Ma-Gruha* take care of the patients. In such a situation women would choose to go to a *MaGruha*." (KM_PG1,age 28)

And:

"There were a lot of mosquitoes there (at the *Ma-Gruha*). For lunch we got rice and vegetables and that too very less. We are used to eating full stomach. There is a lot of filth, and the bathroom is also unclean and that is why when I went to the *Ma-Gruha* it was not a good experience."(MB_PG1,age 35)

And;

"I didn't go to *Ma-Gruha* because I have two young ones who were very small and there was no one to take care of them. Also, I was not very keen to go there due to a lack of cleanliness. They take a lot of time to serve food where also the quality of food was very bad. As we are women from remote villages, we eat to our stomach full at nine o clock in the morning but there they only serve *chewda (dry salted rice flakes) or upma (rice porridge)*. So, in case if the food is good then we can go there." (AD_PG1,age 28)

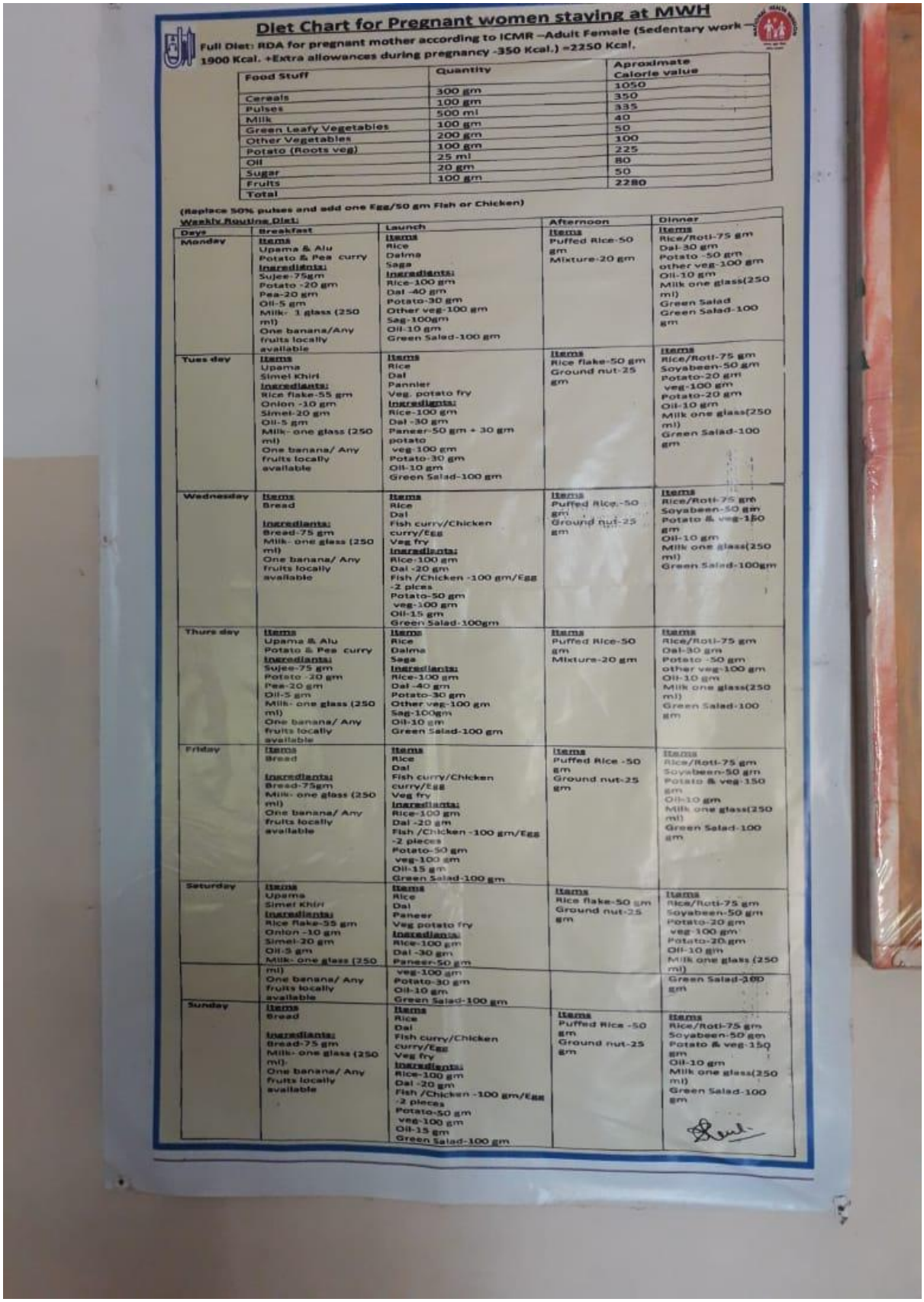
The ASHAs also overlooked sending the home-birthed women to '*Ma-Gruha*' as they had to accompany these women and the ASHAs ended up paying 100 rupees out of their own pockets as a travel cost with no assurance of reimbursement.

"When we take pregnant women to the hospital for delivery, we get paid for that work. However, when we take pregnant women to '*Ma-Gruha*' by auto, we do not receive any money for that work."

And;

"Since '*Ma-Gruha*' is 15 kms from here, I pay 100 rs. for auto as my travel expense accompanied by additional food charges if I happen to stay there for the entire day/duration. If I receive the money spent, I will happily take the women in the village to the centre."

Thus, postnatal care remains neglected as the women participants mention the reasons for unhygienic conditions in these centres. Even the ASHAs are not keen to refer the women to postnatal centres due to a lack of any incentive for this service while also having to pay towards the travel expenses while accompanying these women to postnatal centres.



Diet Chart for Pregnant women staying at MWH

Full Diet: RDA for pregnant mother according to ICMR –Adult Female (Sedentary work – 1900 Kcal. +Extra allowances during pregnancy -350 Kcal.) =2250 Kcal.

Food Stuff	Quantity	Aproximate Calorie value
Cereals	300 gm	1050
Pulses	100 gm	350
Milk	500 ml	335
Green Leafy Vegetables	100 gm	40
Other Vegetables	200 gm	50
Potato (Roots veg)	100 gm	100
Oil	25 ml	225
Sugar	20 gm	80
Fruits	100 gm	50
Total		2280

(Replace 50% pulses and add one Egg/50 gm Fish or Chicken)

Weekly Routine Diet:

Days	Breakfast	Launch	Afternoon	Dinner
Monday	Items Upama & Alu Potato & Pea curry Ingredients: Sujee-75gm Potato -20 gm Pea-20 gm Oil-5 gm Milk- 1 glass (250 ml) One banana/Any fruits locally available	Items Rice Dalma Saga Ingredients: Rice-100 gm Dal -40 gm Potato-30 gm Other veg-100 gm Sag-100gm Oil-10 gm Green Salad-100 gm	Items Puffed Rice-50 gm Mixture-20 gm	Items Rice/Roti-75 gm Dal-30 gm Potato -50 gm other veg-100 gm Oil-10 gm Milk one glass(250 ml) Green Salad Green Salad-100 gm
Tues day	Items Upama Simel Khiri Ingredients: Rice flake-55 gm Onion -10 gm Simel-20 gm Oil-5 gm Milk- one glass (250 ml) One banana/ Any fruits locally available	Items Rice Dal Pannier Veg. potato fry Ingredients: Rice-100 gm Dal -30 gm Paneer-50 gm + 30 gm potato veg-100 gm Potato-30 gm Oil-10 gm Green Salad-100 gm	Items Rice flake-50 gm Ground nut-25 gm	Items Rice/Roti-75 gm Soyabeen-50 gm Potato-20 gm veg-100 gm Potato-20 gm Oil-10 gm Milk one glass(250 ml) Green Salad-100 gm
Wednesday	Items Bread Ingredients: Bread-75 gm Milk- one glass (250 ml) One banana/ Any fruits locally available	Items Rice Dal Fish curry/Chicken curry/Egg Veg fry Ingredients: Rice-100 gm Dal -20 gm Fish /Chicken -100 gm/Egg -2 pices Potato-50 gm veg-100 gm Oil-15 gm Green Salad-100gm	Items Puffed Rice-50 gm Ground nut-25 gm	Items Rice/Roti-75 gm Soyabeen-50 gm Potato & veg-150 gm Oil-10 gm Milk one glass(250 ml) Green Salad-100gm
Thurs day	Items Upama & Alu Potato & Pea curry Ingredients: Sujee-75 gm Potato -20 gm Pea-20 gm Oil-5 gm Milk- one glass (250 ml) One banana/ Any fruits locally available	Items Rice Dalma Saga Ingredients: Rice-100 gm Dal -40 gm Potato-30 gm Other veg-100 gm Sag-100gm Oil-10 gm Green Salad-100 gm	Items Puffed Rice-50 gm Mixture-20 gm	Items Rice/Roti-75 gm Dal-30 gm Potato -50 gm other veg-100 gm Oil-10 gm Milk one glass(250 ml) Green Salad-100 gm
Friday	Items Bread Ingredients: Bread-75gm Milk- one glass (250 ml) One banana/ Any fruits locally available	Items Rice Dal Fish curry/Chicken curry/Egg Veg fry Ingredients: Rice-100 gm Dal -20 gm Fish /Chicken -100 gm/Egg -2 pieces Potato-50 gm veg-100 gm Oil-15 gm Green Salad-100 gm	Items Puffed Rice -50 gm Ground nut-25 gm	Items Rice/Roti-75 gm Soyabeen-50 gm Potato & veg-150 gm Oil-10 gm Milk one glass(250 ml) Green Salad-100 gm
Saturday	Items Upama Simel Khiri Ingredients: Rice flake-55 gm Onion -10 gm Simel-20 gm Oil-5 gm Milk- one glass (250 ml) One banana/ Any fruits locally available	Items Rice Dal Paneer Veg potato fry Ingredients: Rice-100 gm Dal -30 gm Paneer-50 gm veg-100 gm Potato-30 gm Oil-10 gm Green Salad-100 gm	Items Rice flake-50 gm Ground nut-25 gm	Items Rice/Roti-75 gm Soyabeen-50 gm Potato-20 gm veg-100 gm Potato-20 gm Oil-10 gm Milk one glass (250 ml) Green Salad-100 gm
Sunday	Items Bread Ingredients: Bread-75 gm Milk- one glass (250 ml) One banana/ Any fruits locally available	Items Rice Dal Fish curry/Chicken curry/Egg Veg fry Ingredients: Rice-100 gm Dal -20 gm Fish /Chicken -100 gm/Egg -2 pieces Potato-50 gm veg-100 gm Oil-15 gm Green Salad-100 gm	Items Puffed Rice -50 gm Ground nut-25 gm	Items Rice/Roti-75 gm Soyabeen-50 gm Potato & veg-150 gm Oil-10 gm Milk one glass(250 ml) Green Salad-100 gm

Figure 4.8 : Recommended Dietary Chart at the *Ma-Gruha*

Figure 4.9 : *Ma-Gruha* (*written in Odia*)

8. Infamy surrounding the public hospital and the scare of caesarean section

Moreover, as the infamy of the government hospital staff behaviour is commonly discussed among the village woman, the mothers-in-law and the senior elderly woman also advise the pregnant woman and the family members against seeking institutional childbirth. Furthermore, there was a common sentiment among the

village woman, also propagated by the elderly women, that if they sought institutional childbirths, their "stomachs would be cut open" to give birth to the baby.

All the participants dreaded facing such experiences in a hospital-based setting. Many women responded on fears of a caesarean birth and considered an institutional birth synonymous with a caesarean section.

"All women are scared that if they go to the medical (sic), they will have to undergo an operation and the doctor will cut open the stomach (sic). Due to this scare women prefer to deliver at home." (AD_PG1,age 28)

And;

"...even today quite a few women choose to deliver at home because they are extremely scared that if they go to the hospital the doctor will cut open their stomach to deliver the baby. The women are scared to reach the hospital due to such reasons because it has become a common practice that we hear that the one who goes to the hospital always undergoes a surgical delivery." (BDM_PG1, age 22)

Additionally, new evidence arose from the consideration of caesareans as being unnecessary and adding to the cost burden of an institutional birth.

"Most of the women do prefer to deliver at home because they think that if they go to the medical (sic), they will have to undergo a surgery post which they will have to suffer a lot. All women believe that they cut open the stomach to deliver the child and this makes them deliver at home. So, the elderly women emphasize that they have all delivered at home and it wasn't too difficult for them when they did. They still insist that their daughter in laws should deliver at home to avoid going through the suffering of cutting open the stomach (sic) to deliver the child. This they believe would make them unable to participate in domestic chores for a longer time. Also, as a government hospital does not have adequate facilities it makes sense to deliver at home. People do not have much money to spend on deliveries and at the same time to avoid surgical deliveries and to choose normal (home based) deliveries."(KM_PG1,age 28)

And;

"I faced many difficulties in the delivery procedure. Although I wished to deliver at the government hospital, my family members did not prefer visiting the hospital for fear of caesarean section and high expenses for the procedure. Whenever pregnant women go to the hospital these days, they have to undergo a c-section operation. Pregnant women get incisions in their abdomen and waste so much money these days. It would be a normal delivery procedure if they give birth at home. Otherwise, there is a fear of getting a caesarean section in the hospital. So, they prefer childbirth at home." (MK_PG1,age 25)

And;

"The scare being that once the pregnant woman goes to the hospital her stomach would be immediately cut open through surgery. There are lots of women who have undergone surgical delivery, and this is why a lot of women are scared of undergoing a surgical delivery." (SB_PG1,age 24)

All the interviewed ASHAs unanimously mentioned that the women were scared of undergoing 'caesarean' childbirths and preferred home births. Although the ASHA whom her village women praised stated that if adequate guidance and support is provided, the women choose hospital births. However, long waiting times for the government hospital ambulance service dissuaded them from seeking hospital services for childbirth.

Still women are afraid to go to the hospital for fear of caesarean section surgical procedure during delivery.(JDM_PG2)

And;

The village women prefer going to the hospital these days; only a few prefer childbirth at home. Many of them also fear going to the hospital because they are scared of getting a caesarean delivery. They fear that this procedure will cost them a large sum of money. Only a few women who give childbirth at home, as there are difficulties like delays in ambulance services, erratic telephone network, and long waiting hours.(N_PG2)

9. Empathetic behaviour of medical staff influences uptake of institutional childbirth

Some women also mentioned being referred to a mission hospital (faith based charitable hospital) in the vicinity of the government hospital when the government hospital staff felt that they could not handle the case at their levels. The participant women spoke highly about the behaviour of the nurses and doctors in the mission hospital. All the women praised the staff there while elaborating on their well-mannered behaviour and empathetic attitude towards pregnant women undergoing labour pains and their family members. They described the hospital environment as being extremely hygienic. The staff was known to be gentle enough right from the beginning, wherein they spoke empathetically and assured the pregnant woman of her and her new-borns safety.

If the pregnant women cry out in pain, the doctors in the government hospital get really angry such that they start hitting the women on their feet and legs. That is why the best thing we do is go to XXXXXXXX hospital. The doctors in XXXXXXXX hospital visit the pregnant woman and child many a times. If the government doctors would learn something from these doctors, then a lot of poor village women would benefit. (BB_PG1,age 24)

And;

I delivered in the XXXXXXXX medical and there the doctor and the sister took good care of me and the child. However, I am very well aware that if I would deliver in the government hospital the doctors would have ill-treated me. As me and my husband are a bit more educated and aware, my husband had told me that he would take me to XXXXXXXX. I personally like XXXXXXXX and ask women to go there as they pay a lot of attention to the mother and the child even post-delivery. Even post-delivery they visit us many a times which shows us that they care. (KM_PG1,age 28)

And;

The village people go to the government hospital thinking it would cost them less, but they are sent to XXXXXX hospital instead. Therefore, people go to XXXXXX directly, and their doctors treat the patients with kindness and care during check-ups. If the doctors from the government hospital treated their patients with kindness, the village women would have visited the hospital. (SM_PG1,age 25)

The woman reported that the mission hospital nurses and doctors always gave utmost attention to fulfilling their caring needs and their newborns. The overall atmosphere was centric on caregiving, and the women seemed extremely satisfied with the medical staff at this hospital.

Figure 4.10 : The Mission Hospital

10. Issues about CCT schemes

Several factors related to the CCT schemes operating in the state, namely, the JSY and MAMATA, also stemmed up as being of major dissatisfaction during the

interview discussions with the participant women. Most women complained of not receiving cash transfers through these schemes or receiving only partial transfers. Also, if they had opted for institutional childbirth, the overall cost of hiring the private transportation services, loss of daily wages for the spouse, food and other expenses were stated to be much beyond the actual cash incentives received through these schemes. Thus, the financial incentives alone were not conducive to propagating an uptake of institutional childbirths.

"I have received money from MAMTA card; I am not aware of Janani Suraksha Yojana. We are underprivileged; The hospital is 15 kms from here, and it takes 1000 rupees. to reach the location. We could not afford it at that time, so my family members told me to give birth at home." (SM_PG1,age 25)

And:

"I received five thousand rupees during my first delivery and during my second one I got some amount although not full. Also, in case if we rent a vehicle to reach the hospital, we do not get any money for that as well. Even post getting myself operated (for family planning), the government gives some money, but I have not got any money." (LK_PG1,age 23)

And;

I did not get any benefits from any scheme as my first three children were born at home. The next two children were born in the hospital, yet I did not benefit from any of the schemes, and I did not get any money. If I would get some money, I would have had some nutritious food. The money would have been beneficial to my children as well as they are very under nourished.(MB_PG1,age 35)

And;

I did not get any benefit as I have a government job; however, I have heard that some other women have availed services under MAMTA card. I personally feel that women should be made aware more about these schemes, especially about the importance of such schemes. (KM_PG1,age 28)

About the MAMATA scheme, the ASHAs believed that the pregnant women failed to get cash incentives as often they did not link their AADHAR card (a government-approved unique identification number linked to a bank account) with the bank account. Without it, the money transfer does not take place. They also further said that even after undergoing family planning surgeries, they would not get any cash incentives.

"Everyone receives money with MAMTA card. However, it becomes difficult for those who do not link their Aadhar card or any other identification document with MAMTA passbook to get the money transferred to their account. If the women in the village link their cards correctly, they will not experience any difficulty." (JDM_PG2)

And;

"Everyone receives money with MAMTA card. However, it becomes difficult for those who do not link their Aadhar card with MAMTA passbook to transfer the money to their account. Under family operation, while some receive the amount, others do not. In such cases, they complain to us, but we cannot take any action for such issues since the amount needs to be credited to their respective accounts. If they receive the reimbursement on time, it will benefit them, and they might seek hospital deliveries." (N_PG2)

Although, this impediment can be resolved if the ASHAs conduct antenatal care and guide these village women and their families to get their AADHAR linked to their bank accounts for easy transfer of cash incentives. The ASHAs also stated that if there was a timely transfer of cash incentives to these women's accounts, it could motivate them to seek institutional childbirth.

