Medicalisation of childbirth:

A comparative maternal health policy analysis on places of birth in India and the Netherlands

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PREFACE

"Medicalisation of childbirth" is a qualitative research focussed on maternal health policies at the place of birth in India and the Netherlands. This master's thesis was an important step towards fulfilling the graduation requirements of the master Health, Economics, Policy and Law (HEPL) at Erasmus University Rotterdam.

The reasons for choosing this topic are multifold. Firstly, I was riveted by the idea of conducting interdisciplinary research using concepts from health sociology, policy and architecture. Secondly, my personal motivation to explore emotional well-being, especially focussed on maternal and child health encouraged me to investigate salient aspects of caregiving. Finally, and perhaps most importantly, the birth story of my own mother, when I was born, inspired me to pursue this topic.

I'm sincerely grateful to all the respondents who took the time to share their birth experiences with me, despite their busy schedules and time differences. I am forever amazed at the courage and strength that birthing bodies possess, and I thoroughly enjoyed every interaction we've had. Thank you again, for believing in me and introducing me to so many other women across countries.

This research would be incomplete without thanking my supervisor Dara Ivanova, whose guidance and encouragement have helped me in navigating through qualitative research papers and formulating my thoughts scientifically. I was lucky to be part of an engaging and helpful thesis group.

A special thank you to Priyanka Idicula, Director of Operations at Birthvillage, for giving me the opportunity to conduct research at the birth centre and motivating me to use the research findings for policy advocacy.

Last but not least, I'd like to thank my parents, sister, and my partner for their undying love and support.

Hope you enjoy reading,

Nimeeta Gakhar.

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ABSTRACT

The home-hospital dichotomy is clearly one of the most contested topics in debates about the medicalisation of childbirth. This master thesis uses a qualitative approach to explore the extent of medicalisation at places of birth in India and the Netherlands, by analysis of policy documents complemented with phenomenological birth narratives. The idea is to carefully complement heterogenous care practices and examine the effect of medicalisation at places of birth on women's well-being. To challenge the dichotomisation of birth, I propose birth policy assemblages in an effort to combine birth stories, policy documents and socio-materiality at places of birth. Nineteen in-depth interviews of women, care providers, and architects were conducted to discover the choice and experience of homebirths. The results showed the importance of materiality and design in creating birth environments that address women's physical and emotional well-being. The research findings of the need for visualisation and the spatial dimensions for movement during labour can be used by urban planners and architects in developing better places of birth. The comparative maternal health policy analysis revealed that the normalisation of childbirth comes with its own set of challenges related to the continuum of care, care integration and transfer of care. On the other hand, an overmedicalized system with low autonomy and lack of informed consent can subject women to substandard care, jeopardising informed decision making. In conclusion, to counter the ill effects of medicalisation, re-imagining places of birth based on evidence-based care is an urgent necessity. Humanisation of birth, birth education and multistakeholder governance can cause a cultural shift in the milieu of birthing and enable women to attain positive birth experiences.

Keywords: *medicalisation, place of care, maternal health policy, materiality, assemblages, childbirth, architecture, well-being*

CHAPTER 1 INTRODUCTION

"My body is my home"

Childbirth is said to be one of the most carnal experiences, and since reproduction forms a link between nature and society, the way a culture deals with birth and its women is strongly indicative of its core values (Burns, 2015). Childbirth practices have been centred around institutional births and skilled birth attendance across political, economic, and social reforms (Sharma et al., 2013). In the Western world, the incidence of hospitalisation in childbirth has consistently burgeoned, with an average rate of 98-99 per cent (UN 2000). This increase in hospitalised childbirths with a concomitant rise in medical interventions is what I refer to as the medicalisation of birth.

The shift from home births attended by Traditional Birth Attendants (TBAs) to hospital births is being transitioned through a constant "trade-off between desirable and essential; the desirable being a traditional homebirth in secure surroundings and the essential being the survival of mother and baby by going to the hospital" (Sharma et al., 2013, p.1). For instance, in a developing country like India, the government has established various incentive schemes and policies to achieve universal institutional births as a key strategy to reduce maternal and neonatal mortality (Ghosh & Ghosh, 2020). Furthermore, the causes of neonatal and maternal mortality and morbidity are inextricably linked, and maternal policy interventions can thereby impact the health and wellbeing of the mother and the child (Z.S Lassi et. al, 2013).

Medicalisation has also led to an increase in caesarean sections to 21%, which has amplified globally in the last 15 years, with a 4% increase every year (Lancet, 2018). Based on WHO, the ideal rate for caesarean sections should be between 10% and 15%, and there is no justification for any country to surpass this rate (Lancet, 2018). However, this threshold has been exceeded by many developed countries without evidence of effectiveness (Johanson et al., 2002) and concerns have been raised in developing countries such as India (Walker, 2002). Moreover, Johanson et al. (2002) argue that even though obstetricians play an important role in the management of complicated deliveries, obstetric involvement in normal births has become routine in various countries with private practices. My interest in maternity care stems from an enquiry about this global caesarean section epidemic, and the role of diverse models of care in achieving woman-centred care. This thesis originates from a scientific inquiry of over medicalised systems and an attempt to unravel what Rosenblatt (1989) refers to as a "perinatal paradox: doing more and accomplishing less."

I will be referring to Rooks' (1999) description of the two theoretical models of childbirth: the *medical model* and the *midwifery model*. In the medical model, doctors and obstetricians manage the care of women in hospitals, where the hospital is the safest place. This model is predominant in countries like India. The midwifery model demonstrates 'normalcy' in childbirth with a woman-centric approach with the help of skilled birth attendants and midwives. This model is relatively popular in the Netherlands. Based on emerging evidence, higher rates of 'normal' births are connected to "beliefs about birth, implementation of evidence-based practice, and team working" (Johanson et al., 2002, p.892).