From the themes mentioned above, I find that my study findings have similarities with the literature, as evidenced below.

In their work, Sunil *et al.,*(2006) discussed how the utilization of healthcare services is much dependent on the visits of the healthcare worker. Thus, the apathy of the ASHA (Vellakkal, Reddy, *et al.,* 2017), as observed, is similar to this evidence and would not help improve the programme's outcomes.

Another important finding is that the respondents felt that the enforcement of 'power' over them occurs primarily due to their more vulnerable social standing and is similar to those found in other low and middle-income settings (Parashar *et al.,* 2020), whereby power asymmetries influence the outcomes of a programme.

The discussion on the hierarchy of caregivers and their perceptions of their social standing as rightful of their ability to be disrespectful towards patients finds similarities with that of Afulani *et al.,*2020;Freedman & Kruk, 2014; Kruk *et al.,* 2008, 2009.

Also, the participants' identification of the reasons for avoiding facility usage finds similarities with those of Bhattacharya & Sundari Ravindran, (2018); G. Sen, Reddy, *et al.,*(2018); G. Sen & Iyer,(2012);Mayra *et al.,*(2021). The findings of women's response to the fears of caesarean birth and considering an institutional birth as being synonymous with a caesarean section find similarities with that of Bohren *et al.,*(2014); Neuman *et al.,*(2014); Parkhurst & Rahman,(2007). Additionally, the findings on the transportation issues finds similarities with those of De Costa *et al.,*(2009).

Furthermore, the evidence on the choice of a hospital only when a previous birth had complications or if adequate support for a home birth was unavailable finds similarities with that of Simkhada *et al.,* 2008; Stephenson *et al.,* 2006. The evidence whereby an institutional service should only be undertaken if there is a complication in the birthing outcome and not otherwise finds similarities with that of Contractor *et al.,*(2018);Hossain *et al.,*(2022).

4.18 Discussion: Can ASHAs (Community Health Worker) support services help make institutional childbirths more equitable?

In most cases, the interviewed women preferred home births over institutional childbirth either because of previous episodes of a lack of primary help from the ASHA or their own experiences of facing neglect and abuse from the caregivers of the health service birth facility. On the contrary, it remains important to note here that, as my participants belonged to adjacent but two different villages, where each village has their own ASHA.

Some of the participants from the next village spoke very highly of the ASHA in their village. This ASHA was a tribal woman who lived amongst them and was familiar with most of the women and their family situations. They mentioned that she used to engage in formal and informal talks about antenatal care proactively and would urge them to report their pregnancies at the earliest stage while also emphasizing the need for early antenatal care. She was also very proactive in informing all the

expectant mothers to attend the awareness programs about the importance of antenatal care and vaccines.

Most of the women interviewed from this village believed that the ASHA belonging to their community and their village counselled the expectant mothers and explained any potential complications for which referral could be required. She was also well aware of the rude and apathetic behaviour of the medical team wherein the referrals were made. However, she would ask the women to overlook the behaviour while emphasizing the need to minimize pregnancy-related complications. The expectant mother and the families were still reluctant to seek institutional birth, but the interviewed women further mentioned that this ASHA would always accompany the pregnant women right from the onset of labour until they got discharged from the hospital.

The ASHA worker helps us during times of need. She always informs us when XXXXXX didi visits the village. She accompanies us during our delivery date. Further, she also insists that we take our medicines and supplements on time. She is always available to offer her services for assistance. (SM_PG1,age 25)

And;

We have an ASHA worker in our village, and she helps pregnant women when they go into labour. She accompanies pregnant women to the hospital and also stays with them in case it is required…. she is very helpful. (LK_PG1,age 23)

And;

ASHA worker and XXXXX didi take care of pregnant women and help us during our delivery time. ASHA worker tells us about medicines and vaccines. She accompanies us to the hospital during our delivery date. She stays with us until the delivery procedure is complete. She helps us a lot. (MK_PG1,age 25)

The mere presence of a person from their community who was constantly by their side during such difficult times seemed to be a heartening experience for them. Thus, support extended by the community health worker and empathy and care extended by the hospital staff can go a long way in these women seeking hospital-based childbirth. It could be a means of reducing the multi-dimensional inequities in the uptake of institutional childbirth.

Figure 4.11: ASHA (Participant Group II discussing issues with institutional childbirth)

4.19 Conclusion

In this chapter, I find a complex interplay between the institutional childbirth facility-related discomforts due to the caregiver's violence, insults meted out to these women and their families, and the lack of appropriate food and facilities at the health service institutions. These factors thus made institutional childbirth seeking a challenging exercise for these women. The study findings also brought to the forefront many interrelated socio-economic, cultural, and, most importantly, health systemic issues that need attention to improve outcomes of maternal health programmes.

Without considering them, the cash incentive (financial equity dimensions) under CCT schemes would not suffice to increase institutional childbirth, especially for the most vulnerable women who need it. These findings make it important to address the varied inequity dimensions in programme evaluations, as discussed previously in Chapter 2.

To summarize the results, I find a complex interaction between the larger macro (health systemic) and meso-micro (cultural and societal) processes which determine the outcomes (Makleff *et al.,* 2020; Smith & Petticrew, 2010) of the programme. Without such a contextual understanding through such additional evidence, evaluations of different maternal health programmes would be limited.

The study helped improve my understanding of the processes that contribute to 'multi-dimensional' inequities, and I suggest their existence as issues of 'endogeneity'

that often limit empirical analysis outcomes. Since health systems are embedded within societal systems, they can continue to function as systems of oppression (Young *et al.,* 2020) and thus contribute to 'multi-dimensional inequities' in institutional childbirth. Accounting for them through such a qualitative approach could improve these programme's empirics and evaluations, as seen in the following chapter through the suggested equity evaluation framework.

Chapter 5: Conclusion

Chapter Synopsis

As seen from the previous chapters, I find that questions of inequity continue to remain unaddressed in the JSY programme evaluation despite the many years of its existence. Drawing from the empirical and qualitative results, the mainstay of this chapter is a discussion of the complementarity of the findings to address my fourth research objective. After that, I suggest a critical equity analysis framework that could improve the programme's process evaluations; the chapter then discusses the engagement of Development Studies and Public Health and how the two disciplines helped build upon this interdisciplinary research to answer my query.

As an outline, my framework considers the processes that contribute to these 'multi-dimensional inequities' through a methodological undertaking of intersectionality theory (Crenshaw, 1989; Green, Evans & Subramanian, 2017). The framework draws from frameworks in implementation science specific to equity inclusion and its issues (O'Neill *et al.*, 2014; WHO, 2016; Eslava-Schmalbach *et al.*, 2019) and builds upon the contributions of Tapager *et al.,* (2022). Following it in the chapter, I advocate for the 'operationalization' of the multi-dimensional nature of 'inequity'. It could reduce the inherent biases in evaluation frameworks, specifically for evaluating RCH (Reproductive and Child Health) programmes such as the JSY.

Conclusions from the thesis, and the way forward, including limitations of the thesis and evoking a need for understanding contextual equity dimensions for programme evaluation, are discussed in the end.

5.1Introduction

As seen from the empirical and qualitative results of the previous chapters, my focus here would be to coalesce their interpretations. The reasoning for this, I would attribute to Ravindran & Gaitonde (2017, chap. 3).

In their chapter, the authors have gone on to state that through their literature review, they found an absence in the understanding of the pathways of what contributes to inequities in health programmes in India. They also state that these pathways are not described well enough for the reader to be engaged and recognize the intricacies involved in understanding inequity. Through my thesis, I concur that using datasets alone has limitations on understanding inequity as the pathways are not well understood (as previously explained in Chapter 2). The limits show a dissonance on what could better the interpretations of a programme evaluation exercise against what is observed, whereby only a limited picture of the problem gets presented. The findings of the 4th Chapter show the intricacies of the various contributory 'social processes', institutions, and norms, in turn explaining the plausible pathways of inequity.

Another aspect which is brought to the forefront by Ravindran & Gaitonde is that the addressing of Public Health research in India is often dependent on the parent discipline through which the approach is undertaken whereby the authors state that such disciplinary researchers often work in their own silo's (Ravindran & Gaitonde, 2017, p. 3). They also state that the presentation of works in economics and public

health rarely have had interactions, but their outcomes inadvertently contribute to health policy development in India (Ravindran & Gaitonde, 2017). It shows a lack of interdisciplinarity in research to understand better and tackle the inequity problem.

Given this discussion, it became pertinent for me to draw the engagement of the disciplines of Development Studies and Public Health (specific to HSR in my case) to understand if there could be ways in which maternal health inequities are understood for bettering a policy prescription. The contributions of these disciplines become even more relevant since the outcomes of economic liberalization in India (as discussed in Chapter 1) shows an unequal distribution of welfare programme among the populace. Thus, I believe there is a need to draw from different disciplines to address the larger problem under my purview.

Here I argue that the 'epistemic boundaries' of a discipline often limit the inquiry of such problems of health and development, which, when overcome by way of interdisciplinary research, can contribute to better policy formulation.

Therefore, it becomes instrumental in using a theoretical approach to help bridge the abovementioned problems. Hankivsky *et al.*,(2017) indicate how the inclusion of intersectionality as an approach could be well fitting to answer the policy implications of health research, which I use in my work.

In the thesis, I have used both a 'theoretical' and 'methodological' undertaking of 'intersectionality theory' to best use methods and theory to address my inequity query. It also required me to utilize the learnings of Development Studies since I

found (from the qualitative study) that focusing on health systems alone could limit an understanding of maternal health inequity.

Concurrently, this also makes for the problem whereby a simplistic reading of society limits the understanding of how programmes work against the expected reality. It becomes even more important when the heterogeneity of the Indian caste system might become interlaced with the health system and contributes toward a more complex reading of health inequity,[84] as observed in Chapter 4. Thus, in my case, my argument for a 'multi-dimensional inequity' invokes health systems and other systems to determine the limitations of the observed health outcomes.

Such a complex intertwining of these varied social phenomena, institutions and norms often determines programmatic outcomes. In turn, they make for the need to understand the context-specific outcomes of a programme. The criticality[85] of addressing these as a research gap is amiss in the Indian context, as evident in the literature.

It raises the question of how interdisciplinary research is thought of in principle as against its practice. Choi & Pak (2006) have shown that interdisciplinary research is often used in a very lay term independent of the true need to understand the complexity of problems. Especially in policy formulation (more so for health policy),

[84] A good reading for such an existence is (Jeffery & Jeffery, 2010) whereby the authors show an intricate interplay on how such meso level family and societal dynamics have an outplay on programme specific health outcomes.

[85] Marmot (Michael Marmot, 2000) shows why this is a need for a more critical inquiry rather than commenting on what is an expected observation.

this should not depend on a lone 'technocentric approach' (White, 2017) or weighing one methodological approach against the other. The need for this duality is often lost in doctoral research, where the limitations of a doctoral programme make for the loss of scientific rigor (Bosch, 2018) by way of undertakings which become more technical than knowledge making.

Thus, having learnt from the above in the following section, I would address my final objective in constructing a critical multi-dimensional inequity evaluation framework to conclude the 'prescription' of the research undertakings. The utilization of it could help in parameterizing its contributory constructs later and, in turn, could help address inequity in maternal health outcomes. The section after that would discuss the conclusions of the thesis, its limitations, and the way forward.

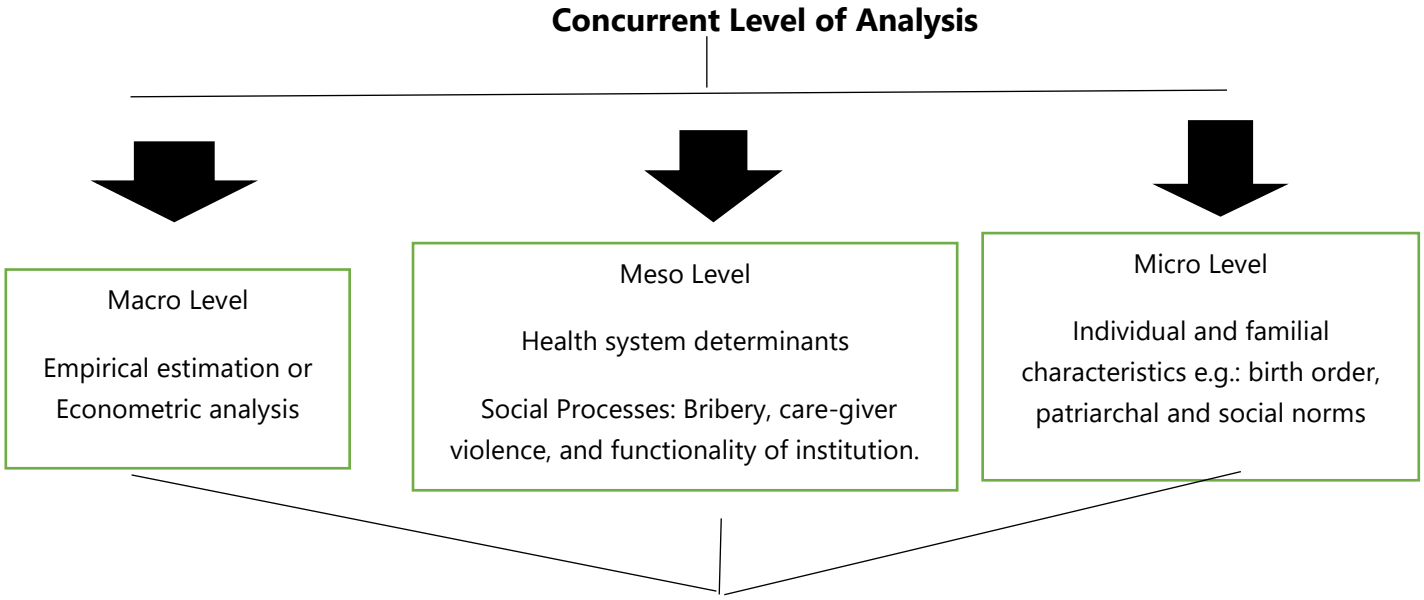
5.2 Critical Equity evaluation framework

This section will address my final objective of constructing an equity evaluation framework as a conclusion to my research.

As an outline, my framework considers the 'processes' observed in Chapter 4 that contribute to these 'multi-dimensional inequities' through a methodological undertaking of intersectionality theory (Crenshaw, 1989; Green, Evans & Subramanian, 2017). The framework draws from frameworks in implementation science specific to equity inclusion and its issues (O'Neill *et al.*, 2014; WHO, 2016; Eslava-Schmalbach *et al.*, 2019) and builds upon the contributions of Tapager *et al.,* (2022). The suggested critical evaluation framework (Figure 5.1) could be uptaken to

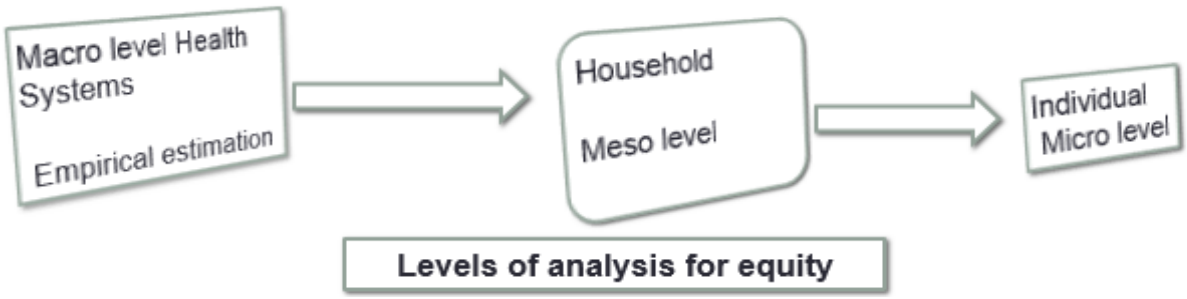
address such multi-dimensional inequity embedded in the 'pragmatic paradigm'. It could demonstrate how the programme could work to address inequity. Likewise, it shows if there are ways other than financial incentivization to help improve the expected programmatic outcomes. The evidence of the importance of these processes needs to come from all levels, as seen in the empirical and qualitative studies.

Figure 5.1 Suggested Critical Evaluation Framework for Multi-dimensional equity Analysis in the Janani Suraksha Yojana



Supply-side Inequity	Demand-side Inequity
• *Functionality of Institutions:* Presence or absence of bribery for services Presence or absence of caregiver violence • *Accessibility of institutions* • *Availability of transportation* • *Disability friendliness* • *Nature of work of health work force (Permanent versus contractual, salary structure, disbursement of benefits)*	• *Cultural understanding of birth* • *Accepted birth practices* • *Trust and acceptability of institution for availing maternal service* • *Community audit and dialogue determining the functionality of the institution*
Horizontal Inequity	Vertical Inequity
• *Residence (type, place)* • *Socio Economic status such as class, caste, religion (as indicative of vulnerability)*	• *Familial power relations* • *Order of birth for birth planning* • *Where the individual stand within the class, caste, and religious determinants of inequity* *(focus on the more vulnerable within them: hence parameterize the constructs for a measure of equity)*

Figure 5.2: Approach to undertaking an analysis of multi-dimensional inequity



5.2.1 Using the Critical Equity evaluation framework

Step1

As shown in Fig 5.2, the macro-level empirical data would show if the variation in the outcomes need to be complemented by understanding the meso or micro-level processes that contribute to them, thereby enabling a better comprehension of the dimensions of inequity in the programmatic outcomes. These, therefore, would need further enquiry through different methods.

Given that there is no conclusive advantage of using a singular method, theoretical advantages can be achieved by utilizing a mixed-method approach to formulating the constructs of a 'multi-dimensional inequity' as found in the thesis. My suggested framework accounts for this by using different methods at varying levels through an understanding of intersectionality theory. The empirical estimates of the determinants of institutional childbirth, such as those in Chapter 2, enabled a 'macro-level' understanding of the limitations of a health system evaluation by being

dependent only on a unidimensional empirical inquiry for the question of inequity (Richardson *et al.,* 2001). Thus, using other methods helped invoke the contributions of other systems at other levels to help better 'multi-dimensional inequity' as a construct.

My empirical findings also suggested that public health programmes such as the JSY have an inherent equity-efficiency trade-off in their design, which, in turn, needs to inform the programme evaluation framework. I assume this trade-off can be addressed by focussing on inequity as a measurable construct that this framework can help parameterize. Thus, drawing from differences in empircal estimates, one could focus on whether the observed differences in a particular socioeconomic group could be causative of the existent inequities and whether there be ways to address them.

Step 2

The power relations between the individual, the household, the health system and other systems in a specified population group need to be considered adequately, which also can be accounted for by this framework. The qualitative findings have enabled me to make context-specific contributions to multi-dimensional inequity and allow for their existence beyond a description by prescribing the ones which could be observed. Using the evaluation framework suggested from my drawing of intersectionality theory, the implicit power hierarchies relevant to the JSY programme can also be addressed. These questions often remain unanswered when evaluations

depend on a 'lone' unidimensional macroeconomic, econometric analysis. Given that, sometimes, these issues of marginalization are not measured, I believe this is the best way to begin the investigation of multi-dimensional inequity in a programme evaluation.

Another basic outline of my suggested framework (Figure 5.1) posits my questioning of the programme's work as it would be essential if one is to delve wholly into the programme's complexity.

What I put forward is that given that there is a push towards data-centric decision-making in policy circles (Kitchin,2014), a contextual understanding needs to surface and is argued for by me. It can be achieved by considering programmes as complex systems (Braithwaite, Churruca, *et al.,* 2018; Braithwaite, Clay-Williams, *et al.,* 2018)**,** which would require an 'emergent causality' (Greenhalgh & Papoutsi, 2018) to understand inequity in process evaluations thereby enabling a better comprehension of the working of the programme. It would also help determine whether these help address the question of health inequity.

Thus the 'Occam's Razor' referred to by Das (2017) might not be the best way to understand the complexity involved in a programme's evaluation, especially when health systems are inherently complex (Marchal *et al.,* 2009). These additional levels of evidence could help reduce the inherent biases in process evaluations and make for better policy considerations that answer equity questions.

The importance of such frameworks as mine is that they can go on to help in the development of measures (Arnulf,2014 in Damschroeder, 2020). My work could contribute to an evaluation theory (Proctor *et al.,* 2011) which can help improve programme evaluation. It can also help understand the complexity embedded in the intervention (in my case, the uptake of institutional childbirth) due to the unique circumstances under which it is delivered. Although interventions need not be generically complex, the aforementioned complex pathways can lead to interventions having both simple and complex pathways of explanations (Petticrew, 2011; Squires *et al.,* 2013), thus needing them to be attributed in evaluations as well.

However, owing to the complex nature of policy questions in diverse fields (e.g., health, education, social justice) and the non-linear pathways to address them, it is challenging to communicate the dynamics of complex interventions that operate at different levels like the individual, group, social system levels while also bringing to the forefront the factors that might influence a programme's effectiveness (Petticrew & Roberts, 2006). The idea of the suggested framework as an outcome of the thesis is to help address these in my context.

5.3 Conclusions, limitations of the thesis and the way forward

In conclusion, the thesis shows that a research undertaking such as mine could improve evaluations of public policies more specific to health in India. I argue that distributional equity (Smith & Hanson, 2016) is already attained, as previously evidenced in the programme's design, and should be the programme's focus, while

procedural equity would remain unaddressed if the complexities involved in the delivery of the goods (institutional childbirth in my case) are not well understood. Procedural equity dimensions need to be acknowledged since, without them, one would be unable to address the needed change in process evaluations.

However, the thesis has the following limitations :

1. The fieldwork duration was limited due to the epidemic and the doctoral timeline. Further queries in the context-specific understanding of inequity need to be done considering the given population variations. However, the basic outline could remain the same by using the suggested framework for defining them.
2. The focus in the thesis was to use intersectionality theory to show how various forms of inequities determine a programmatic outcome which are often not accounted for in process evaluations. As a note of caution, one however should not be swayed to think of the health system in Odisha as being similar all across. The fieldwork was a means to provide transferable evidence of the complexity involved which is absent in current program evaluations and their inability to account for concerns of health equity. These results might hold relevance to other tribal settings in terms of 'transferability' (wherein the study brings to the forefront the social oppression faced by the beneficiaries as a result of belonging to a particular caste and being ill-educated).

As a suggestion of the way forward, the thesis can help contribute to

1. Designing similar studies in other regions that can be conducted on a larger scale to generalize such contributory multi-dimensional inequities.
2. Allow for parameterization of these multi-dimensional inequities as a construct that can help improve inequity measures.
3. Allow for a contextual approach, specifically in low resource settings where it might be pertinent, to begin with the variables described in the framework.
4. Although, the focus of the thesis was exclusively on understanding maternal health inequities resulting from various factors involved and not accounted for in process evaluations of the program, the conceptual framework could help account for program specific evaluations of other health programs (such as the PMJAY and others) . It could help bring in a 'realist' perspective (Pawson et al., 2005) to process evaluations as the way forward.

This brings the thesis to a conclusion.

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Annexure

Annexure 1: Consolidated criteria for reporting qualitative studies (COREQ): 32-item checklist

Item (under respective domains)	Guide questions/description	Response	Chapter section mentioned in
Domain 1: Research team and reflexivity			
Personal Characteristics			
1. Interviewer/facilitator	Which author/s conducted the interview or focus group?	The author (RS) was assisted with a research facilitator (SB)a who was fluent in both the state language (Odia) and the dialect spoken (*Gadaba* and *Desia*) and acted as the translator. She undertook the interviews under the guidance of the researcher.	Reflexivity: Point 4

2. Credentials	What were the researcher's credentials?	RS has an MPH (Social Epidemiology) and a BPT. The research facilitator (SB) has an undergraduate degree in arts (BA) and is fluent in the local language. Additionally, she is a resident of the given region since 2015.	Reflexivity: Point 2
3. Occupation	What was their occupation at the time of the study?	RS is currently a doctoral candidate in a PhD Programme and SB works with local women self-help agencies in the field area.	Reflexivity: Point 3
4. Gender	Was the researcher male or female?	RS (male) SB (female)	Reflexivity: Point 3
5. Experience and training	What experience or training did the researcher have?	RS is trained in undertaking qualitative, quantitative, and mixed methods research.	Reflexivity: Point 3
Relationship with participants			
6. Relationship established	Was a relationship established prior to study commencement?	Yes, a relationship was established prior to the research. However, during the period of the fieldwork rapport	Reflexivity: Point 1,8,9

		building was undertaken with the villagers which helped in further getting a contextual understanding of the topic through village walks and post interview informal conversations.	
7. Participant knowledge of the interviewer	What did the participants know about the researcher? e.g. personal goals, reasons for doing the research	The research facilitator explained the outline of the research to the participants and engaged with them on why such a topic was being undertaken to study prior to them being engaged in the research. The information declaration was in *Odia* and was given to the participants while the consent form remained with the investigator.	Recruitment of Participants
8. Interviewer characteristics	What characteristics were reported about the interviewer/facilitator? e.g. Bias, assumptions, reasons and interests in the research topic	Yes, these have been reported by way of the researcher's reflexivity to the best of their knowledge.	Reflexivity: Point 1,3

Domain 2: study design			
Theoretical framework			
9. Methodological orientation and Theory	What methodological orientation was stated to underpin the study?	The given study was part of a sequential explanatory design utilizing a thematic analysis of 'ethnographic interviewing'(Basit, 2003) The study would delve around being ethnographic case studies since it is a study of two cases and each case comprise of respondents from both the supply and the demand side. The thematic analysis framework as mentioned by Braun & Clarke (2006); Maguire & Delahunt(2017) was undertaken	Data Analysis
Participant selection			
10. Sampling	How were participants selected? e.g. purposive, convenience, consecutive, snowball	Purposive, snowball	Research Design
11. Method of approach	How were participants approached? e.g. face-to-face, telephone, mail,	Face to face	Recruitment of Participants

	email		
12. Sample size	How many participants were in the study?	10 participants in Group I and 3 participants in Group II	Demographic Profile
13. Non-participation	How many people refused to participate or dropped out? Reasons?	When approached 4 individuals refused to participate as part of Participant Group 1. They stated they might not return to the village soon they had to finish pending work in their fields and go for rations to the block town	Recruitment of Participants
Setting			
14. Setting of data collection	Where was the data collected? e.g. home, clinic, workplace	Homes or courtyard of the respondents. Usually during mid-day when they would be more available for a discussion. The timing for their availability was previously discussed with the respondents.	Reflexivity: Point 6
15. Presence of non-participants	Was anyone else present besides the participants and researchers?	Yes, sometimes a child was present in case an elderly lady was unavailable to take care of the child. In one case a	Reflexivity: Point 5

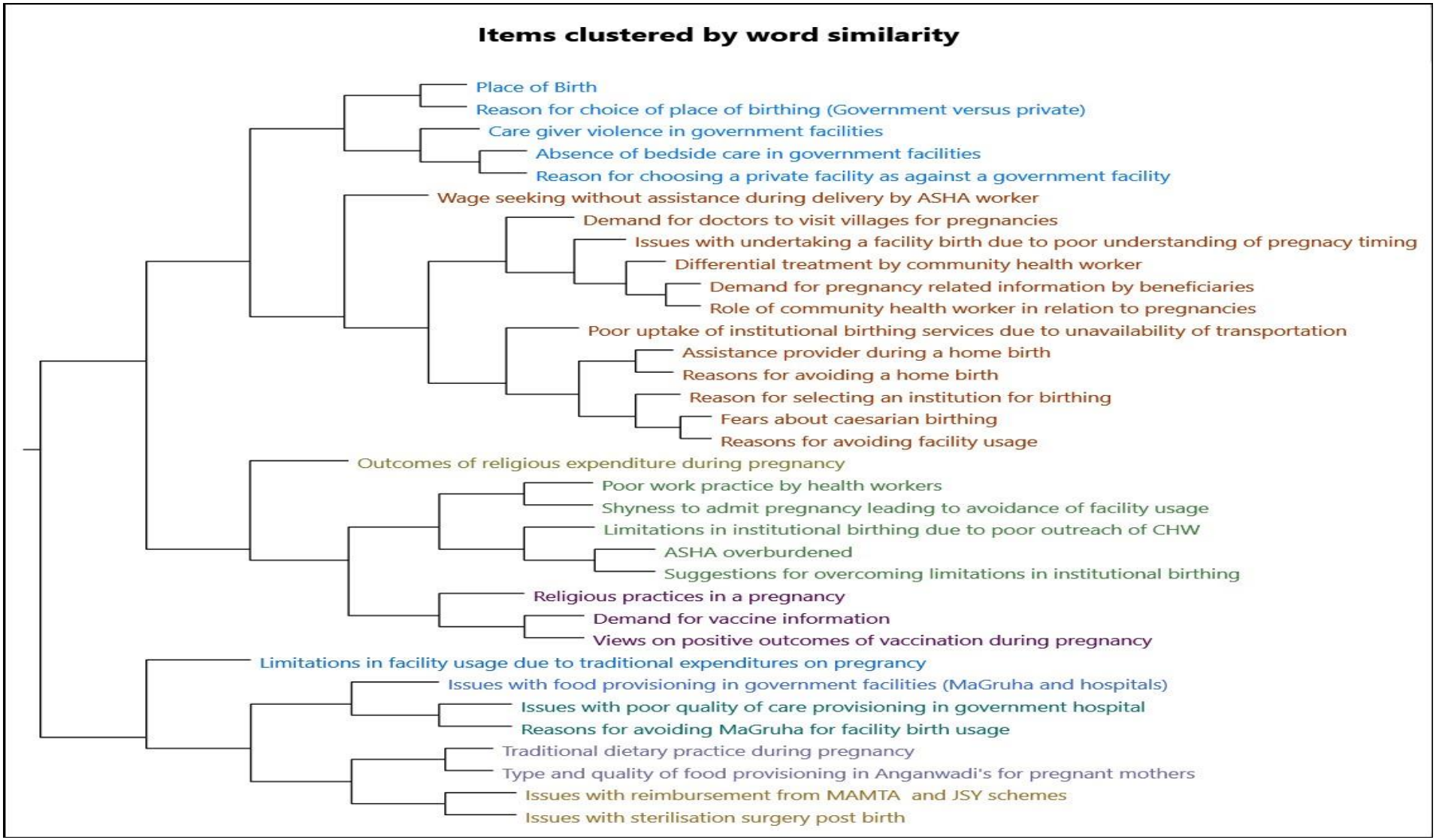
		father-in-law was also present who was disabled due to an injury (Pilot interview).	
16. Description of sample	What are the important characteristics of the sample? e.g. demographic data, date	Interview period and demographic information provided in table format.	Demographic Profile
Data collection			
17. Interview guide	Were questions, prompts, guides provided by the authors? Was it pilot tested?	Yes, prior to engagement with the field, pilot interviews were conducted with the research facilitator. She was trained on how to undertake queries during the interview and any issues which might come up. Thereafter pilot interviews were conducted with other community workers from the facilitating organisation as a 'play act' and thereafter in the selected villages. The original interview guides were validated by the supervisors and were then back translated from *Odia* to *English* by experts .These experts confirmed that the constructs as	Annexure

		mentioned in the forms were culturally adept; the experts were linguistically trained in *Odia* and had a higher degree level of education.	
18. Repeat interviews	Were repeat interviews carried out? If yes, how many?	Yes, only one repeat interview was carried out with Participant Group 2 since the recorder had issues and she had to go attend to her livestock.	Reflexivity: Point 7
19. Audio/visual recording	Did the research use audio or visual recording to collect the data?	All interviews were audio recorded using a voice recorder and then transcribed. Field notes were taken as and when felt necessary by the researcher (RS).	Recruitment of Participants
20. Field notes	Were field notes made during and/or after the interviews?	Yes, field notes were made for the authors reflections and contributed towards the reflexivity statement/ journaling.	Reflexivity: Point 4
21. Duration	What was the duration of the interviews or focus group?	Interviews for each respondent in Participant Group 1 lasted around 25-30 minutes. For respondents in Participant Group 2 it lasted around	Recruitment of Participants

		20-25 minutes each.	
22. Data saturation	Was data saturation discussed?	Yes, data saturation was discussed as per the guidelines of (Guest *et al.*,., 2006)	Data Analysis
23. Transcripts returned	Were transcripts returned to participants for comment and/or correction?	No, transcripts were not returned to participants for comments and corrections.	N/A
Domain 3: analysis and findings			
Data analysis			
24. Number of data coders	How many data coders coded the data?	1 data coder was used Researcher (RS)	Data Analysis
25. Description of the coding tree	Did authors provide a description of the coding tree?	Yes, a description of the coding tree was provided.	NA
26. Derivation of themes	Were themes identified in advance or derived from the data?	The interviews were conducted and *a priori* themes were used to begin the coding cycle. During the coding cycle, as new codes emerged, they were added. Thus, the research used an iterative process for drawing themes	Data Analysis

		from the data.	
27. Software	What software, if applicable, was used to manage the data?	NVivo (Version 20, Release 1.6.1)	Data Analysis
28. Participant checking	Did participants provide feedback on the findings?	No, participants did not provide feedback on the findings. However, the findings were presented to the facilitating community organisation and feedback from them was received on how to implement these issues.	N/A
Reporting			
29. Quotations presented	Were participant quotations presented to illustrate the themes / findings? Was each quotation identified? e.g., participant number	Yes	Results
30. Data and findings consistent	Was there consistency between the data presented and the findings?	Yes	Results
31. Clarity of major themes	Were major themes clearly presented in the findings?	Yes	Results
32. Clarity of minor themes	Is there a description of diverse cases or discussion of minor themes?	Yes	Results

Annexure 2: Thematic cluster by word similarity



Annexure 3: INFORMED CONSENT FORMS, INFORMATION SHEETS, CERTIFICATES OF CONSENT, INTERVIEW GUIDES (INCLUDING ODIA TRANSLATIONS)

INFORMED CONSENT FORMS

INFORMATION SHEET

THIS INFORMATION SHEET IS FOR YOU TO KEEP

Participant Group I

Study title: Exploring Women's Perspectives on Determinants of Institutional Births in Odisha.

Rohit Shah (Doctoral candidate)

Prof Sarthak Gaurav (IIT Bombay, Mumbai)

Prof Jane Fisher (Monash University, Australia)

Doctoral Research Project No: HSS0641

IITB-Monash Research Academy

This Informed Consent Form has two parts:

- **Information Sheet (to share information about the study with you)**
- **Certificate of Consent (for signatures if you choose to participate)**

You will be given a copy of the full Informed Consent Form; the researcher will retain the certificate of consent on completion.

Part I: Information Sheet

Greetings,

My name is Rohit Shah, and I am a PhD candidate at the IITB-Monash Research Academy. You are invited to participate in the study I am conducting along with my PhD supervisors, Prof. Sarthak Gaurav (SJMSOM, IIT Bombay) and Prof. Jane Fisher (Monash University), titled: **Exploring Women's Perspectives on Determinants of Institutional Births in Odisha**.

Please read this Information Sheet carefully before deciding to participate in this research. If you have any difficulty reading English, a translated version of this form in Odia can be provided. Also, if you want, a translated version in Odia can be read out to you. After reading the Information Sheet, if you do not wish to participate in the study, you are free to withdraw and would not be asked to provide reasons for the same.

What is the purpose of this research?

This research involves understanding perspectives on women regarding undergoing childbirth in a hospital in Odisha.

What would this study involve (interventions)?

I will discuss with you questions on the broad areas of decisions about childbirth. Learning from women about their experiences is the best way to improving the programme. We trust you to share with us a truthful account of what you experienced.

The study involves asking you questions with a translator (if required) to assist us if needed. Your interview will last for about 45 minutes. The interview will be audiotaped with your prior written consent. If you wish to give oral consent or a thumb impression instead, a witness signature would be applicable. The interviewer might also take handwritten notes at the time of the interview.

Why was I chosen for this research (participant selection)?

Your pregnancy details were taken from the ASHA (Accredited Social Health Activist) worker, where you were recorded as a potential enrollee in the JSY programme. This helped us to contact you for your participation.

What procedures would it entail if I participate in the study?

Participation in this study is completely voluntary. You would be asked to give your consent either verbally or via a signature or a thumbprint for participation and return the interviewer's consent form. If you wish to give only verbal consent, then the verbal consent will be voice recorded, and a witness signature would be applicable. If you do not wish to consent to the interview, you are free to withdraw without having to explain.

You are also free to withdraw from participating at any stage of the interview without giving any explanation to the interviewer. During the interview, I would ask you a few questions.

You are not bound to answer any question if you do not wish to. Furthermore, you are free to comment on any other aspects that have not been covered in my questionnaire and would like to talk about.