Complementing such theories and scientific evidence, emerging discourses on childbirth delve into the ideas and meanings of care, reflecting changing paradigms in the milieu of birthing (Walsh, 2010). According to Burns (2015), the home has been constructed 'other' than the hospital, as opposed to medical intervention, a place of risk vis- à-vis safety in medical childbirth discourse. The place of birth and midwifery legislation also influence childbirth experiences (Burns,2015).

Childbirth also depends on a myriad of factors such as the culture and policies around midwives and the autonomy of women in making choices (Hadjigeorgiou et al., 2012). Women's perceptions, beliefs, and decisions about where to give birth are closely interlinked with their "living conditions, life chances (structure) and life choices (agency), a proposition to act (habitus) and meaning in life" (Bourdieu,1990, Cockerham, 2007 as cited in Saeedi et. al, 2013, p.45). These factors are often neglected and demand attention when analysing places of birth.

In his book "In Place Out of Place", Cresswell (1996) talks about the construction of ideologies wherein, differentiation of place is the central theme within the home/hospital birth dichotomy. The hospital is what Cresswell (via Bourdieu) refers to as "Doxa", signifying its existence as more of common sense rather than something that requires critical decision making. At the opposite end, home is distinguished as "abnormal", this oppositional relationship is personified by the spatial differentiation, specifically drawing focus on risk and safety, which are being used by both sides of the debates to defend their position (Michie, 1998).

Exploring the effects of place on maternal and perinatal outcomes coupled with the interventions in labour have been axiomatic in various studies on birthplace (Devasenapathy et al., 2014). This association and the meaning ascribed to the place of care has paved the way

to the burgeoning interest in exploring these concepts within the nursing and midwifery fields (Devasenapathy et al., 2014). Buse et al. (2015, p.1010) argue that the "aspiration to make institutions homely has often failed, not least because such intentions failed to appreciate the embedded nature of place and confused the specificities of the architectural form."

Place of birth will be further examined from a sociological standpoint, for understanding the tensions in transporting the homebirth model to institutional care settings, and the various power dynamics between professionals and patients. Focussing on home birth experiences will thereby provide insight into the precariousness of bringing care to homes (Martin et al, 2015) and unravel subtleties in birth policies, care practices and power relations. By doing this, this study complements intersectoral understandings of health policy and governance at places of birth.

Materiality, a highly contested topic will be used as a lens to (re) examine care practices in maternal health (Buse et al.,2018). The concept of materiality is crucial to explore care practices, as the materiality of care and its influence on interactions (non-human and human) in birth centres, hospitals and homes remain inadequately addressed (Tantchou, J. C., 2018). I argue that India and the Netherlands are suitable for comparison, because natural births assisted by midwives or *verloskundigen* (DeVries, 2004), and traditional birth attendants or dais (Bhattacharya, S., 2005) have been traditionally commonplace in the Dutch and Indian birthing cultures, respectively. Nevertheless, they present contesting paradigms of childbirth in international and national maternal health policy narratives and discourses.

For instance, the Netherlands, an exception to its European counterparts, normalises birth. Here, a much larger group of women can give home births attended by a midwife, although in small percentages of overall births (Walsh, 2010). However, despite the drastic reduction in maternal mortality rates, there is a dearth of information and research about the needs of women and their overall well-being. Little is known about the problems women face during and post-pregnancy and their diverse needs.

On the other hand, despite the progress made in the recent decades, in reducing maternal mortality rates, causes for amenable or preventable mortality are still not being addressed adequately in India. Maternal mortality, a priority issue in health policy and research in India, is reflective of economic and socio-cultural disadvantages faced by women (Khan et al., 2013). There are very few studies that explore the well-being of women during and after

childbirth, and the repercussions of over-medicalisation on quality of care in low and middle-income countries (LMIC) (Leone, T., 2015).

This thesis aims to explore the differences in the interplay between built environments and maternal policies in India and the Netherlands, thus revealing how the medicalisation of birth is constructed differently in these two countries. To advance the understanding of places of birth, and their impact on the well-being of mothers, childbirth experiences at birthing centres and homes are analysed.

Wahlström, S. et al (2019) argue that the impact of the socio-cultural environment and the lack of autonomy for women in developing countries, often limits women to access quality medical services. Birth politics is shaped by such entanglements of power, and birthing bodies are central to my inquiry about birth policy assemblages. The work of Michel Foucault (1979) has been instrumental in delineating relationships between power, body, and discourse. In her book *Bodies that birth*, Chadwick (2018, p.1) reflects that "birthing bodies are located within intra-acting fields of power relations, including biomedicine, racialized patriarchy, socioeconomics and geopolitics."

Furthermore, it is imperative to critically analyse the medicalisation of birth and the associated biomedical hegemony (Huopalainen & Satama, 2020), to understand women's choices of homebirths. The current trends ranging from over-medicalisation to de-medicalisation, and the plurality of such movements in childbirth practices will be further investigated. By doing this, I aim to unravel the influence of both the medical and midwifery models on maternal health and analyse women's experiences of healthcare delivery at the place of birth.