The questions would largely pertain to understanding why a woman (you) decides to undergo or refrains from undergoing childbirth in a hospital in Odisha.

How long would it last (duration)?

This interview should take about 45 minutes of your time. There may be a brief follow-up in case any clarification is required.

What could be the possible risks to me?

There is no potential known or unknown risk posed by getting involved as a participant (you) in this research.

What could be the possible benefits to me?

Although you might not be able to see any immediate gain to yourself, your participation remains important as it will help understand the functioning of the Janani Suraksha Yojana (JSY) programme.

Would I be paid for participating (reimbursements)?

As a token of appreciation for your participation in the study, a small token amount of INR 150 in cash will be given to you.

How would my confidentiality be maintained?

Your name, signatures in the consent form, and interview would be kept confidential. Your names and identification details will always remain anonymised in all the research publications and any research proceedings produced through the data procured during this research.

How will my information (data) be stored?

Your interview data and consent forms would be scanned and stored safely at IIT Bombay.

Will the results be shared with me?

The knowledge generated as an outcome of the study will be shared through publications and conference participation. It will also be part of my PhD thesis. If you are interested in knowing the results, a summary of the findings will be shared with you if you can provide us with a mailing address.

Do I have the right to refuse or withdraw?

Your participation in the study is completely voluntary and you are free to withdraw at

any time without giving any explanation.

Whom should I contact if I have any further queries?

This proposal has been reviewed and approved by the IEC of IIT Bombay, Mumbai, a committee whose task is to ensure that research participants are protected from harm. If you wish to find about more about the IEC at IITB, please contact the following individuals:

1. Dr Sreelekha Gopinathan **Member Secretary, IRCC, IIT Bombay** **E-mail: sreelekha@ircc.iitb.ac.in** **Contact: ***********	**2. Name of the PI: Prof. Sarthak Gaurav** **E-mail: sgaurav@iitb.ac.in** **Contact: ***********

If you have any questions, you can ask them now or later. If you wish to ask questions later, you may contact me for the same. (E-mail: rohit.shah@iitb.ac.in/rohit.shah@monash.edu or contact me at **********)

Part II: Certificate of Consent

CERTIFICATE OF CONSENT

Participant Group I

This Certificate of Consent will remain with the researcher.

Part II: Certificate of Consent

I have been asked to take part in the research study titled: **Exploring Women's Perspectives on Determinants of Institutional Births in Odisha**.

I have read the above information, or it has been read to me. I have had the opportunity to ask questions about it, and any questions I have asked have been answered to my satisfaction.

I hereby consent to the following:	**Yes**	**No**
Audio recording during the interview	☐	☐
Written notetaking if required by the interviewer	☐	☐

Name of Participant: _____

Signature: _____

Date: _____

Witness : (applicable only for oral consent or if the participant gives thumb impression)

I have witnessed the accurate reading of the informed consent form to the potential participant, and the individual has had the opportunity to ask questions.

I confirm that the individual has given consent freely.

Name of the Witness :

Witness Signature

Date

Statement by the researcher/person taking consent:

I have accurately read out the information sheet to the potential participant, and to the best of my ability, I made sure that the participant understands the study's requirements as outlined in the Information Sheet.

I confirm that the participant was allowed to ask questions about the study, and all the questions asked by the participant have been answered correctly and to the best of my ability. I confirm that the individual has not been coerced into giving consent, and the consent has been given freely and voluntarily.

Name of Investigator: ROHIT SHAH

Signature of Investigator_____

Date _____(dd/mm/yyyy)

Name of Principal Investigator: SARTHAK GAURAV

Signature of Principal Investigator_____

Date _____(dd/mm/yyyy)

INFORMED CONSENT FORMS

INFORMATION SHEET

THIS INFORMATION SHEET IS FOR YOU TO KEEP

Participant Group II

Study title: Exploring Women's Perspectives on Determinants of Institutional Births in Odisha.

Rohit Shah (Doctoral candidate)

Prof Sarthak Gaurav (IIT Bombay, Mumbai)

Prof Jane Fisher (Monash University, Australia)

Doctoral Research Project No: HSS0641

IITB-Monash Research Academy

This Informed Consent Form has two parts:

- **Information Sheet (to share information about the study with you)**
- **Certificate of Consent (for signatures if you choose to participate)**

You will be given a copy of the full Informed Consent Form; the researcher will retain the certificate of consent on completion.

Part I: Information Sheet

Greetings,

My name is Rohit Shah, and I am a PhD candidate at the IITB-Monash Research Academy. You are invited to participate in the study I am conducting along with my

PhD supervisors, Prof. Sarthak Gaurav (SJMSOM, IIT Bombay) and Prof. Jane Fisher (Monash University), titled: **Exploring Women's Perspectives on Determinants of Institutional Births in Odisha**.

Please read this Information Sheet carefully before deciding to participate in this research. If you have any difficulty reading English, a translated version of this form in Odia can be provided. Also, if you want, a translated version in Odia can be read out to you. After reading the Information Sheet, if you do not wish to participate in the study, you are free to withdraw and would not be asked to provide reasons for the same.

What is the purpose of this research?

This research involves understanding perspectivess on women regarding undergoing childbirth in a hospital in Odisha.

What would this study involve (interventions)?

I will discuss with you questions on the broad areas of decisions about childbirth. Learning from women about their experiences is the best way to improving the programme. We trust you to share with us a truthful account of what you experienced. The study involves asking you questions with a translator (if required) to assist us if needed. Your interview will last for about 30 minutes. The interview will be audiotaped with your prior written consent. If you wish to give oral consent or a thumb impression

instead, a witness signature would be applicable. The interviewer might also take handwritten notes at the time of the interview.

Why was I chosen for this research (participant selection)?

Apart from the beneficiary perspectives of potential enrollees in the JSY programme, the health provider perspectives would help bring the issues of health service delivery to the forefront, which is a major objective of this research. Given your experience in the said area, we decided to approach you as a potential participant.

What procedures would it entail if I participate in the study?

Participation in this study is completely voluntary. You would be required to give your written consent for participation and return the interviewer's consent form. If you wish to give only verbal consent, then the verbal consent will be voice recorded, and a witness signature would be applicable. If you do not wish to consent to the interview, you are free to withdraw without having to explain.

You are also free to withdraw from participating at any stage of the interview without giving any explanation to the interviewer. During the interview, I would ask you a few questions.

You are not bound to answer any question if you do not wish to. Furthermore, you are free to comment on any other aspects that have not been covered in my questionnaire

and would like to talk about. The questions would largely pertain to understanding why a woman decides to undergo or refrains from undergoing childbirth in a hospital in Odisha.

How long would it last (duration)?

This interview should not take more than 30 minutes of your time. There may be a brief follow-up in case any clarification is required.

What could be the possible risks to me?

There is no potential known or unknown risk posed by getting involved as a participant in this research. We do acknowledge it would possibly keep you away from your work during the said period of the interview. Additionally, your participation or withdrawal will not have any influence on your profession.

What could be the possible benefits to me?

Although you might not be able to see any immediate gain to yourself, your participation remains of importance as it will help understand the functioning of the Janani Suraksha Yojana (JSY) programme and help evaluate this programme based on factors associated with culture and health service delivery issues. The policy implication would be to address the enabling factors of the JSY to improve the programme's outcomes in Odisha.

Would I be paid for participating (reimbursements)?

No, you would not be paid for participating in this study.

How would my confidentiality be maintained?

Your name, signatures in the consent form, and interview would be kept confidential. The interview data will be translated and transcribed by a third-party translator and transcriber (in other words your names will be kept confidential and will be merged with details of others to anonymise it). Your names and identification details will always remain anonymised in all the research publications and any research proceedings produced through the data procured during this research. The informed consent forms would be scanned and stored with the Principal Investigator. Copies of all interviews and informed consent would be under the Principal Investigators supervision.

How will my information (data) be stored?

Your interview data would be scanned and stored safely as per the guidelines for storage, usage, and removal of such data at IIT Bombay. No personal identifiers which can reveal your identity will be used at any stage in this research. Your consent form would be scanned and stored with the Principal Investigator. The copies of all interviews and consent forms would be under the Principal Investigator's supervision and would be deposited at IIT Bombay. Copies and digital data would be stored at IIT

Bombay in line with the university's storage guidelines. Once the interim period of data storage is completed, the data would be disposed (erasure) off in line with IIT Bombay protocol.

Will the results be shared with me (sharing results)?

The knowledge generated as an outcome of the study will be shared through publications and conference participation. It will also be part of my PhD thesis. A summary of the findings will be shared with you if you want the whole study then do provide us with a mailing address.

Do I have the right to refuse or withdraw?

This is a re-confirmation that your participation in the study is completely voluntary and allows you (the participant) the right to withdraw.

Whom should I contact if I have any further queries?

This proposal has been reviewed and approved by the IEC of IIT Bombay, Mumbai (partnering university), a committee whose task is to ensure that research participants are protected from harm. If you wish to find about more about the IEC at IITB, please contact the following individuals:

1. Dr Sreelekha Gopinathan **Member Secretary, IRCC, IIT Bombay** **E-mail: sreelekha@ircc.iitb.ac.in** **Contact: ***********	**2. Name of the PI: Prof. Sarthak Gaurav** **E-mail: sgaurav@iitb.ac.in** **Contact: ***********

If you have any questions, you can ask them now or later. If you wish to ask questions later, you may contact me for the same. (E-mail: rohit.shah@iitb.ac.in/ rohit.shah@monash.edu or contact me at *********

Part II: Certificate of Consent

CERTIFICATE OF CONSENT

Participant Group II

This Certificate of Consent will remain with the researcher.

Part II: Certificate of Consent

I have been asked to take part in the research project titled: **Exploring Women's Perspectives on Determinants of Institutional Births in Odisha**.

I have read the above information, or it has been read to me. I have had the opportunity to ask questions about it, and any questions I have asked have been answered to my satisfaction.

I hereby consent to the following:	Yes	No
Audio recording during the interview	☐	☐
Written notetaking if required by the interviewer	☐	☐

Name of Participant: _____

Signature: _____

Date: _____

Witness : (applicable only for oral consent or if the participant cannot sign)

I have witnessed the accurate reading of the informed consent form to the potential participant, and the individual has had the opportunity to ask questions.

I confirm that the individual has given consent freely.

Name of the Witness :

Witness Signature

Date

Statement by the researcher/person taking consent:

I have accurately read out the information sheet to the potential participant, and to the best of my ability, I made sure that the participant understands the study's requirements as outlined in the Information Sheet.

I confirm that the participant was allowed to ask questions about the study, and all the questions asked by the participant have been answered correctly and to the best of my ability. I confirm that the individual has not been coerced into giving consent, and the consent has been given freely and voluntarily.

Name of Investigator: ROHIT SHAH

Signature of Investigator_____

Date _____(dd/mm/yyyy)

Name of Principal Investigator: SARTHAK GAURAV

Signature of Principal Investigator_____

Date _____(dd/mm/yyyy)

INTERVIEW GUIDE

PARTICIPANT GROUP I

Greetings.

Thank you for agreeing to the invite and participating in this study titled: **Exploring Women's Perspectives on Determinants of Institutional Births in Odisha.**

The objective of this study is to understand the decisions that women undertake for institutional child birth/delivery in Odisha. In this study, we are having discussions with women and health care workers in your locality. The purpose of our discussion is to understand the factors contributing to decision of institutional child birth.

The government has many programmes to promote institutional birth. The Janani Suraksha Yojana is one such programme. Delivering in a hospital is safe for both the mother and the child. But often we see many still do not choose to give birth in a hospital. We would want to know what the reasons for it could be.

This interview will last for about 45 minutes. If you will permit, this interview will be audiotaped with your prior written consent. If you wish to give an oral consent or a

thumb impression, a witness signature would be applicable. The interviewer might also take handwritten notes at the time of the interview.

Please note that your responses will have no impact on how you receive health services. Your personal details and responses would be kept anonymous and strictly confidential.

Learning from mothers about their experiences is valuable for improving the programme. We trust you to give a truthful account of what you experienced. Please feel free to participate in the discussion at your convenience. If you do not want to answer any question at any time, you do not have to answer them necessarily. You can withdraw from this study without having to provide any reasons. The basic outline of the topics which would be attempted to be covered by the interview would be as follows:

Topics for discussion

- Perceptions about home vs institutional birth
- Local healers
- Perception about vaccination
- Local rituals followed during and post-pregnancy
- Local childbirth-related practices
- Availability of local traditional birth attendant

- Dietary norms
- Decisions about pregnancy/birthing

Perceptions about health service delivery

- Access to public and private hospitals
- Availability of transportation facilities for institutional births
- Waiting time for pregnant women at the institution
- Staff response and availability
- Behaviour towards patient
- Issues pertaining to the following:
    - Availability of medicine and vaccine supply
    - Diagnostics
    - Any other infrastructural issues
- Awareness about the JSY program
    - Incentives / Benefits (related to the JSY, enrolment, disbursement issues and individual's perception on cash transfers)
    - Role of community health workers (ASHA)
- Suggestions for change in the JSY (what should be done, which part was the good and which part was the bad in the programme, would they recommend it to others it even if the money is not provided)

INTERVIEW GUIDE

PARTICIPANT GROUP II

Greetings.

Thank you for agreeing to the invite and participating in this study titled: **Exploring Women's Perspectives on Determinants of Institutional Births in Odisha.**

The objective of this study is to understand the decisions that women undertake for institutional child birth/delivery in Odisha. In this study, we are having discussions with women and health care workers in your locality. The purpose of our discussion is to understand the factors contributing to decision of institutional child birth.

The government has many programmes to promote institutional birth. The Janani Suraksha Yojana is one such programme. Delivering in a hospital is safe for both the mother and the child. But often we see many still do not choose to give birth in a hospital. We would want to know what the reasons for it could be.

This interview will last for about 30 minutes. If you will permit, this interview will be audiotaped with your prior written consent. If you wish to give an oral consent or a

thumb impression, a witness signature would be applicable. The interviewer might also take handwritten notes at the time of the interview.

Please note that your responses will have no impact on you or your work. Your personal details and responses would be kept anonymous and strictly confidential.

We trust you to give a truthful account of what you experienced. Please feel free to participate in the discussion at your convenience. If you do not want to answer any question at any time, you do not have to answer them necessarily. You can withdraw from this study without having to provide any reasons. The basic outline of the topics which would be attempted to be covered by the interview would be as follows:

Topics for discussion

- Transport facilities for institutional deliveries
- Referral facilities during emergencies
- Average time taken by staff to reach out to the patient
- Issues pertaining to:
    - Shortage of drugs- medicine and vaccine supply (related to institutional delivery for the mother and child (probe on issues of stock outs, central supply, and storage issues)

    - Staff (availability, allocation, duty timings, appointments-central versus state cadre differences)
    - Diagnostics
    - Necessary equipment (purchasing and maintenance)
    - Any other infrastructural issues
- Awareness about the JSY program
    - Incentives and benefits (for enrolling beneficiaries, financial and non-financial performance incentives)
    - Role of community health workers (ASHA and others)
    - Funds for cash transfers to beneficiaries
- Good practices for increasing institutional delivery
- Awareness about any cultural practices that hinder institutional deliveries
- Suggestions for change in the JSY (what should be done, which part was the good and which part was the bad in the programme)

(ODIA TRANSLATION OF INTERVIEW GUIDE, GROUP I)

ଗ୍ରୁପ୍ ୧ଇଣ୍ଟରଭ୍ୟୁ ଗାଇଡ୍ |

ନମସ୍କାର,

ଏହି ଅଧ୍ୟୟନରେ ଅଂଶଗ୍ରହଣ କରିବା ପାଇଁ ରାଜି ହୋଇଥିବାରୁ ଧନ୍ୟବାଦ|ଏହି ଅଧ୍ୟୟନର ଉଦ୍ଦେଶ୍ୟ ହେଉଛି ଓଡିଶାରେ ଡାକ୍ତରଖାନାରେ ଶିଶୁ ଜନ୍ମ/ପ୍ରସବ ର ନିର୍ଣ୍ଣୟ ଉପରେ ମହିଳାଙ୍କ ଦୃଷ୍ଟିକୋଣ ଜାଣିବା| ଏହି ଅଧ୍ୟୟନରେ ଆମେ ଆପଣଙ୍କ ଅଞ୍ଚଳରେ ମହିଳା ଏବଂ ସ୍ୱାସ୍ଥ୍ୟ ସେବା କର୍ମିଙ୍କ ସହିତ ଆଲୋଚନା କରୁଛୁ| ଆମର ସାକ୍ଷାତକାର ର ଉଦ୍ଦେଶ୍ୟ ହେଉଛି ଡାକ୍ତରଖାନାରେ/ଅନୁଷ୍ଠାନିକ ଶିଶୁ ଜନ୍ମରେ ସହାୟକ ହେଉଥିବା କାରଣଗୁଡିକ ଜାଣିବା |

ଡାକ୍ତରଖାନାରେ ପ୍ରସବ ପାଇଁ ସରକାରଙ୍କର ଅନେକ କାର୍ଯ୍ୟକ୍ରମ ରହିଛି। ଜନନୀ ସୁରକ୍ଷ ଯୋଜନା (JSY) ଏହିପରି ଏକ କାର୍ଯ୍ୟକ୍ରମ| ଡାକ୍ତରଖାନାରେ ପ୍ରସବ କରିବା ଉଭୟ ମା ଏବଂ ଶିଶୁ ପାଇଁ ନିରାପଦ ଅଟେ। କିନ୍ତୁ ପ୍ରାୟତ ଆମେ ଦେଖୁ ଅନେକ ମହିଳା ଡାକ୍ତରଖାନାରେ ପ୍ରସବ କରିବାକୁ ପସନ୍ଦ କରୁନାହାଁନ୍ତି |ଏହାର କାରଣ କ'ଣ ହୋଇପାରେ ଆମେ ଜାଣିବାକୁ ଚାହିଁବୁ |

ଯଦି ଆପଣ ଅନୁମତି ଦିଅନ୍ତି, ଏହି ସାକ୍ଷାତକାର ପ୍ରାୟ ୪୫ ମିନିଟ୍ ପର୍ଯ୍ୟନ୍ତ ଲାଗିବ| ଆପଣଙ୍କର ପୂର୍ବ ଲିଖିତ ସମ୍ମତି ସହିତ ଏହି ସାକ୍ଷାତକାର ଅଡିଓଟେପ୍ ହେବ| ଯଦି ଆପଣ ଏକ ମୌଖିକ ସମ୍ମତି କିମ୍ବା ଆଙ୍ଗୁଠି ଛାପ ଦେବାକୁ ଚାହୁଁଛନ୍ତି,ତେବେ ଏକ ସାକ୍ଷୀ ଦସ୍ତଖତ ପ୍ରଯୁଜ୍ୟ ହେବ |ସାକ୍ଷାତକାର ସମୟରେ ସାକ୍ଷାତକାର ମଧ୍ୟ ହସ୍ତଲିଖିତ ନୋଟ୍ ନେଇପାରନ୍ତି|

ଦୟାକରି ଧ୍ୟାନ ଦିଅନ୍ତୁ ଯେ ଆପଣଙ୍କର ପ୍ରତିକ୍ରିୟାଗୁଡ଼ିକର ଆପଣ କିପରି ସ୍ୱାସ୍ଥ୍ୟ ସେବା ଗ୍ରହଣ କରନ୍ତି ତାହା ଉପରେ କୌଣସି ପ୍ରଭାବ ପକାଇବ ନାହିଁ |ଆପଣଙ୍କର ବ୍ୟକ୍ତିଗତ ବିବରଣୀ ଏବଂ ପ୍ରତିକ୍ରିୟାଗୁଡ଼ିକୁ କଡା ଭାବରେ ଗୋପନୀୟ ରଖାଯିବ|

କାର୍ଯ୍ୟକ୍ରମରେ ଉନ୍ନତି ଆଣିବା ପାଇଁ ମା'ମାନଙ୍କଠାରୁ ସେମାନଙ୍କ ଅଭିଜ୍ଞତା ବିଷୟରେ ଶିଖିବା ବହୁତ ମୂଲ୍ୟବାନ| ଆମେ ଆଶା କରୁଛୁ

ଆପଣ ଯାହା ଅନୁଭବ କରିଛନ୍ତି ତାହାର ଏକ ସତ୍ୟପାଠ ଦେବାକୁ ଆମେ ଆପଣଙ୍କୁ ବିଶ୍ୱାସ କରୁ |ଆପଣଙ୍କ ସୁବିଧା ଅନୁଯାୟୀ ଆଲୋଚନା କରିବାକୁ ଦୟାକରି ମୁକ୍ତ ମନରେ ଭାଗ ନିଅନ୍ତୁ | ଯଦି ଆପଣ କୌଣସି ସମୟରେ କୌଣସି ପ୍ରଶ୍ନର ଉତ୍ତର ଦେବାକୁ ଚାହୁଁନାହାଁନ୍ତି, ତେବେ ଆପଣ ସେଗୁଡିକର ଉତ୍ତର ଦେବା ଆବଶ୍ୟକ ନୁହେଁ| କୌଣସି କାରଣ ନ ଦେଇ ଆପଣ ଏହି ଅଧ୍ୟୟନରୁ ପ୍ରତ୍ୟାହାର କରିପାରିବେ |

ଆଲୋଚନା ବିଷୟ

- ଘର ବନାମ ଡାକ୍ତରଖାନାରେ ପ୍ରସବ ବିଷୟରେ ଧାରଣା |
- ସ୍ଥାନୀୟ ଆରୋଗ୍ୟକାରୀ |
- ଟୀକାକରଣ ବିଷୟରେ ଧାରଣା |
- ଗର୍ଭାବସ୍ଥାରେ ଏବଂ ପରବର୍ତ୍ତୀ ସମୟରେ ସ୍ଥାନୀୟ ପୂଜା ବିଧି |
- ସ୍ଥାନୀୟ ପ୍ରସବ ସମ୍ବନ୍ଧୀୟ ଅଭ୍ୟାସ |
- ସ୍ଥାନୀୟ ପାରମ୍ପାରିକ ଜନ୍ମ ସେବିକାଙ୍କ ଉପଲବ୍ଧତା |
- ଖାଦ୍ୟପେୟ ନିୟମ |
- ଗର୍ଭାବସ୍ଥା / ପ୍ରସବ ବିଷୟରେ ନିଷ୍ପତ୍ତି |

ସ୍ୱାସ୍ଥ୍ୟ ସେବା ବିଷୟରେ ଧାରଣା

- ସରକାରୀ ଏବଂ ବେସରକାରୀ ଡାକ୍ତରର ଉପଲବ୍ଧତା |
- ଡାକ୍ତରଖାନାରେ ଜନ୍ମ ପାଇଁ ପରିବହନ ସୁବିଧା |
- ଗର୍ଭବତୀ ମହିଳାଙ୍କ ଅପେକ୍ଷା ସମୟ|
- କର୍ମଚାରୀଙ୍କ ପ୍ରତିକ୍ରିୟା ଏବଂ ଉପଲବ୍ଧତା |
- ରୋଗୀ ପ୍ରତି ଆଚରଣ |
- ପ୍ରସବ ସମୟରେ ସହାୟତା |

ନିମ୍ନଲିଖିତ ବିଷୟଗୁଡ଼ିକ

- ଔଷଧ ଏବଂ ଟିକା ଯୋଗାଣର ଉପଲବ୍ଧତା |
- ନିଦାନ |
- ଅନ୍ୟ କୌଣସି ଭିତ୍ତିଭୂମି ସମସ୍ୟା |

JSY ଯୋଜନା ବିଷୟରେ ସଚେତନତା |

- ପ୍ରୋତ୍ସାହନ / ଲାଭ (JSY ସହିତ ଜଡିତ ସୁବିଧା, ନାମଲେଖା,ନଗଦ/ ଟଙ୍କା ବିତରଣ ପ୍ରସଙ୍ଗ ଉପରେ ବ୍ୟକ୍ତିଗତ ଧାରଣା |
- ଆଶା (ASHA)କର୍ମୀଙ୍କ ଭୂମିକା |
- JSY ରେ ପରିବର୍ତ୍ତନ ପାଇଁ ପରାମର୍ଶ (କଣ କରାଯିବା ଉଚିତ୍? JSY ଯୋଜନାରେ କେଉଁ ଅଂଶ ଭଲ ଏବଂ କେଉଁ ଅଂଶ ଖରାପ ଥିଲା କି? ଟଙ୍କା ପ୍ରଦାନ କରାଯାଇ ନଥିଲେ ମଧ୍ୟ ସେମାନେ ଏହାକୁ ଅନ୍ୟମାନଙ୍କୁ ସୁପାରିଶ କରିବେ କି?)

(ODIA TRANSLATION OF INTERVIEW GUIDE, GROUP **II**)

ଗ୍ରୁପ୍ **9**ଇଣ୍ଟରଭ୍ୟୁ ଗାଇଡ୍ **|**

ନମସ୍କାର,

ଏହି ଅଧ୍ୟୟନରେ ଅଂଶଗ୍ରହଣ କରିବା ପାଇଁ ରାଜି ହୋଇଥିବାରୁ ଧନ୍ୟବାଦ|ଏହି ଅଧ୍ୟୟନର ଉଦ୍ଦେଶ୍ୟ ହେଉଛି ଓଡିଶାରେ ଡାକ୍ତରଖାନାରେ ଶିଶୁ ଜନ୍ମ/ପ୍ରସବ ର ନିର୍ଣ୍ଣୟ ଉପରେ ମହିଳାଙ୍କ ଦୃଷ୍ଟିକୋଣ ଜାଣିବା| ଏହି ଅଧ୍ୟୟନରେ ଆମେ ଆପଣଙ୍କ ଅଞ୍ଚଳରେ ମହିଳା ଏବଂ ସ୍ୱାସ୍ଥ୍ୟ ସେବା କର୍ମିଙ୍କ ସହିତ ଆଲୋଚନା କରୁଛୁ| ଆମର ସାକ୍ଷାତକାର ର ଉଦ୍ଦେଶ୍ୟ ହେଉଛି ଡାକ୍ତରଖାନାରେ/ଅନୁଷ୍ଠାନିକ ଶିଶୁ ଜନ୍ମରେ ସହାୟକ ହେଉଥିବା କାରଣଗୁଡିକ ଜାଣିବା |

ଡାକ୍ତରଖାନାରେ ପ୍ରସବ ପାଇଁ ସରକାରଙ୍କର ଅନେକ କାର୍ଯ୍ୟକ୍ରମ ରହିଛି। ଜନନୀ ସୁରକ୍ଷ ଯୋଜନା (JSY) ଏହିପରି ଏକ କାର୍ଯ୍ୟକ୍ରମ| ଡାକ୍ତରଖାନାରେ ପ୍ରସବ କରିବା ଉଭୟ ମା ଏବଂ ଶିଶୁ ପାଇଁ ନିରାପଦ ଅଟେ। କିନ୍ତୁ ପ୍ରାୟତ ଆମେ ଦେଖୁ ଅନେକ ମହିଳା ଡାକ୍ତରଖାନାରେ ପ୍ରସବ କରିବାକୁ ପସନ୍ଦ କରୁନାହାଁନ୍ତି |ଏହାର କାରଣ କ'ଣ ହୋଇପାରେ ଆମେ ଜାଣିବାକୁ ଚାହିଁବୁ |

ଯଦି ଆପଣ ଅନୁମତି ଦିଅନ୍ତି, ଏହି ସାକ୍ଷାତକାର ପ୍ରାୟ ଅଧଘଣ୍ଟା ପର୍ଯ୍ୟନ୍ତ ଲାଗିବ| ଆପଣଙ୍କର ପୂର୍ବ ଲିଖିତ ସମ୍ମତି ସହିତ ଏହି ସାକ୍ଷାତକାର ଅଡିଓଟେପ୍ ହେବ| ଯଦି ଆପଣ ଏକ ମୌଖିକ ସମ୍ମତି କିମ୍ବା ଆଙ୍ଗୁଠି ଛାପ ଦେବାକୁ ଚାହୁଁଛନ୍ତି,ତେବେ ଏକ ସାକ୍ଷୀ ଦସ୍ତଖତ ପ୍ରଯୁଜ୍ୟ ହେବ |ସାକ୍ଷାତକାର ସମୟରେ ସାକ୍ଷାତକାର ମଧ୍ୟ ହସ୍ତଲିଖିତ ନୋଟ୍ ନେଇପାରନ୍ତି|

ଦୟାକରି ଧ୍ୟାନ ଦିଅନ୍ତୁ ଯେ ଆପଣଙ୍କର ପ୍ରତିକ୍ରିୟାଗୁଡ଼ିକର ଆପଣ କିମ୍ବା ଆପଣଙ୍କର କାମ ଉପରେ କୌଣସି ପ୍ରଭାବ ପକାଇବ ନାହିଁ|ଆପଣଙ୍କର ବ୍ୟକ୍ତିଗତ ବିବରଣୀ ଏବଂ ପ୍ରତିକ୍ରିୟାଗୁଡ଼ିକୁ କଡା ଭାବରେ ଗୋପନୀୟ ରଖାଯିବ|

ଆମେ ବିଶ୍ୱାସ କରୁଛୁ ଆପଣ ଯାହା ଅନୁଭବ କରିଛନ୍ତି, ଆପଣ ତାହାର ପ୍ରକୃତ ବର୍ଣ୍ଣନା କରିବେ|ଆପଣଙ୍କ ସୁବିଧା ଅନୁଯାୟୀ ଆଲୋଚନା କରିବାକୁ ଦୟାକରି ମୁକ୍ତ ମନରେ ଭାଗ ନିଅନ୍ତୁ | ଯଦି ଆପଣ କୌଣସି ସମୟରେ କୌଣସି ପ୍ରଶ୍ନର ଉତ୍ତର ଦେବାକୁ ଚାହୁଁନାହାଁନ୍ତି, ତେବେ ଆପଣ ସେଗୁଡିକର ଉତ୍ତର ଦେବା ଆବଶ୍ୟକ ନୁହେଁ| କୌଣସି କାରଣ ନ ଦେଇ ଆପଣ ଏହି ଅଧ୍ୟୟନରୁ ପ୍ରତ୍ୟାହାର କରିପାରିବେ |

ଆଲୋଚନା ବିଷୟ

- ଡାକ୍ତରଖାନାରେ ଶିଶୁ ଜନ୍ମ/ପ୍ରସବ ପାଇଁ ପରିବହନ ସୁବିଧା |
- ଜରୁରୀକାଳୀନ ସମୟରେ ରେଫରାଲ୍ ସୁବିଧା |

- ଗର୍ଭବତୀ ମହିଳାଙ୍କ ପାଖରେ ପହଞ୍ଚିବା ପାଇଁ (କର୍ମଚାରୀଙ୍କ ଦ୍ୱାରା) ହାରାହାରି ସମୟ |

ସମ୍ବନ୍ଧୀୟ ବିଷୟଗୁଡିକ:

- ଔଷଧ ଏବଂ ଟିକା ଯୋଗାଣର ଉପଲବ୍ଧତା ଜଡିତ (ଷ୍ଟକ୍ ଆଉଟ୍, କେନ୍ଦ୍ରୀୟ ଯୋଗାଣ ଏବଂ ସଂରକ୍ଷଣ ସମସ୍ୟା ଉପରେ ଅନୁସନ୍ଧାନ) |
- କର୍ମଚାରୀ (ଉପଲବ୍ଧତା, ଆବଣ୍ଟନ, ଡ୍ୟୁଟି ସମୟ, ନିଯୁକ୍ତି-କେନ୍ଦ୍ରୀୟ ବନାମ ରାଜ୍ୟ କ୍ୟାଡର ପାର୍ଥକ୍ୟ)
- ନିଦାନ/ଡାଇଗ୍ନୋଷ୍ଟିକ୍ (ଅନୁଷ୍ଠାନିକ ବିତରଣ ସହିତ ଜଡିତ)
- ଆବଶ୍ୟକ ଉପକରଣ (କ୍ରୟ ଏବଂ ରକ୍ଷଣାବେକ୍ଷଣ)
- ଅନ୍ୟ କୌଣସି ଭିତ୍ତିଭୂମି ସମସ୍ୟା |

ସ୍ୱାସ୍ଥ୍ୟ ସେବା ବିଷୟରେ ଧାରଣା

- ପ୍ରୋତ୍ସାହନ / ଲାଭ (JSY ସହିତ ଜଡିତ ସୁବିଧା, ନାମଲେଖା, ଆର୍ଥିକ ଏବଂ ଅଣ-ଆର୍ଥିକ ମଧ୍ୟ|
- ଆଶା (ASHA) ଏବଂ ଅନ୍ୟ କର୍ମୀଙ୍କ ଭୂମିକା |
- ଗର୍ଭବତୀ ମହିଳାଙ୍କ ଅପେକ୍ଷା ସମୟ|
- ହିତାଧିକାରୀଙ୍କୁ ନଗଦ ସ୍ଥାନାନ୍ତର ପାଇଁ ପାଣ୍ଠି
- ଡାକ୍ତରଖାନାରେ ଶିଶୁ ଜନ୍ମ/ପ୍ରସବ ବୃଦ୍ଧି ପାଇଁ ଉତ୍ତମ ଅଭ୍ୟାସ |
- କୌଣସି ସାଂସ୍କୃତିକ ଅଭ୍ୟାସ ବିଷୟରେ ସଚେତନତା ଯାହା ଅନୁଷ୍ଠାନିକ ପ୍ରସବ ରେ ବାଧା ସୃଷ୍ଟି କରେ |
- JSY ରେ ପରିବର୍ତ୍ତନ ପାଇଁ ପରାମର୍ଶ (କଣ କରାଯିବା ଉଚିତ୍? JSY ଯୋଜନାରେ କେଉଁ ଅଂଶ ଭଲ ଏବଂ କେଉଁ ଅଂଶ ଖରାପ ଥିଲା କି? ଟଙ୍କା ପ୍ରଦାନ କରାଯାଇ ନଥିଲେ ମଧ୍ୟ ସେମାନେ ଏହାକୁ ଅନ୍ୟମାନଙ୍କୁ ସୁପାରିଶ କରିବେ କି?)

(ODIA TRANSLATION OF CONSENT FORM, GROUP I)

ସମ୍ମତି ଫର୍ମ

(ଏହି ସୂଚନା ଫର୍ମ ଆପଣ ରଖିବା ପାଇଁ)

ଅଂଶଗ୍ରହଣକାରୀ ଗ୍ରୁପ୍ ୧

ଅଧ୍ୟୟନର ଆଖ୍ୟା: ଓଡିଶାରେ ଅନୁଷ୍ଠାନିକ ପ୍ରସବ ର ନିର୍ଣ୍ଣୟ ଉପରେ ମହିଳାଙ୍କ ଦୃଷ୍ଟିକୋଣ

ରୋହିତ ଶାହ (ଡକ୍ଟରେଟ୍ ପ୍ରାର୍ଥୀ)

ପ୍ରଫେସର ସାର୍ଥକ ଗୌରଭ (ଆଇଆଇଟି - IIT ବମ୍ବେ, ମୁମ୍ବାଇ)

ପ୍ରଫେସର ଜେନ ଫିଷେର (ମୋନାଶ ବିଶ୍ୱବିଦ୍ୟାଳୟ, ଅଷ୍ଟ୍ରେଲିୟା)

ଡକ୍ଟରାଲ୍ ରିସର୍ଚ୍ଚ ପ୍ରୋଜେକ୍ଟ ନଂ: HSS0641

ଆଇଆଇଟିବି-ମୋନାଶ ରିସର୍ଚ୍ଚ ଏକାଡେମୀ

ଏହି ସୂଚନା ସମ୍ମତି ଫର୍ମର ଦୁଇଟି ଅଂଶ ଅଛି:

- ସୂଚନା ଶୀଟ୍ (ଆପଣଙ୍କ ସହିତ ଅଧ୍ୟୟନ ବିଷୟରେ ସୂଚନା ଦେବାକୁ)
- ସମ୍ମତି ପ୍ରମାଣପତ୍ର (ଯଦି ଆପଣ ଅଂଶଗ୍ରହଣ କରିବାକୁ ରାଜି ହୁଅନ୍ତି ତେବେ ଦସ୍ତଖତ ପାଇଁ)

ପ୍ରଥମ ଭାଗ: ସୂଚନା ଶୀଟ୍

ନମସ୍କାର,

ମୋର ନାମ ରୋହିତ ଶାହ,ଏବଂ ମୁଁ ଆଇଆଇଟିବି-ମୋନାଶ ରିସର୍ଚ୍ଚ ଏକାଡେମୀରେ ଡକ୍ଟରେଟ୍ ପ୍ରାର୍ଥୀ। ମୋର ଡକ୍ଟରେଟ୍ ସୁପରଭାଇଜର, ପ୍ରଫେସର ସାର୍ଥକ ଗୌରଭ (SJMSOM, IIT ବମ୍ବେ) ଏବଂ ପ୍ରଫେସର ଜେନ ଫିଷେର (ମୋନାଶ ବିଶ୍ୱବିଦ୍ୟାଳୟ, ଅଷ୍ଟ୍ରେଲିୟା) ଙ୍କ ସହ ମୁଁ ଯେଉଁ ଅଧ୍ୟୟନ କରୁଛି,ଏହାର ଶୀର୍ଷକ ହେଉଛି "ଓଡିଶାରେ ଅନୁଷ୍ଠାନିକ ପ୍ରସବ ର ନିର୍ଣ୍ଣୟ ଉପରେ ମହିଳାଙ୍କ ଦୃଷ୍ଟିକୋଣ" |

ଏହି ଅନୁସନ୍ଧାନରେ ଭାଗ ନେବାକୁ ନିଷ୍ପତ୍ତି ନେବା ପୂର୍ବରୁ ଦୟାକରି ଏହି ସୂଚନା ଶୀଟ୍ କୁ ଭଲ ଭାବରେ ପଢନ୍ତୁ| ଯଦି ଆପଣଙ୍କର ଇଂରାଜୀ ପଢିବାରେ କୌଣସି ଅସୁବିଧା ଅଛି, ତେବେ ଓଡିଆରେ ଏହି ଫର୍ମର ଅନୁବାଦିତ ସଂସ୍କରଣ ପ୍ରଦାନ କରାଯାଇପାରିବ | ଯଦି ଆପଣ ଚାହାଁନ୍ତି, ଓଡିଆରେ ଏକ ଅନୁବାଦିତ ସଂସ୍କରଣ ଆପଣଙ୍କୁ ପଠାଯାଇପାରିବ| ଯଦି

ଆପଣ କୌଣସି ସମୟରେ କୌଣସି ପ୍ରଶ୍ନର ଉତ୍ତର ଦେବାକୁ ଚାହୁଁନାହାଁନ୍ତି, ତେବେ ଆପଣ ସେଗୁଡିକର ଉତ୍ତର ଦେବା ଆବଶ୍ୟକ ନୁହେଁ| କୌଣସି କାରଣ ନ ଦେଇ ଆପଣ ଏହି ଅଧ୍ୟୟନରୁ ପ୍ରତ୍ୟାହାର କରିପାରିବେ |

ଏହି ଅଧ୍ୟୟନର ଉଦ୍ଦେଶ୍ୟ କଣ?