So, on one side, we see birth being constructed as a 'biomedically risky event' and on the other, this "(paradoxically) intensive idealization of so-called physiological or 'normal' birth particularly among middle-class, privileged women in Northern contexts" is also evident (Chadwick, 2018, p.4). This contrast between the Netherlands and India will be explored in this thesis and the policies about the medicalisation at the place of birth will be studied to highlight salient aspects of the birthing practices in two very different countries. Within maternal health, my focus is on health policies about childbirth and the thesis answers the following research question:

How do maternal health policies differ in the extend of the medicalisation at the place of birth in India and the Netherlands?

The question can be further specified into the following sub-questions:

1. How are home birth experiences embedded differently in India and the Netherlands?
2. How have policies around childbirth evolved in the Netherlands and India, and what can we learn from them?
3. How can we transform a birth centre into a place of home?
4. How does the material environment of childbirth contribute to the well-being of women?

CHAPTER 2 THEORETICAL FRAMEWORK

The concepts in this theoretical framework will be employed to explore how policies around places of birth are shaped culturally and materially, and how care is provided at home. The concept of materiality of care will be used to analyse places of birth in both India and the Netherlands, and how material elements and objects shape actions and relationships. The comparison is vital to be able to draw similarities and differences in practices and policies in relation to childbirth, and stipulate insights into how places matter (differently). Exploring these two countries will help to further contribute to inherent meanings and interactions of places of birth and help provide sound policy recommendations for both maternity systems.

2.1 PLACE OF CARE

Gieryn (2002) describes ‘place’ as a socially constructed phenomenon, which is considered both as a physical and material site geographically located, mutable over time. Place is based on values and meanings that evolve over time due to varied memories and experiences (Gieryn, 2002). Melo (2018) argues that the concept of place is gaining more popularity due to the interprofessional dynamics that are affected by various perceptions of the built environment. The interaction of obstetricians, midwives, birth attendants with hospitals or homes, and understanding women’s perceptions has both practical and policy relevance for healthcare professionals (Hadjigeorgiou et al., 2012).

The remarkability of place stems from the endless interaction of material forms, and the inherent understandings or experience (Smeenk & ten Have, 2003). Places are constructed eternally, not only through architectural ambitions in brick and mortar, not only when form is given to function by design professionals, but also when ordinary people extract meaning and significance of this place from an abstract space (de Certeau 1984, Etlin 1997). These

meanings reflect a certain sense of embeddedness in historical and cultural interpretation of the terrain supported by the diversity in ways we see and remember cities (Boyer 1994).

The characteristic of meaning to 'built-form or natural spot' (Rotenberg & McDonogh 1993) can go a long way in exploring the way materiality can shape the birthing experience. This sense of place is extremely useful to explore how diverse people and communities assign value to material and social objects around them.

Place and care have received meagre attention in terms of analytical conceptualization (Ivanova et al., 2016). This study aims to add perspective and further explore the role of place of birth, thereby enriching the heterogeneity and multiplicity of care in childbirth, which often goes unnoticed. Moreover, it is vital to zoom into social relations and praxis, power dynamics (Grbin, 2015) and institutional framework of organizations to explore the embodiment of health and illness (Martin et al., 2015). Therefore, place of care/birth will form the basis of the theoretical framework to examine how they influence the well-being of mothers.

2.2 MATERIALITY OF CARE

The material culture studies approach to the sociology of health and illness emphasizes the significance of often neglected, mundane objects which are overlooked owing to their embeddedness in routines (Buse et al., 2018). Materiality can be used as a tool to methodically examine practices in social and health care settings by drawing attention to various objects and features within the environment, and scrutinizing relationships between these objects, materials, and care practices (Buse et al., 2018).

Scholars have explored the materiality of nursing, examining the power of mundane artefacts such as sluice pans, towels, gloves, washing bowls, clothes, cotton balls etc. in illuminating nursing cultures (Buse et al, 2018). Such 'quiet materialites' like soap, hand gloves, shoes, wipes often form the basis to understand the negotiations of *safety* and *touch* by healthcare professionals (Pink et al, 2014, p. 432). Women's narratives of giving birth and their interaction with such objects and materials provide insights into the various policies surrounding maternal and childcare.

Although there are various factors involved in providing care, care management and delivery, the concept of assemblages is useful. Buse et al. (2018) claim that attention to the material elements of the care assemblage can provide insights into non-verbal aspects of care practices. Various human and inhuman elements form assemblages. For instance, a nurse, a

midwife, a doctor, arrangement of a birth room, health technology etc. These assemblages are ever-evolving and relational, changing across contexts (Buse et al., 2018).

Assemblage is a concept used in new materialist approaches to health extending the understanding of social production rather than social construction (Fox, N. J., & Alldred, P., 2014). Assembling and re-assembling involve transcending from 'macro' level phenomena to 'micro-sociology (Fox, N. J., & Alldred, P., 2014). Within assemblages, the materiality of places will be further explored and used to understand how they shape relations and social hierarchies, drive actions and how they are linked to the place of birth.

2.2.1 Birth policy assemblage

To incorporate all the actors, acts and events involved in birth, this study is inspired by the concept of assemblage or French version, agencement) as used by Deleuze & Guattari (1988). 'Assemblage' finds its roots in Actor-network theory (ANT), with a focus on the presence and agency of things. The relations between entities, in this anti-essentialist, anti-totalitarian way of thinking, are not 'logically necessary' as in totalities, but are only 'contingently obligatory' (Gorur, 2010). An assemblage is defined as, "a multiplicity which is made up of many heterogeneous terms and which establishes liaisons, relations between them" (Deleuze & Parnet, 1987 p. 69 as cited in Chadwick, 2018).