ଏହି ଅଧ୍ୟୟନର ଉଦ୍ଦେଶ୍ୟ ହେଉଛି ଓଡିଶାରେ ଡାକ୍ତରଖାନାରେ ଶିଶୁ ଜନ୍ମ/ପ୍ରସବ ର ନିର୍ଣ୍ଣୟ ଉପରେ ମହିଳାଙ୍କ ଦୃଷ୍ଟିକୋଣ ଜାଣିବା| ଏହି ଅଧ୍ୟୟନରେ ଆମେ ଆପଣଙ୍କ ଅଞ୍ଚଳରେ ମହିଳା ଏବଂ ସ୍ୱାସ୍ଥ୍ୟ ସେବା କର୍ମିଙ୍କ ସହିତ ଆଲୋଚନା କରୁଛୁ| ଆମର ସାକ୍ଷାତକାର ର ଉଦ୍ଦେଶ୍ୟ ହେଉଛି ଡାକ୍ତରଖାନାରେ/ଅନୁଷ୍ଠାନିକ ଶିଶୁ ଜନ୍ମରେ ସହାୟକ ହେଉଥିବା କାରଣଗୁଡିକ ଜାଣିବା |

ଏହି ଅଧ୍ୟୟନରେ ମୁଁ କଣ କରିବେ?

ଏହି ଅଧ୍ୟୟନରେ ଆମେ ଆପଣଙ୍କ ଅଞ୍ଚଳରେ ମହିଳା ଏବଂ ସ୍ୱାସ୍ଥ୍ୟ ସେବା କର୍ମିଙ୍କ ସହିତ ଆଲୋଚନା କରୁଛୁ|ଆମର ଉଦ୍ଦେଶ୍ୟ ହେଉଛି ଡାକ୍ତରଖାନାରେ/ଅନୁଷ୍ଠାନିକ ଶିଶୁ ଜନ୍ମରେ ସହାୟକ ହେଉଥିବା କାରଣଗୁଡିକ ଜାଣିବା| ଯଦି ଆପଣ ଅନୁମତି ଦିଅନ୍ତି, ଏହି ସାକ୍ଷାତକାର ପ୍ରାୟ ୪୫ ମିନିଟ୍ ପର୍ଯ୍ୟନ୍ତ ଲାଗିବ| ଆପଣଙ୍କର ପୂର୍ବ ଲିଖିତ ସମ୍ମତି ସହିତ ଏହି ସାକ୍ଷାତକାର ଅଡିଓଟେପ୍ ହେବ| ସାକ୍ଷାତକାର ସମୟରେ ସାକ୍ଷାତକାର ମଧ୍ୟ ହସ୍ତଲିଖିତ ନୋଟ୍ ନେଇପାରନ୍ତି|

ଏହି ଅନୁସନ୍ଧାନ (ଅଂଶଗ୍ରହଣକାରୀ ଚୟନ) ପାଇଁ ମୋତେ କାହିଁକି ମନୋନୀତ କରାଗଲା?

ଆପଣଙ୍କ ଗର୍ଭଧାରଣର ବିବରଣୀ ଆଶାଙ୍କଠାରୁ(ସ୍ୱୀକୃତିପ୍ରାପ୍ତ ସାମାଜିକ ସ୍ୱାସ୍ଥ୍ୟ କର୍ମୀ) ନିଆଯାଇଥିଲା,ଯେଉଁଠାରେ ଆପଣ ଜନନୀ ସୁରକ୍ଷା ଯୋଜନା (JSY)ଏକ ସମ୍ଭାବ୍ୟ ନାମଲେଖା ଭାବରେ ରେକର୍ଡ ହୋଇଥିଲେ | ଆପଣଙ୍କ ଅଂଶଗ୍ରହଣ ପାଇଁ ଏହା ଆପଣଙ୍କୁ ଯୋଗାଯୋଗ କରିବାରେ ଆମକୁ ସାହାଯ୍ୟ କଲା |

ଯଦି ମୁଁ ଏହି ଅଧ୍ୟୟନରେ କରେ,ତେବେ ଏହାର ପ୍ରକ୍ରିୟା କଣ? ଏହି ଅଧ୍ୟୟନରେ ଅଂଶଗ୍ରହଣ ସମ୍ପୂର୍ଣ୍ଣ ସ୍ୱେଚ୍ଛାକୃତ ଅଟେ |ଯଦି ଆପଣ ଏକ ମୌଖିକ ସମ୍ମତି କିମ୍ବା ଆଙ୍ଗୁଠି ଛାପ ଦେବାକୁ ଚାହୁଁଛନ୍ତି,ତେବେ ଏକ ସାକ୍ଷୀ ଦସ୍ତଖତ ପ୍ରଯୁଜ୍ୟ ହେବ |ସାକ୍ଷାତକାର ସମୟରେ ସାକ୍ଷାତକାର ମଧ୍ୟ ହସ୍ତଲିଖିତ ନୋଟ୍ ନେଇପାରନ୍ତି|

ଯଦି ଆପଣ କୌଣସି ସମୟରେ କୌଣସି ପ୍ରଶ୍ନର ଉତ୍ତର ଦେବାକୁ ଚାହୁଁନାହାଁନ୍ତି, ତେବେ ଆପଣ ସେଗୁଡିକର ଉତ୍ତର ଦେବା ଆବଶ୍ୟକ ନୁହେଁ| କୌଣସି କାରଣ ନ ଦେଇ ଆପଣ ଏହି ଅଧ୍ୟୟନରୁ ପ୍ରତ୍ୟାହାର କରିପାରିବେ |

ଏହାର ଅବଧି କଣ?

ଯଦି ଆପଣ ଅନୁମତି ଦିଅନ୍ତି, ଏହି ସାକ୍ଷାତକାର ପ୍ରାୟ ୪୫ ମିନିଟ୍ ପର୍ଯ୍ୟନ୍ତ ଲାଗିବ|

ମୋ ପାଇଁ ସମ୍ଭାବ୍ୟ ବିପଦ କଣ ହୋଇପାରେ?

ଏହି ଅନୁସନ୍ଧାନରେ ଅଂଶଗ୍ରହଣକାରୀ ଭାବରେ ଜଡିତ ହୋଇ କୌଣସି ସମ୍ଭାବ୍ୟ ଜଣାଶୁଣା କିମ୍ବା ଅଜ୍ଞାତ ବିପଦ ନାହିଁ |

ମୋ ପାଇଁ ସମ୍ଭାବ୍ୟ ଲାଭ କଣ ହୋଇପାରେ?

ଯଦିଓ ଆପଣ ନିଜ ପାଇଁ କୌଣସି ତତକ୍ଷଣାତ୍ ଲାଭ ଦେଖିବାକୁ ସକ୍ଷମ ହୋଇନପାରନ୍ତି, ଆପଣଙ୍କର ଅଂଶଗ୍ରହଣ ଗୁରୁତ୍ୱପୂର୍ଣ୍ଣ କାରଣ ଏହା ଜନନୀ ସୁରକ୍ଷ ଯୋଜନା (JSY) କାର୍ଯ୍ୟକ୍ରମର କାର୍ଯ୍ୟକାରିତା ବୁଝିବାରେ ସାହାଯ୍ୟ କରିବ |

ଅଂଶଗ୍ରହଣ ପାଇଁ ମୋତେ ଟଙ୍କା ଦିଆଯିବ କି?

ଅଧ୍ୟୟନରେ ଆପଣଙ୍କର ଅଂଶଗ୍ରହଣ ପାଇଁ କୃତଜ୍ଞତାର ଏକ ଟୋକନ୍ ଭାବରେ, ଆପଣଙ୍କୁ INR 150 ର ଅଳ୍ପ ଟୋକନ୍ ପରିମାଣ ଦିଆଯିବ |

ମୋର ଗୋପନୀୟତା କିପରି ବଜାୟ ରହିବ?

ସମ୍ମତି ଫର୍ମରେ ଆପଣଙ୍କ ନାମ,ଦସ୍ତଖତ,ଏବଂ ସାକ୍ଷାତକାର ଗୋପନୀୟ ରଖାଯିବ | ଆପଣଙ୍କ ନାମ ଏବଂ ପରିଚୟ ବିବରଣୀ ଗୋପନୀୟ ରଖାଯିବ ଏବଂ ଏହାକୁ ଅଜ୍ଞାତ କରିବା ପାଇଁ ଅନ୍ୟମାନଙ୍କ ବିବରଣୀ ସହିତ ମିଶ୍ରଣ କରାଯିବ |

ମୋର ସୂଚନା (ତଥ୍ୟ) କିପରି ଷ୍ଟୋର୍ ହେବ?

ଆପଣଙ୍କର ସାକ୍ଷାତକାର ତଥ୍ୟ ଏବଂ ସମ୍ମତି ଫର୍ମଗୁଡିକ ସ୍କାନ୍ ହୋଇ IIT ବମ୍ବେରେ ସୁରକ୍ଷିତ ଭାବରେ ଗଚ୍ଛିତ ହେବ |

ଫଳାଫଳଗୁଡିକ ମୋ ସହିତ ଅଂଶୀଦାର ହେବ?

ଅଧ୍ୟୟନର ଫଳାଫଳ ଭାବରେ ସୃଷ୍ଟି ହୋଇଥିବା ଜ୍ଞାନ ପ୍ରକାଶନ ଏବଂ ସମ୍ମିଳନୀରେ ଅଂଶଗ୍ରହଣ ମାଧ୍ୟମରେ ଅଂଶୀଦାର ହେବ | ଏହା ମୋର ଡକ୍ଟରେଟ୍ ଏକ ଅଂଶ ହେବ | ଅନୁସନ୍ଧାନର ଏକ ସାରାଂଶ ଆପଣଙ୍କ ସହିତ ଅଂଶୀଦାର ହେବ ଯଦି ଆପଣ ପୁରା ଅଧ୍ୟୟନ ଚାହୁଁଛ ତେବେ ଆମକୁ ଏକ ମେଲ୍ ଠିକଣା ପ୍ରଦାନ କରନ୍ତୁ|

ମନା କିମ୍ବା ପ୍ରତ୍ୟାହାର କରିବାର ମୋର ଅଧିକାର ଅଛି କି?

ଏହି ଅଧ୍ୟୟନରେ ଅଂଶଗ୍ରହଣ ସମ୍ପୂର୍ଣ୍ଣ ସ୍ୱେଚ୍ଛାକୃତ ଅଟେ | କୌଣସି କାରଣ ନ ଦେଇ ଆପଣ ଏହି ଅଧ୍ୟୟନରୁ ପ୍ରତ୍ୟାହାର କରିପାରିବେ

ଯଦି ମୋର ଆଉ କିଛି ପ୍ରଶ୍ନ ଅଛି ତେବେ ମୁଁ କାହା ସହିତ ଯୋଗାଯୋଗ କରିବି?

ଏହି ପ୍ରସ୍ତାବକୁ ମୁମ୍ବାଇର ଆଇଆଇଟି ବମ୍ବେର (IITB)IEC

ଯାହାର କାର୍ଯ୍ୟ ହେଉଛି ଅନୁସନ୍ଧାନକାରୀ ଅଂଶଗ୍ରହଣକାରୀମାନେ କ୍ଷତିରୁ ରକ୍ଷା କରିବା, ଦ୍ୱାରା ସମୀକ୍ଷା ଏବଂ ଅନୁମୋଦନ କରାଯାଇଛି । ଯଦି ଆପଣ IITB ରେ IEC ବିଷୟରେ ଅଧିକ ଜାଣିବାକୁ ଚାହାଁନ୍ତି, ଦୟାକରି ନିମ୍ନଲିଖିତ ବ୍ୟକ୍ତିବିଶେଷଙ୍କ ସହିତ ଯୋଗାଯୋଗ କରନ୍ତୁ:

୧. ଡକ୍ଟର ଶ୍ରୀଲେଖା ଗୋପୀନାଥନ୍

ସଦସ୍ୟ ସଚିବ, ଆଇଆରସିସି, ଆଇଆଇଟି ବମ୍ବେ

ଇ-ମେଲ୍: sreelekha@ircc.iitb.ac.in |

ଯୋଗାଯୋଗ: **********

୨. ମୁଖ୍ୟ ଅନୁସନ୍ଧାନକାରୀ (PI): ପ୍ରଫେସର ସାର୍ଥକ ଗୌରଭ

ଇ-ମେଲ୍: sgaurav@iitb.ac.in |

ଯୋଗାଯୋଗ: **********

ଯଦି ଆପଣଙ୍କର କିଛି ପ୍ରଶ୍ନ ଅଛି, ଆପଣ ବର୍ତ୍ତମାନ କିମ୍ବା ପରେ ସେମାନଙ୍କୁ ପଚାରିପାରିବେ | ଯଦି ଆପଣ ପରେ ପ୍ରଶ୍ନ ପଚାରିବାକୁ ଚାହାଁନ୍ତି, ତେବେ ଆପଣ ମୋତେ ମଧ୍ୟ ଯୋଗାଯୋଗ କରିପାରିବେ |

(ଇ-ମେଲ୍: rohit.shah @ iitb.ac.in / rohit.shah @ monash.edu କିମ୍ବା ******** ରେ ଯୋଗାଯୋଗ କରନ୍ତୁ)

ଦ୍ୱିତୀୟ ଭାଗ: ସମ୍ମତି ପ୍ରମାଣପତ୍ର

ସମ୍ମତି ସାର୍ଟିଫିକେଟ୍

ଅଂଶଗ୍ରହଣକାରୀ ଗ୍ରୁପ୍ ୧

ଏହି ସମ୍ମତି ପ୍ରମାଣପତ୍ର ଅନୁସନ୍ଧାନକାରୀଙ୍କ ପାଖରେ ରହିବ

ଦ୍ୱିତୀୟ ଭାଗ: ସମ୍ମତି ପ୍ରମାଣପତ୍ର |

ମୋତେ ଅନୁସନ୍ଧାନରେ ଭାଗ ନେବାକୁ କୁହାଯାଇଛି: ଓଡିଶାରେ ଅନୁଷ୍ଠାନିକ ପ୍ରସବ ର ନିର୍ଣ୍ଣୟ ଉପରେ ମହିଳାଙ୍କ ଦୃଷ୍ଟିକୋଣ |

ମୁଁ ଉପରୋକ୍ତ ସୂଚନା ପଢିଛି, କିମ୍ବା ଏହା ମୋତେ ପଢାଯାଇଛି | ମୁଁ ଏହା ବିଷୟରେ ପ୍ରଶ୍ନ ପଚାରିବାର ସୁଯୋଗ ପାଇଛି, ଏବଂ ମୁଁ ପଚାରିଥିବା ସମସ୍ତ ପ୍ରଶ୍ନର ସନ୍ତୋଷଜନକଉତ୍ତର ଦିଆଯାଇଛି |

ମୁଁ ଏଠାରେ ନିମ୍ନଲିଖିତକୁ ସହମତ: ହଁ ନା

ସାକ୍ଷାତକାର ସମୟରେ ଅଡିଓ ରେକର୍ଡିଂ

ସାକ୍ଷାତକାର ଦ୍ୱାରା ଆବଶ୍ୟକ ହେଲେ ହସ୍ତଲିଖିତ ନୋଟ୍ ନେଇପାରନ୍ତି

ଅଂଶଗ୍ରହଣକାରୀଙ୍କ ନାମ: _____

ଦସ୍ତଖତ: _____

ତାରିଖ: _____

ସାକ୍ଷୀ: (କେବଳ ମୌଖିକ ସମ୍ମତି ପାଇଁ ପ୍ରଯୁଜ୍ୟ କିମ୍ବା ଯଦି ଅଂଶଗ୍ରହଣକାରୀ ଆଙ୍ଗୁଠି ଛାପ ଦିଅନ୍ତି)

ମୁଁ ସମ୍ଭାବ୍ୟ ଅଂଶଗ୍ରହଣକାରୀଙ୍କୁ ସୂଚିତ ସମ୍ମତି ଫର୍ମର ସଠିକ୍ ପଢ଼ାଯିବାର ସାକ୍ଷୀ ହୋଇଛି, ଏବଂ ବ୍ୟକ୍ତି ପ୍ରଶ୍ନ ପଚାରିବାର ସୁଯୋଗ ପାଇଛନ୍ତି|ମୁଁ ନିଶ୍ଚିତ କରେ ଯେ ବ୍ୟକ୍ତି ମୁକ୍ତ ଭାବରେ ସମ୍ମତି ଦେଇଛନ୍ତି |