In policy research, assemblages are used to comprehend the nature of policies, how they move, manifest, and transform in increasingly transnational contexts and changing policy ideas. However, birth policy assemblages are not documented, yet. One can think of birth stories as assemblages, wherein the new materialist approach gives room for such stories to be reconceptualized. Boundaries, bodies, and capacities are reconceptualized as material-discursive assemblages through which subjectivities, capacities and bodies are (partially) constituted. Birth stories, thus go beyond the reflections of *what really happened*, which bare an unsubstantiated relationship to events in real life, and the mere association of words, language, and discourse (Huopalainen & Suvi Satama, 2020). Birth stories also represent the transfer of care between the midwifery model and the medical model, and within the various levels of care (primary, secondary, and tertiary). I will be challenging the dichotomisation of childbirth using this theory.

Hereby, I introduce the concept of *birth policy assemblages* to combine three elements: birth stories, maternal health policies and associated socio-materiality at the place of care

(Figure 1). Essentially, the aim is to unravel useful information using assemblage thinking that traditional policy research might not necessarily reveal (Savage, 2019).

Policies have the potential to travel and get reassembled in new locations which are understood as the process of translation (Savage, 2019). Moreover, knowledge, ideas, theories, and practices shape policies and essentially have 'power'. They are tools to change, strengthen and at times, weaken international relations between countries. This diffusion of knowledge fuels policy transfer (Stone et al., 2020). This framework also explores an intersection between architecture and healthcare and placed care policies highlighting intersectoral perspectives and enriching our understanding of maternal care.

Birth centres in India are new and so is the term 'midwife', even though birth attendance goes way back in time. The practice of home births has travelled generations, still prevalent in some countries like the Netherlands and certain parts of India. But these practices and policies do not evolve in silos. The singularity of birth is almost always absent and materializes in relation to '*intra-acting sociomaterialities and ontological politics*' (Huopalainen & Satama, 2020). Leonardi (2012) maintains that sociomateriality is progressing from 'materiality' to 'sociomateriality' in the manner in which it acknowledges that materiality establishes the social world, and the social world also impacts technological materiality. 'Social' here means human intentions, norms, institutions, and discourses. (Leonardi, P. M., 2012).

Rejection of birth as a *'stable, decontextualized, biological event'* that is freestanding from culture and politics is paramount when drawing on the new materialist concept of assemblage (Huopalainen & Suvi Satama, 2020). Birth, on the contrary, is conceived as an interplay or *'emergent assemblage'* that involves various embodied relations, components, and forces. Furthermore, it is imperative to analytically approach not only how various components and parts are brought together and assembled, but also pay focus to the ways in which birth policies undergo disruption and change, i.e., how they are disassembled or reassembled (Savage, 2019). Assemblages will help to compare birth policies through the lens of policy convergence and analyse birth stories in relation to the place of birth.

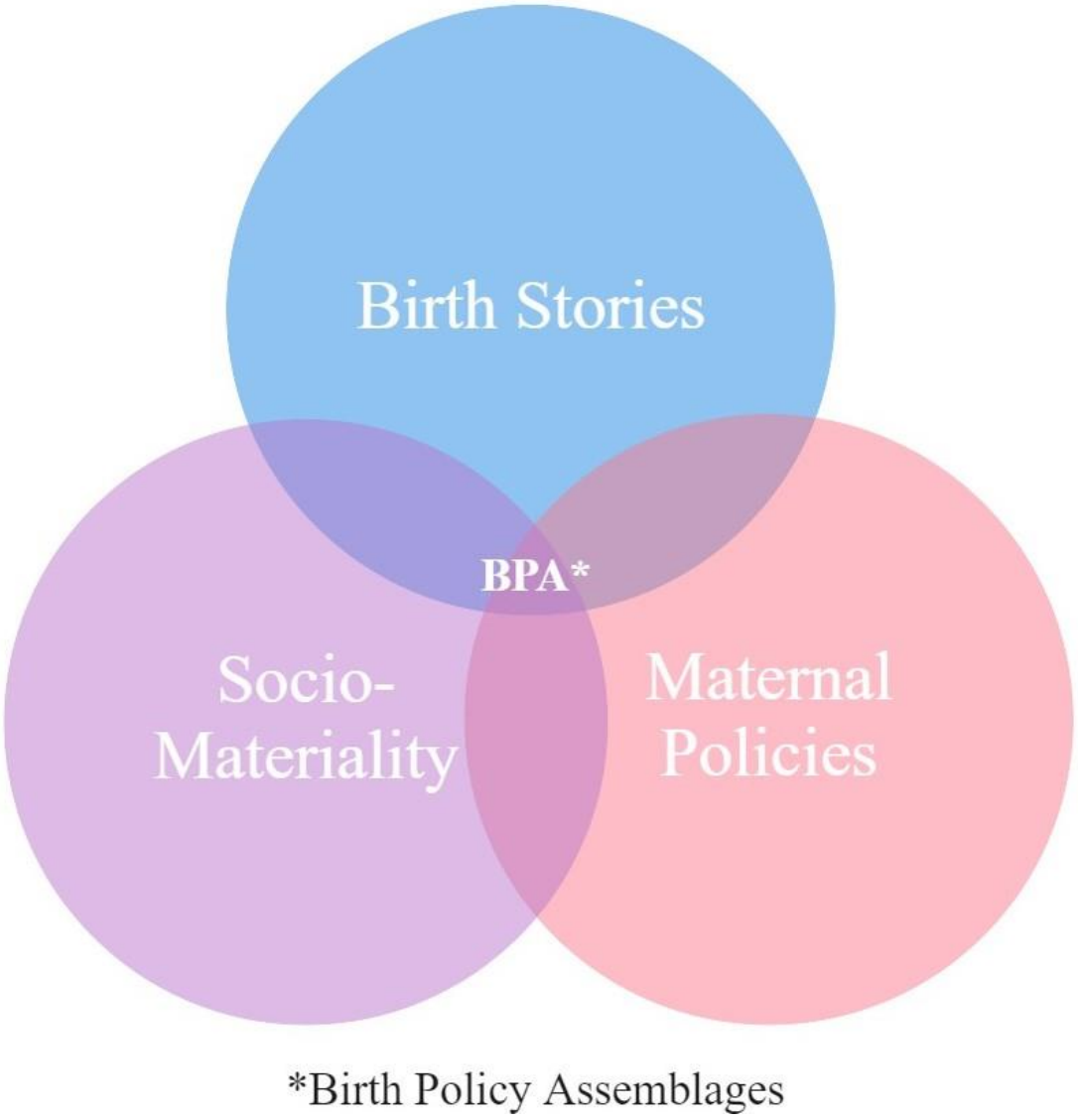

Figure 1 The three elements of Birth Policy Assemblages

2.3 MEDICALISATION

The term *medicalisation* was first introduced by the American sociologist Irving Zola (1973), to draw attention to the process in which terms like "health, disease and illness are applied to variety of aspects of daily life" (Smeenk & ten Have, 2003, p.153). He was of the view that modern medicine has gained importance as an 'institution of social control' and this development has led to replacing traditional institutions as law and religion (Smeenk & ten Have, 2003, p.153).

In Western societies, one can see an expansion in the process of medicalisation and biomedical hegemony, especially within the area of pregnancy and childbirth (Huopalainen & Satama, 2020). Caesarean sections, induction of labour, forceps delivery, episiotomy, oxytocin injections right after birth, etc. are some of the most common medical interventions

during childbirth (Smeenk & ten Have, 2003, Johanson et al., 2002). Medical ways of thinking govern the physiological processes of pregnancy and delivery which has resulted into changing roles of the midwives, the place and location of birth, and the use of medical interventions or technologies in pregnancy, and in the process of childbirth (Smeenk & ten Have, 2003).

Mitchell (2001) demonstrated that pregnancy is currently conceptualized as a time of danger and risk within medical and social discourse. Woliver (2002) argued that childbirth and pregnancy, previously considered *normal* or *natural*, have been taken shape of an unnatural condition or illness whereby there is a postulation of risk to both maternal and foetal health.

Progress in obstetrics has been attributed to advancing medical interventions and use of technologies alongside completely removing the non-medical birth process and placing it in the hands of specialists. Midwives have gained more and more authority over medical dimensions as autonomous medical practitioners, and prevention of pathology and unnecessary medical intervention in low-risk pregnancies has been the focus of midwives.

The other very significant aspect in childbirth is the *screening for risk pregnancies*. The decision making with regards to the place of birth depends significantly on the detection for normal and complicated deliveries, the division of labour between general practitioners and the roles of midwives and obstetricians in the system. (Smeenk & ten Have, 2003).

In maternal policy debates, there is increasing pressure to develop strategies capable of stopping and reversing the trend toward medicalisation, also known as de-medicalisation, without compromising its benefits. Alongside de-medicalisation, there is emerging evidence of humanizing birth by uniting positive effects of medicalisation while limiting its iatrogenic effects. According to Clesse et al, (2018, p.163), “excluding any excessive demedicalisation, humanisation of birth advocates a rebalancing of the role of medicine among women in childbirth by reaffirming the physiological valence of childbirth, and in some cases and countries, reassert the role of midwife support.”

Place of care, materiality, birth policy assemblages and medicalisation form the theoretical framework. This framework will be used to address the theoretically informed research questions and explore the influence of built environment on well-being.

CHAPTER 3 RESEARCH METHODS

3.1 METHODOLOGY

Qualitative study design was used to develop the case study in an interpretative, naturalistic manner, thereby striving to make sense of phenomena by understanding meanings and moments surrounding people's lives (Mays & Pope, 2000). The concept of thick description held relevance for case study research as it entails looking at phenomena of birthing in depth, going beyond what appears at the surface. Special attention was paid to history and the physical settings which are typically central to providing a thick description (Mills, A. J et al, 2010). Qualitative interviews were helpful to compare policy processes and related action and understand the views of various actor's vis a vis the issues related to place of birth in question (Bourgeault et al., 2010).

Phenomenology was useful in discovering perceptions and experiences about childbirth. In India, research was conducted on Birthvillage, a birth centre in Kerala that employs the "Midwifery Model of Care". In both the countries, interviews were virtually conducted via zoom except one interview of a midwife, which took place in person in Rotterdam, the Netherlands. Phenomenology considers the lived experience or lifeworld perspective (Husserl, 1970) where meaning is central to understanding the phenomena of well-being, health, and illness. The idea is to provide insights into caregiving by exploring the various meanings women attach to the place of birth and examine ways to elucidate human existence in a care setting (Dahlberg, K., 2011). The multiple layers of humanity are revealed by using 'lived body' experiences (Dahlberg, K. 2011) in a fundamental event of life such as childbirth. This can be the basis for helping healthcare professionals understand what meanings patients attribute to a fulfilling childbirth experience. I used phenomenology to understand first person accounts and the bodily experiences of childbearing women in retrospective to assess how the environment shaped their well-being, and what delineates a bad experience from a good one.