ସାକ୍ଷୀଙ୍କ ନାମ:

ସାକ୍ଷୀ ଦସ୍ତଖତ |

ତାରିଖ

ଅନୁସନ୍ଧାନକାରୀ / ସମ୍ମତି ଗ୍ରହଣ କରୁଥିବା ବ୍ୟକ୍ତିଙ୍କ ବିବୃତ୍ତି:

ମୁଁ ସମ୍ଭାବ୍ୟ ଅଂଶଗ୍ରହଣକାରୀଙ୍କୁ ସୂଚନା ଶୀଟ୍ ସଠିକ୍ ଭାବରେ ପଢିଛି, ଏବଂ ମୋ ସାମର୍ଥ୍ୟ ଅନୁଯାୟୀ, ମୁଁ ନିଶ୍ଚିତ କରୁଅଛି ଯେ ସୂଚନା ଶୀଟ୍ ରେ ବର୍ଣ୍ଣିତ ଅଧ୍ୟୟନର ଆବଶ୍ୟକତା ଅଂଶଗ୍ରହଣକାରୀ ବୁଝିଛନ୍ତି|

ମୁଁ ନିଶ୍ଚିତ କରୁଅଛି ଯେ ଅଂଶଗ୍ରହଣକାରୀଙ୍କୁ ଅଧ୍ୟୟନ ବିଷୟରେ ପ୍ରଶ୍ନ ପଚାରିବାକୁ ଅନୁମତି ଦିଆଯାଇଥିଲା, ଏବଂ ଅଂଶଗ୍ରହଣକାରୀଙ୍କ ଦ୍ୱାରା ପଚରାଯାଇଥିବା ସମସ୍ତ ପ୍ରଶ୍ନର ସଠିକ୍ ଉତ୍ତର ଏବଂ ମୋ ସାମର୍ଥ୍ୟ ଅନୁଯାୟୀ ଉତ୍ତର ଦିଆଯାଇଛି | ମୁଁ ନିଶ୍ଚିତ କରୁଅଛି ଯେ ବ୍ୟକ୍ତିବିଶେଷଙ୍କୁ ସମ୍ମତି ଦେବା ପାଇଁ ବାଧ କରାଯାଇ ନାହିଁ, ଏବଂ ସମ୍ମତି ମୁକ୍ତ ଏବଂ ସ୍ୱେଚ୍ଛାକୃତ ଭାବେ ଦିଆଯାଇଛି |

ଅନୁସନ୍ଧାନକାରୀ ନାମ: ରୋହିତ ଶାହ

ଅନୁସନ୍ଧାନକାରୀଙ୍କ ଦସ୍ତଖତ _____

ତାରିଖ _____ (dd / mm / yyyy)

ମୁଖ୍ୟ ଅନୁସନ୍ଧାନକାରୀଙ୍କ ନାମ: ସାର୍ଥକ ଗୌରଭ

ମୁଖ୍ୟ ଅନୁସନ୍ଧାନକାରୀଙ୍କ ଦସ୍ତଖତ _____

ତାରିଖ _____ (dd / mm / yyyy)

ODIA TRANSLATION OF CONSENT FORM, GROUP II)

ସମ୍ମତି ଫର୍ମ

(ଏହି ସୂଚନା ଫର୍ମ ଆପଣ ରଖିବା ପାଇଁ)

ଅଂଶଗ୍ରହଣକାରୀ ଗ୍ରୁପ୍ **9**

ଅଧ୍ୟୟନର ଆଖ୍ୟା: ଓଡିଶାରେ ଅନୁଷ୍ଠାନିକ ପ୍ରସବ ର ନିର୍ଣ୍ଣୟ ଉପରେ ମହିଳାଙ୍କ ଦୃଷ୍ଟିକୋଣ

ରୋହିତ ଶାହ (ଡକ୍ଟରେଟ୍ ପ୍ରାର୍ଥୀ)

ପ୍ରଫେସର ସାର୍ଥକ ଗୌରଭ (ଆଇଆଇଟି - IIT ବମ୍ବେ, ମୁମ୍ବାଇ)

ପ୍ରଫେସର ଜେନ ଫିଷେର (ମୋନାଶ ବିଶ୍ୱବିଦ୍ୟାଳୟ, ଅଷ୍ଟ୍ରେଲିୟା)

ଡକ୍ଟରାଲ୍ ରିସର୍ଚ୍ଚ ପ୍ରୋଜେକ୍ଟ ନଂ: HSS0641

ଆଇଆଇଟିବି-ମୋନାଶ ରିସର୍ଚ୍ଚ ଏକାଡେମୀ

ଏହି ସୂଚନା ସମ୍ମତି ଫର୍ମର ଦୁଇଟି ଅଂଶ ଅଛି:

- ସୂଚନା ଶୀଟ୍ (ଆପଣଙ୍କ ସହିତ ଅଧ୍ୟୟନ ବିଷୟରେ ସୂଚନା ଦେବାକୁ)
- ସମ୍ମତି ପ୍ରମାଣପତ୍ର (ଯଦି ଆପଣ ଅଂଶଗ୍ରହଣ କରିବାକୁ ରାଜି ହୁଅନ୍ତି ତେବେ ଦସ୍ତଖତ ପାଇଁ)

ପ୍ରଥମ ଭାଗ: ସୂଚନା ଶୀଟ୍

ନମସ୍କାର,

ମୋର ନାମ ରୋହିତ ଶାହ,ଏବଂ ମୁଁ ଆଇଆଇଟିବି-ମୋନାଶ ରିସର୍ଚ୍ଚ ଏକାଡେମୀରେ ଡକ୍ଟରେଟ୍ ପ୍ରାର୍ଥୀ। ମୋର ଡକ୍ଟରେଟ୍ ସୁପରଭାଇଜର, ପ୍ରଫେସର ସାର୍ଥକ ଗୌରଭ (SJMSOM, IIT ବମ୍ବେ) ଏବଂ ପ୍ରଫେସର ଜେନ ଫିଷେର (ମୋନାଶ ବିଶ୍ୱବିଦ୍ୟାଳୟ, ଅଷ୍ଟ୍ରେଲିୟା) ଙ୍କ ସହ ମୁଁ ଯେଉଁ ଅଧ୍ୟୟନ କରୁଛି,ଏହାର ଶୀର୍ଷକ ହେଉଛି "ଓଡିଶାରେ ଅନୁଷ୍ଠାନିକ ପ୍ରସବ ର ନିର୍ଣ୍ଣୟ ଉପରେ ମହିଳାଙ୍କ ଦୃଷ୍ଟିକୋଣ" |

ଏହି ଅନୁସନ୍ଧାନରେ ଭାଗ ନେବାକୁ ନିଷ୍ପତ୍ତି ନେବା ପୂର୍ବରୁ ଦୟାକରି ଏହି ସୂଚନା ଶୀଟ୍ କୁ ଭଲ ଭାବରେ ପଢନ୍ତୁ| ଯଦି ଆପଣଙ୍କର ଇଂରାଜୀ ପଢିବାରେ କୌଣସି ଅସୁବିଧା ଅଛି, ତେବେ ଓଡିଆରେ ଏହି ଫର୍ମର ଅନୁବାଦିତ ସଂସ୍କରଣ ପ୍ରଦାନ କରାଯାଇପାରିବ | ଯଦି ଆପଣ ଚାହାଁନ୍ତି, ଓଡିଆରେ ଏକ ଅନୁବାଦିତ ସଂସ୍କରଣ ଆପଣଙ୍କୁ ପଠାଯାଇପାରିବ| ଯଦି

ଆପଣ କୌଣସି ସମୟରେ କୌଣସି ପ୍ରଶ୍ନର ଉତ୍ତର ଦେବାକୁ ଚାହୁଁନାହାଁନ୍ତି, ତେବେ ଆପଣ ସେଗୁଡିକର ଉତ୍ତର ଦେବା ଆବଶ୍ୟକ ନୁହେଁ| କୌଣସି କାରଣ ନ ଦେଇ ଆପଣ ଏହି ଅଧ୍ୟୟନରୁ ପ୍ରତ୍ୟାହାର କରିପାରିବେ |

ଏହି ଅଧ୍ୟୟନର ଉଦ୍ଦେଶ୍ୟ କଣ?

ଏହି ଅଧ୍ୟୟନର ଉଦ୍ଦେଶ୍ୟ ହେଉଛି ଓଡିଶାରେ ଡାକ୍ତରଖାନାରେ ଶିଶୁ ଜନ୍ମ/ପ୍ରସବ ର ନିର୍ଣ୍ଣୟ ଉପରେ ମହିଳାଙ୍କ ଦୃଷ୍ଟିକୋଣ ଜାଣିବା| ଏହି ଅଧ୍ୟୟନରେ ଆମେ ଆପଣଙ୍କ ଅଞ୍ଚଳରେ ମହିଳା ଏବଂ ସ୍ୱାସ୍ଥ୍ୟ ସେବା କର୍ମିଙ୍କ ସହିତ ଆଲୋଚନା କରୁଛୁ| ଆମର ସାକ୍ଷାତକାର ର ଉଦ୍ଦେଶ୍ୟ ହେଉଛି ଡାକ୍ତରଖାନାରେ/ଅନୁଷ୍ଠାନିକ ଶିଶୁ ଜନ୍ମରେ ସହାୟକ ହେଉଥିବା କାରଣଗୁଡିକ ଜାଣିବା |

ଏହି ଅଧ୍ୟୟନରେ ମୁଁ କଣ କରିବେ?

ଏହି ଅଧ୍ୟୟନରେ ଆମେ ଆପଣଙ୍କ ଅଞ୍ଚଳରେ ମହିଳା ଏବଂ ସ୍ୱାସ୍ଥ୍ୟ ସେବା କର୍ମିଙ୍କ ସହିତ ଆଲୋଚନା କରୁଛୁ|ଆମର ଉଦ୍ଦେଶ୍ୟ ହେଉଛି ଡାକ୍ତରଖାନାରେ/ଅନୁଷ୍ଠାନିକ ଶିଶୁ ଜନ୍ମରେ ସହାୟକ ହେଉଥିବା କାରଣଗୁଡିକ ଜାଣିବା| ଯଦି ଆପଣ ଅନୁମତି ଦିଅନ୍ତି, ଏହି ସାକ୍ଷାତକାର ପ୍ରାୟ ଅଧଘଣ୍ଟା ପର୍ଯ୍ୟନ୍ତ ଲାଗିବ| ଆପଣଙ୍କର ପୂର୍ବ ଲିଖିତ ସମ୍ମତି ସହିତ ଏହି ସାକ୍ଷାତକାର ଅଡିଓଟେପ୍ ହେବ| ସାକ୍ଷାତକାର ସମୟରେ ସାକ୍ଷାତକାର ମଧ୍ୟ ହସ୍ତଲିଖିତ ନୋଟ୍ ନେଇପାରନ୍ତି|

ଏହି ଅନୁସନ୍ଧାନ (ଅଂଶଗ୍ରହଣକାରୀ ଚୟନ) ପାଇଁ ମୋତେ କାହିଁକି ମନୋନୀତ କରାଗଲା?

JSY ଯୋଜନା ସମ୍ଭାବ୍ୟ ହିତାଧିକାରୀଙ୍କ ଦୃଷ୍ଟିକୋଣ ବ୍ୟତୀତ, ସ୍ୱାସ୍ଥ୍ୟ ପ୍ରଦାନକାରୀଙ୍କ ଦୃଷ୍ଟିକୋଣ ସ୍ୱାସ୍ଥ୍ୟ ସେବାର ସମସ୍ୟାକୁ ବୁଝିବାରେ ସାହାଯ୍ୟ କରିବ, ଯାହା ଏହି ଅନୁସନ୍ଧାନରେ ଏକ ଉତ୍ତମ ଉଦ୍ଦେଶ୍ୟ|

ଉକ୍ତ କ୍ଷେତ୍ରରେ ଆପଣଙ୍କର ଅଭିଜ୍ଞତାକୁ ଦୃଷ୍ଟିରେ ରଖି, ଜଣେ ସମ୍ଭାବ୍ୟ ଅଂଶଗ୍ରହଣକାରୀ ଭାବରେ ଆପଣଙ୍କ ଚୟନ କରାଯାଇଥିଲା|

ଯଦି ମୁଁ ଏହି ଅଧ୍ୟୟନରେ କରେ,ତେବେ ଏହାର ପ୍ରକ୍ରିୟା କଣ?

ଏହି ଅଧ୍ୟୟନରେ ଅଂଶଗ୍ରହଣ ସମ୍ପୂର୍ଣ୍ଣ ସ୍ୱେଚ୍ଛାକୃତ ଅଟେ |ଯଦି ଆପଣ ଏକ ମୌଖିକ ସମ୍ମତି କିମ୍ବା ଆଙ୍ଗୁଠି ଛାପ ଦେବାକୁ ଚାହୁଁଛନ୍ତି,ତେବେ ଏକ ସାକ୍ଷୀ ଦସ୍ତଖତ ପ୍ରଯୁଜ୍ୟ ହେବ |ସାକ୍ଷାତକାର ସମୟରେ ସାକ୍ଷାତକାର ମଧ୍ୟ ହସ୍ତଲିଖିତ ନୋଟ୍ ନେଇପାରନ୍ତି|

ଯଦି ଆପଣ କୌଣସି ସମୟରେ କୌଣସି ପ୍ରଶ୍ନର ଉତ୍ତର ଦେବାକୁ ଚାହୁଁନାହାଁନ୍ତି, ତେବେ ଆପଣ ସେଗୁଡିକର ଉତ୍ତର ଦେବା ଆବଶ୍ୟକ ନୁହେଁ| କୌଣସି କାରଣ ନ ଦେଇ ଆପଣ ଏହି ଅଧ୍ୟୟନରୁ ପ୍ରତ୍ୟାହାର କରିପାରିବେ |

ଏହାର ଅବଧି କଣ?

ଯଦି ଆପଣ ଅନୁମତି ଦିଅନ୍ତି, ଏହି ସାକ୍ଷାତକାର ପ୍ରାୟ ଅଧ ଘଣ୍ଟା ପର୍ଯ୍ୟନ୍ତ ଲାଗିବ|

ମୋ ପାଇଁ ସମ୍ଭାବ୍ୟ ବିପଦ କଣ ହୋଇପାରେ?

ଏହି ଅନୁସନ୍ଧାନରେ ଅଂଶଗ୍ରହଣକାରୀ ଭାବରେ ଜଡିତ ହୋଇ କୌଣସି ସମ୍ଭାବ୍ୟ ଜଣାଶୁଣା କିମ୍ବା ଅଜ୍ଞାତ ବିପଦ ନାହିଁ |

ମୋ ପାଇଁ ସମ୍ଭାବ୍ୟ ଲାଭ କଣ ହୋଇପାରେ?

ଯଦିଓ ଆପଣ ନିଜ ପାଇଁ କୌଣସି ତତକ୍ଷଣାତ୍ ଲାଭ ଦେଖିବାକୁ ସକ୍ଷମ ହୋଇନପାରନ୍ତି, ଆପଣଙ୍କର ଅଂଶଗ୍ରହଣ ଗୁରୁତ୍ୱପୂର୍ଣ୍ଣ କାରଣ ଏହା ଜନନୀ ସୁରକ୍ଷ ଯୋଜନା (JSY) କାର୍ଯ୍ୟକ୍ରମର କାର୍ଯ୍ୟକାରିତା ବୁଝିବାରେ ସାହାଯ୍ୟ କରିବ |

ଅଂଶଗ୍ରହଣ ପାଇଁ ମୋତେ ଟଙ୍କା ଦିଆଯିବ କି?

ନା,ଏହି ଅଧ୍ୟୟନରେ ଅଂଶଗ୍ରହଣ କରିବା ପାଇଁ ଆପଣଙ୍କୁ ଟଙ୍କା ଦିଆଯିବ ନାହିଁ|

ମୋର ଗୋପନୀୟତା କିପରି ବଜାୟ ରହିବ?

ସମ୍ମତି ଫର୍ମରେ ଆପଣଙ୍କ ନାମ,ଦସ୍ତଖତ,ଏବଂ ସାକ୍ଷାତକାର ଗୋପନୀୟ ରଖାଯିବ | ଆପଣଙ୍କ ନାମ ଏବଂ ପରିଚୟ ବିବରଣୀ ଗୋପନୀୟ ରଖାଯିବ ଏବଂ ଏହାକୁ ଅଜ୍ଞାତ କରିବା ପାଇଁ ଅନ୍ୟମାନଙ୍କ ବିବରଣୀ ସହିତ ମିଶ୍ରଣ କରାଯିବ |

ମୋର ସୂଚନା (ତଥ୍ୟ) କିପରି ଷ୍ଟୋର୍ ହେବ?

ଆପଣଙ୍କର ସାକ୍ଷାତକାର ତଥ୍ୟ ଏବଂ ସମ୍ମତି ଫର୍ମଗୁଡିକ ସ୍କାନ୍ ହୋଇ IIT ବମ୍ବେରେ ସୁରକ୍ଷିତ ଭାବରେ ଗଚ୍ଛିତ ହେବ |

ଫଳାଫଳଗୁଡିକ ମୋ ସହିତ ଅଂଶୀଦାର ହେବ?

ଅଧ୍ୟୟନର ଫଳାଫଳ ଭାବରେ ସୃଷ୍ଟି ହୋଇଥିବା ଜ୍ଞାନ ପ୍ରକାଶନ ଏବଂ ସମ୍ମିଳନୀରେ ଅଂଶଗ୍ରହଣ ମାଧ୍ୟମରେ ଅଂଶୀଦାର ହେବ | ଏହା ମୋର ଡକ୍ଟରେଟ୍ ଏକ ଅଂଶ ହେବ | ଅନୁସନ୍ଧାନର ଏକ ସାରାଂଶ ଆପଣଙ୍କ ସହିତ ଅଂଶୀଦାର ହେବ ଯଦି ଆପଣ ପୁରା ଅଧ୍ୟୟନ ଚାହୁଁଛ ତେବେ ଆମକୁ ଏକ ମେଲ୍ ଠିକଣା ପ୍ରଦାନ କରନ୍ତୁ|

ମନା କିମ୍ବା ପ୍ରତ୍ୟାହାର କରିବାର ମୋର ଅଧିକାର ଅଛି କି?