To maintain scientific rigour in qualitative research, data triangulation was employed using both policy documents and interviews. Triangulation is based on the postulation that, "data, people, contexts, and methods can be triangulated and that taking up such an approach will necessarily result in some kind of validity" (Savin-Baden & Major,2013, p. 477).

3.2 DATA COLLECTION

Data was collected during a period of four months starting from March 2021 and ending at the end of June of the same year. Interview guides were used to develop interview questions and interviews were conducted in English and transcribed. Nineteen well-designed semi-structured interviews of mothers, care providers and architects were collected. Data was captured and analysed in key areas while leaving room for flexibility for participants to bring their own personalities and perspectives to the discussion (Pope & Mays, 2006, p.13).

Various cross-cultural groups of women belonging to India (n=8) and the Netherlands (n=6) in the reproductive age (15-49) who gave birth at birth centres and homes were interviewed to understand their experiences and choices of home births and perceptions about the current state of maternal health. Most of the mothers had an experience of a home birth with the exception of three women who initially planned a home birth but were transferred to the hospital due to labour complications. I chose to include two women who gave birth at the hospital in the Netherlands to examine professional hierarchies and birth medicalisation from a broader perspective. Two midwives (n=2) and doulas (n=2) were interviewed as well to recognize placed care policies and to delve into the diverse healthcare systems and workplace dynamics in both the settings. An architect (n=1) from the firm responsible for designing and constructing Birthvillage team's new birth centre was interviewed to incorporate not only design philosophies and principles, but to develop an in-depth understanding of materiality and assemblages at the place of birth. Birth stories can highlight a myriad of complex interactions among social expectations and negotiations of physical and social spaces. Thereby, the idea was to actively listen to the voices of women and understand the meaning attached to place of care, accompanied with their expectations from the maternal health systems in their respective countries.

I was fortunate to come into contact with pioneers in the field, which provided invaluable insights about maternal health systems. The Indian midwife and doula are amongst the first few birth educators in the country. The Indian midwife (Director of Operations, Birthvillage) has been an active promoter of natural births after her midwifery education from the United States. The doula from the Netherlands is a Sexual Reproductive Health Rights (SRHR) advocate and researcher based in Amsterdam.

The interviews lasted 30 to 60 minutes (with an average of 38 minutes) and in many cases, the interview turned into a free-flowing conversation rather than a simple question-and-answer session. The goal was to identify various ideas and meanings of childbirth across cultural groups in similar birth settings, midwife-led care, in particular. I reached data

saturation early during the interviews. The assessment was made owing to the repetition of themes and codes and the exhaustion of interpretation and explanation of theoretical considerations.

Policy documents were used to develop a comparative maternal health policy analysis and derive policy learnings from both country settings. Document analysis, one of the most powerful methods in health policy research can be defined as "a systematic procedure for reviewing or evaluating documents, which can be used to provide context, generate questions, supplement other types of research data, track change over time and corroborate other sources" (Dalglish et al., 2020, p.1425).

Three rationales for cross-national comparative health policy research will be incorporated, with a strong focus on policy learning: "learning about national health arrangements and how they operate, learning why they take the forms they do, and learning policy lessons from those analyses" (Marmor et. al, 2009, as cited in Blank, R. et al., 2017, p. 5). Policy learning is directed at the analysis of 'best practices' and how countries can learn from each other.

Name of the document	Details
NFHS 2019-2020, India	National Family Health Survey (NFHS-5), for information on maternal and child health
KNOV (2017), the Netherlands	Midwifery in the Netherlands
NNMC Bill (2020), India	National Nursing & Midwifery Commission Bill 2020 Draft
UNFPA(2014) and (2021)	The state of world's midwifery

Table 1 Overview of documents used for comparative health policy analyses

Respondent	Date of the interview	Respondent function	Country of origin	Duration of the interview
1.	23-04-2021	Doula, Birth Educator, former Healthcare journalist	India	1:04:56
2.	26-04-2021	Mother	India	00:21:55
3.	26-04-2021	Mother	India	00:49:32
4.	26-04-2021	Mother	India	00:41:55
5.	27-04-2021	Mother	India	01:20:44
6.	27-04-2021	Mother	India	00:57:17
7.	29-04-2021	Mother	Netherlands	00:19:26
8.	30-04-2021	Mother	India	00:23:49
9.	01-05-2021	Mother	India	00:17:51
10.	05-05-2021	Mother	Netherlands	00:37:49
11.	12-05-2021	Midwife	Netherlands	00:21:27
12.	12-05-2021	Mother	Netherlands	00:31:02
13.	17-05-2021	Mother	Netherlands	00:19:19
14.	19-05-2021	Doula, Global SRHR Researcher & Advocate	Netherlands	00:45:42
15.	25-05-2021	Mother and Doctor	India	00:44:06

16.	03-06-2021	Architect and father	India	00:34:37
17.	03-06-2021	Mother	Netherlands	00:20:30
18.	21-06-2021	Mother	Netherlands	00:20:06
19.	25-06-2021	Midwife, Director of Operations, Birthvillage	India	01:03:51

Table 2 Additional information regarding interviews

3.3 DATA ANALYSIS

Digital recording helped with data collection and analysis allowing repeated viewing (Braun & Clarke, 2006). Data triangulation was employed by use of with multiple data, document analysis, photographs, and semi-structured interviews.