ଏହି ଅଧ୍ୟୟନରେ ଅଂଶଗ୍ରହଣ ସମ୍ପୂର୍ଣ୍ଣ ସ୍ୱେଚ୍ଛାକୃତ ଅଟେ | କୌଣସି କାରଣ ନ ଦେଇ ଆପଣ ଏହି ଅଧ୍ୟୟନରୁ ପ୍ରତ୍ୟାହାର କରିପାରିବେ

ଯଦି ମୋର ଆଉ କିଛି ପ୍ରଶ୍ନ ଅଛି ତେବେ ମୁଁ କାହା ସହିତ ଯୋଗାଯୋଗ କରିବି?

ଏହି ପ୍ରସ୍ତାବକୁ ମୁମ୍ବାଇର ଆଇଆଇଟି ବମ୍ବେର (IITB)IEC

ଯାହାର କାର୍ଯ୍ୟ ହେଉଛି ଅନୁସନ୍ଧାନକାରୀ ଅଂଶଗ୍ରହଣକାରୀମାନେ କ୍ଷତିରୁ ରକ୍ଷା କରିବା, ଦ୍ୱାରା ସମୀକ୍ଷା ଏବଂ ଅନୁମୋଦନ କରାଯାଇଛି । ଯଦି ଆପଣ IITB ରେ IEC ବିଷୟରେ ଅଧିକ ଜାଣିବାକୁ ଚାହାଁନ୍ତି, ଦୟାକରି ନିମ୍ନଲିଖିତ ବ୍ୟକ୍ତିବିଶେଷଙ୍କ ସହିତ ଯୋଗାଯୋଗ କରନ୍ତୁ:

୧. ଡକ୍ଟର ଶ୍ରୀଲେଖା ଗୋପୀନାଥନ୍

ସଦସ୍ୟ ସଚିବ, ଆଇଆରସିସି, ଆଇଆଇଟି ବମ୍ବେ

ଇ-ମେଲ୍: sreelekha@ircc.iitb.ac.in |

ଯୋଗାଯୋଗ: **********

୨. ମୁଖ୍ୟ ଅନୁସନ୍ଧାନକାରୀ (PI): ପ୍ରଫେସର ସାର୍ଥକ ଗୌରଭ

ଇ-ମେଲ୍: sgaurav@iitb.ac.in |

ଯୋଗାଯୋଗ: *********

ଯଦି ଆପଣଙ୍କର କିଛି ପ୍ରଶ୍ନ ଅଛି, ଆପଣ ବର୍ତ୍ତମାନ କିମ୍ବା ପରେ ସେମାନଙ୍କୁ ପଚାରିପାରିବେ | ଯଦି ଆପଣ ପରେ ପ୍ରଶ୍ନ ପଚାରିବାକୁ ଚାହାଁନ୍ତି, ତେବେ ଆପଣ ମୋତେ ମଧ୍ୟ ଯୋଗାଯୋଗ କରିପାରିବେ |

(ଇ-ମେଲ୍: rohit.shah @ iitb.ac.in / rohit.shah @ monash.edu କିମ୍ବା ******** ରେ ଯୋଗାଯୋଗ କରନ୍ତୁ)

ଦ୍ୱିତୀୟ ଭାଗ: ସମ୍ମତି ପ୍ରମାଣପତ୍ର

ସମ୍ମତି ସାର୍ଟିଫିକେଟ୍

ଅଂଶଗ୍ରହଣକାରୀ ଗ୍ରୁପ୍ **9**

ଏହି ସମ୍ମତି ପ୍ରମାଣପତ୍ର ଅନୁସନ୍ଧାନକାରୀଙ୍କ ପାଖରେ ରହିବ

ଦ୍ୱିତୀୟ ଭାଗ: ସମ୍ମତି ପ୍ରମାଣପତ୍ର |

ମୋତେ ଅନୁସନ୍ଧାନରେ ଭାଗ ନେବାକୁ କୁହାଯାଇଛି: ଓଡିଶାରେ ଅନୁଷ୍ଠାନିକ ପ୍ରସବ ର ନିର୍ଣ୍ଣୟ ଉପରେ ମହିଳାଙ୍କ ଦୃଷ୍ଟିକୋଣ |

ମୁଁ ଉପରୋକ୍ତ ସୂଚନା ପଢିଛି, କିମ୍ବା ଏହା ମୋତେ ପଢାଯାଇଛି | ମୁଁ ଏହା ବିଷୟରେ ପ୍ରଶ୍ନ ପଚାରିବାର ସୁଯୋଗ ପାଇଛି, ଏବଂ ମୁଁ ପଚାରିଥିବା ସମସ୍ତ ପ୍ରଶ୍ନର ସନ୍ତୋଷଜନକଉତ୍ତର ଦିଆଯାଇଛି |

ମୁଁ ଏଠାରେ ନିମ୍ନଲିଖିତକୁ ସହମତ: ହଁ ନା

ସାକ୍ଷାତକାର ସମୟରେ ଅଡିଓ ରେକର୍ଡିଂ

ସାକ୍ଷାତକାର ଦ୍ୱାରା ଆବଶ୍ୟକ ହେଲେ ହସ୍ତଲିଖିତ ନୋଟ୍ ନେଇପାରନ୍ତି

ଅଂଶଗ୍ରହଣକାରୀଙ୍କ ନାମ: _____

ଦସ୍ତଖତ: _____

ତାରିଖ: _____

ସାକ୍ଷୀ: (କେବଳ ମୌଖିକ ସମ୍ମତି ପାଇଁ ପ୍ରଯୁଜ୍ୟ କିମ୍ବା ଯଦି ଅଂଶଗ୍ରହଣକାରୀ ଆଙ୍ଗୁଠି ଛାପ ଦିଅନ୍ତି)

ମୁଁ ସମ୍ଭାବ୍ୟ ଅଂଶଗ୍ରହଣକାରୀଙ୍କୁ ସୂଚିତ ସମ୍ମତି ଫର୍ମର ସଠିକ୍ ପଢ଼ାଯିବାର ସାକ୍ଷୀ ହୋଇଛି, ଏବଂ ବ୍ୟକ୍ତି ପ୍ରଶ୍ନ ପଚାରିବାର ସୁଯୋଗ ପାଇଛନ୍ତି|ମୁଁ ନିଶ୍ଚିତ କରେ ଯେ ବ୍ୟକ୍ତି ମୁକ୍ତ ଭାବରେ ସମ୍ମତି ଦେଇଛନ୍ତି |

ସାକ୍ଷୀଙ୍କ ନାମ:

ସାକ୍ଷୀ ଦସ୍ତଖତ |

ତାରିଖ

ଅନୁସନ୍ଧାନକାରୀ / ସମ୍ମତି ଗ୍ରହଣ କରୁଥିବା ବ୍ୟକ୍ତିଙ୍କ ବିବୃତ୍ତି:

ମୁଁ ସମ୍ଭାବ୍ୟ ଅଂଶଗ୍ରହଣକାରୀଙ୍କୁ ସୂଚନା ଶୀଟ୍ ସଠିକ୍ ଭାବରେ ପଢିଛି, ଏବଂ ମୋ ସାମର୍ଥ୍ୟ ଅନୁଯାୟୀ, ମୁଁ ନିଶ୍ଚିତ କରୁଅଛି ଯେ ସୂଚନା ଶୀଟ୍ ରେ ବର୍ଣ୍ଣିତ ଅଧ୍ୟୟନର ଆବଶ୍ୟକତା ଅଂଶଗ୍ରହଣକାରୀ ବୁଝିଛନ୍ତି|

ମୁଁ ନିଶ୍ଚିତ କରୁଅଛି ଯେ ଅଂଶଗ୍ରହଣକାରୀଙ୍କୁ ଅଧ୍ୟୟନ ବିଷୟରେ ପ୍ରଶ୍ନ ପଚାରିବାକୁ ଅନୁମତି ଦିଆଯାଇଥିଲା, ଏବଂ ଅଂଶଗ୍ରହଣକାରୀଙ୍କ ଦ୍ୱାରା ପଚରାଯାଇଥିବା ସମସ୍ତ ପ୍ରଶ୍ନର ସଠିକ୍ ଉତ୍ତର ଏବଂ ମୋ ସାମର୍ଥ୍ୟ ଅନୁଯାୟୀ ଉତ୍ତର ଦିଆଯାଇଛି | ମୁଁ ନିଶ୍ଚିତ କରୁଅଛି ଯେ ବ୍ୟକ୍ତିବିଶେଷଙ୍କୁ ସମ୍ମତି ଦେବା ପାଇଁ ବାଧ କରାଯାଇ ନାହିଁ, ଏବଂ ସମ୍ମତି ମୁକ୍ତ ଏବଂ ସ୍ୱେଚ୍ଛାକୃତ ଭାବେ ଦିଆଯାଇଛି |

ଅନୁସନ୍ଧାନକାରୀ ନାମ: ରୋହିତ ଶାହ

ଅନୁସନ୍ଧାନକାରୀଙ୍କ ଦସ୍ତଖତ _____

ତାରିଖ _____ (dd / mm / yyyy)

ମୁଖ୍ୟ ଅନୁସନ୍ଧାନକାରୀଙ୍କ ନାମ: ସାର୍ଥକ ଗୌରଭ

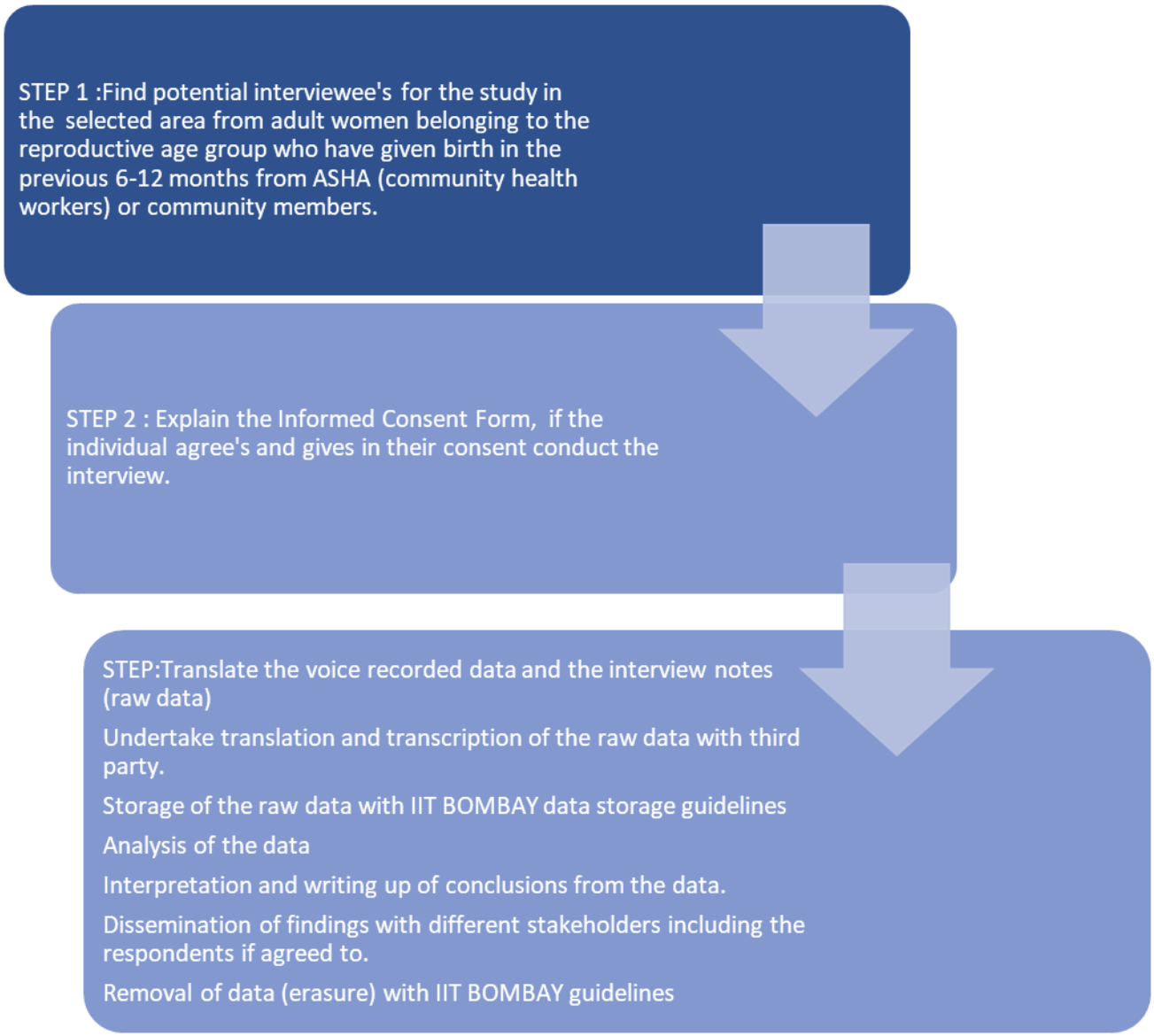
ମୁଖ୍ୟ ଅନୁସନ୍ଧାନକାରୀଙ୍କ ଦସ୍ତଖତ _____

ତାରିଖ _____ (dd / mm / yyyy)

STUDY PROTOCOL

PARTICIPANT GROUP I

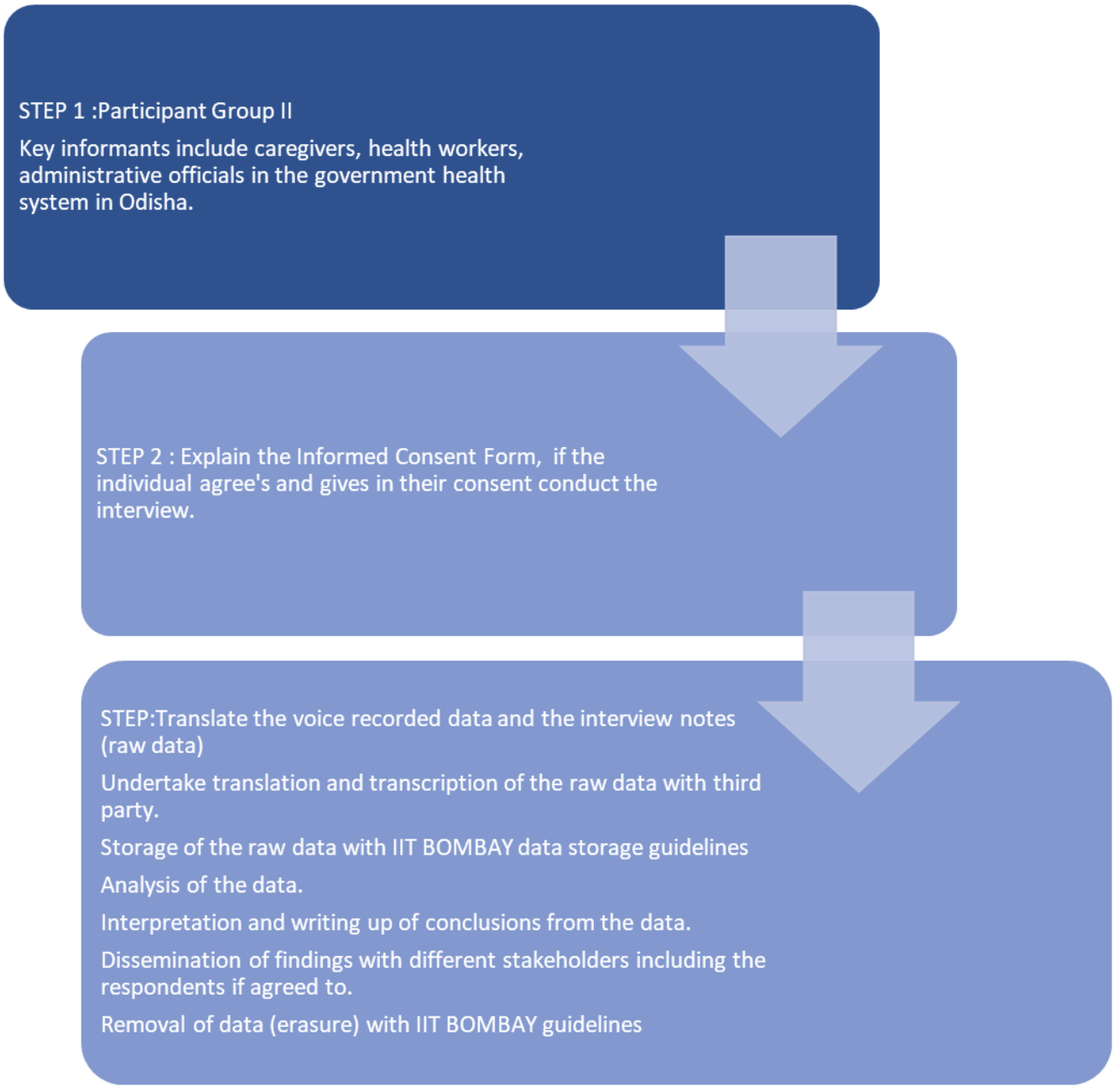
Project title: Exploring Women's Perspectives on Determinants of Institutional Births in Odisha.

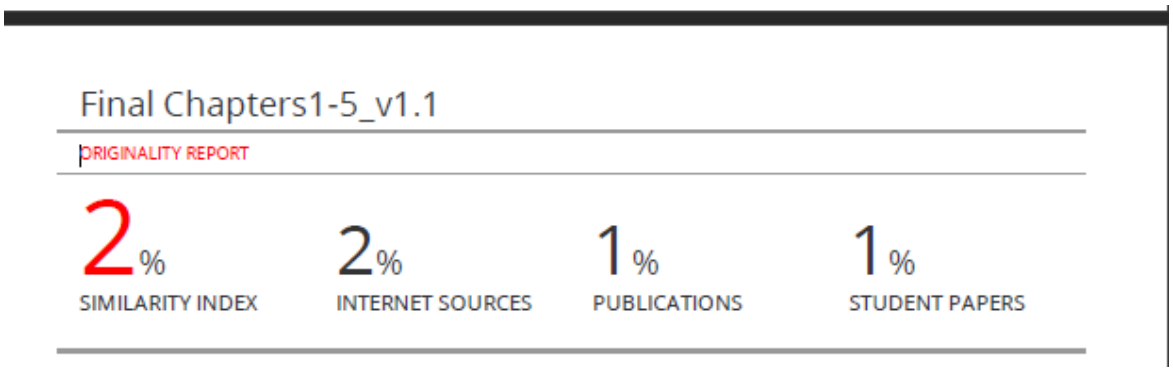


STUDY PROTOCOL

PARTICIPANT GROUP II

Project title Exploring Women's Perspectives on Determinants of Institutional Births in Odisha.





Turnitin Report