The analysis of the transcribed interviews was facilitated by the coding software Atlas.ti with the aim to uncover patterns (Pope & Mays, 2006, p.71). The process of coding and identification of themes and sub-themes was inductively approached (Braun & Clarke, 2006). Interviews were analysed as appropriate for qualitative inquiry, taking contextual influences into account. Steps used in data analysis comprised exploring the fundamental meaning of the entire individual transcript, recognizing themes, coding of data bits related to those themes, and identification of meaningful passages that described the influence of the place of birth on women's childbirth experience (Callister, L. C., 2004).

3.4 ETHICAL CONSIDERATIONS

In India, Birthvillage was approached initially, and the intent of the research was stated beforehand whilst sharing the objective, research plan and the preliminary interview questions with them. On my behalf, the birth centre reached out to their group of mothers (who gave birth or were planning to give birth at Birthvillage) for voluntary participation. I was approached by eight participants who were willing to share their birth experiences. In the Netherlands, I reached out to the respondents by myself via personal connections, and care providers were approached via social media. Due to confidentiality, birth centres, midwife associations and hospitals could not render help, so I asked around and found a few participants through my research group and other friends. Oral consent was taken before each

interview and participants were informed about how the data was going to be used. At any point, participants were free to stop the interview and not answer questions if they felt uncomfortable in doing so.

CHAPTER 4 RESULTS

As Burns (2015) demonstrated, having a home birth is not as simple and straightforward as "birthing at home." Multiple factors influence women in choosing the right place of birth and in shaping their experience. In both Dutch and Indian contexts, I have examined birth from architecture and materiality of care perspectives, to broaden the way we look at the childbirth practice.

The first section discusses evidence based maternity care, where I delve deeper into the current tensions and gaps in the maternal health systems in India and the Netherlands. Both document analysis and birth narratives are used to give the reader a more nuanced understanding of on the ground realities at places of birth.

Subsequently, the following section presents the findings based on design and architecture of places of birth (birth centres and homes through the lens of clients and users-mothers, care-providers, and an architect. Three major themes that emerged from the data analysis**:** autonomy, embodiment and medicalisation, are expounded. Finally, policy learnings are derived, with the hope to create a more homely and safe place of birth.

4.1 COMPARATIVE HEALTH POLICY ANALYSIS

In this section, the maternity care systems in India and the Netherlands are introduced. Policy documents are critically analysed, and the interviews of care providers and mothers are be presented to elucidate diverse birth experiences and the maternal health policies that govern places of birth.

4.1.1 Medical model in India

> *"All these years, India has been mainly focussing on morbidity and mortality outcomes, but overlooked a positive birth experience. We limit ourselves to a live mother and a live baby. No one is interested in knowing what goes inside the mother. The quality of [childbirth] experience is sadly neglected. We are overmedicalised to a point where women and their families have no idea as to what normalcy is anymore."* (Respondent 19)

Over-medicalisation is a trend seen in the Indian maternal health policies, and India is a perfect example of the Medical model of care. As per National Family Health Survey (NFHS 2019-2020), India is largely dominated by institutional births with much higher rates in urban areas across most states. The maternal health policy is restrictive as substantial progress is still required to address the obstetric causes of maternal mortality to achieve the SDG goal (Mondal, D et al., 2020). India did not independently train and explicitly recognize midwifery until 2020, here nursing graduates are trained as registered auxiliary nurse-midwives (ANM) (WHO, 2020). ANMs are village level midwives who provide birth attendance, and some are even trained to handle complicated births (Scott et. al, 2018). Moreover, Accredited Social Health Activists (ASHA) is another cadre of community health worker who promote maternal and child health and help drive immunisation and community mobilisation (Scott et. al, 2018).

Despite the progress made in the recent decades in causing a decline in maternal mortality rates, causes for amenable or preventable mortality are still not being addressed adequately. To improve maternal and new-born health, continuum of care approach has been employed by India in their reproductive, maternal, new-born and child health (RMNCH) programs to ameliorate mortality and disability (Z. S Lassi et.al, 2013). Two dimensions have been identified under continuum of care: "time (throughout the lifecycle, i.e., adolescence, pregnancy, childbirth, the postnatal period, and childhood) and place (between places of care giving including households and communities, outpatient and outreach services, and clinical-care settings)" (Z. S Lassi et. al, 2013, p.6). However, supply side interventions are scantly addressed and the association of "facility level bottlenecks with skilled delivery" remains to be poorly understood (Kumar, S., & Dansereau, E., 2014, p.6).

Demand side interventions, under the National Rural Health Mission (NRHM) like conditional cash transfers (CCTs) for institutional deliveries under Janani Suraksha Yojana (JSY) is a policy for promoting institutional childbirth. Moreover, extra payment for Caesarean sections, have led to an overall increase in the uptake of institutional facilities, but little is documented about the quality of care provided and the medical guidelines used for high risk and low risk pregnancies.

The recent bill-National Nursing and Midwifery Commission (NNMC) Bill 2020, which aims at regulation and establishment of service standards for the nursing and midwifery professionals is also not without flaws. There is a lack of vision for the roles to be undertaken by nurses and midwives and no guidelines as to how integration will take place.

Prasad and Dasgupta (2013, p.8) argue that "instead of strengthening midwifery, the NRHM is supporting large-scale development of ASHAs (Accredited Social Health Activist) as an incentivized (institutional delivery providing the highest incentive) link worker to facilitate institutional delivery. This reflects that the government policy initiative has again neglected frontline professional services for birthing care."

Institutional deliveries have become so common that even women have started demanding C-sections to avoid pain without being informed about risks adequately. *Safety* and *the perception of risk* are extremely important since decisions are being made using or rather misusing these factors. An Indian doula offers an insightful account about the distribution of risk pregnancies based on WHO as described earlier:

> *"The production line is orchestrated in mainstream healthcare, to cater to the high risk pregnancies.However, low risks [women] are going through that production line where the red flags do not exist. 100% of the population feels that birth is inherently unsafe, but inherently birth is not unsafe. Out of the 80% who are low risk, 80% to 98% of them are actually capable of having very minimal or no [medical] interventional birth. But, if they don't have the support that enables them to have that, they're going to have the high risk production line. This is where the feeling of unsafe comes in. However, birth is not risky, being pregnant is not risky, waiting for your labor to start if you're healthy, is not risking giving birth. If that was the case, human species would have been wiped out many centuries ago. The perception of risk is something that the corporatized model of maternity care has brought to us. It doesn't mean that somebody doesn't have risk in it, but if you're being very true and honest about it, the risk usually mostly arises in high risk pregnancies."*(Respondent 1)

The maternal health system in India is fairly fragmented and quality of care is still extremely poor in certain public and a few private hospitals.The utter disregard of women and the lack of hygiene in places of birth is reflected in the following passage, where a mother/Doctor shares her experience during her placement in the maternity ward in a community hospital:

> *"In the labor ward, we were dealing with about 30 deliveries per day. It could be a caesarean or a normal birth. There were hundreds of women everywhere. You're talking about [women being] on the floor, outside the hospital, and none of the attenders were allowed. So you'd find women in the worst possible states all cramped up in this hospital ward. I mean, there was a smell to it, you're talking about fluids, ,*

> *alongwith the smell of chlorine and the disinfectant. The labor room basically had about 10 steel metal tables with a hole in the centre for any of the fluids to go through."* (Respondent 15)

Most deliveries in community hospitals take place by Auxiliary Nurse Midwives(ANMs) and even students in teaching hospitals. An ANM is not just a nurse or a midwife but a "multi-purpose worker providing family planning, immunization, sanitation, infectious disease prevention/care and antenatal, and post-natal care" (Prasad and Dasgupta, 2013, p.8). She goes on to explain the professional dynamics and care provided:

> *"A lot of the times, the gynecologist and the senior doctor are not present for all of the deliveries, and are called in when there is a complication. Otherwise, most of the deliveries happen either by students, and more commonly by these ANMs. To tell you the truth, they do it all the time like that's their job."* (Respondent 15)

Birth experiences of women demonstrated disrespect and abuse where they are vilified. Also, women are not given in option to birth in any position of their choice but do as the doctor says. An important aspect of institutional path dependency is seen, when age-old practices and policies are being followed and seldom questioned. The underlying values surrounding childbrith practices partly define the progress, and change is often incremental:

> *"I was audience to what was happening. There was constant shouting in Tamil[local language]. The mother is screaming in pain and then these ayas[dais] abusing, saying 'you should have known when you allowed yourself to get pregnant'. When you allowed yourself to be penetrated, this is what was going to happen'. They spread their legs to ensure they lie in the lithotomy position. That's how we (medical professionals) have been taught and it's been passed on to us, so we never really questioned whether it was the right position for a woman to deliver. It's being done routinely because that gives the least number of complications and is easier to do. I think, we're always just told to do what we've been asked and never question too much."* (Respondent 15)

Moreover, there are still some underlying issues with *transfer of care* since hospitals do not want to necessarily take responsibility of complicated births, especialy when they are treated by midwives. A mother describes the stigmatization of midwifery as a profession and her utter disgust, when confronted with unprofessional behaviour of care providers at the hospital. The tensions between the medical model and the midwifery model of care is highlighted:

> *"I had zero support from my friends and family. They would question my choice, and ask me why would I want to go to midwives when medical technology has advanced so much. Some people would call it 'mumbo jumbo' and 'black magic'... it was nuts!(..)After my birth [at Birthvillage],my baby inhaled a lot of amniotic fluid and they suggested us to take him to a hospital near the birth centre. Priyanka[midwife] said 'Fight for him so he does not have to stay in the hospital'. At the hospital, the doctor saw my child and he was completely judgemental. He started screaming at the midwife saying 'How can you be so irresponsible?' Eventually, the baby was admitted and based on the hospital protocal my baby was given antibiotics. The hospital nurses were good to my baby, but horrible to me. It was difficult for me to latch the baby and these nurses kept saying weird stuff to me, 'You don't know how to do this, your nipple is inside'.. and they would just give formula to the baby and I did not get enough bonding with my baby(..) I'm glad I didn't go to the hospital and gave birth at home, since I'm certain the hospital would have induced me and performed a C-section."* (Respondent 6)

Overall, all the Indian respondents exhibited a lack of trust and confidence in the maternal system in India, forcing them travel from one city to another for birthing at a birth centre. Premature inducing and humiliating women who cannot lactate immediately along with a high degree of unprofessionalism observed in hospitals are reasons for women to opt for homebirths. Women demonstrated a sense of aversiveness towards mechanised health systems where patient centric care is jeopardised. Respectful autonomy and informed consent were found to be neglected as well.

4.1.2 Midwifery model in the Netherlands

> *Among the many interesting things, I discovered while studying the Dutch language, none was more fascinating than learning that the verb bevallen, means both to "to give birth" and "to please."*
>
> ~Raymond De Vries, A Pleasing Birth

In the Netherlands, childbirth practices are reflective of the Dutch culture which emphases on acting normally (*doe maar gewoon*) (Simmons, E., 2012). Even after birth at hospitals or polyclinics, women return home with their babies within 24 hours and are supported by midwives and maternity assistants *(kraamzorg*).

The healthcare system in the Netherlands has three levels: the first line, the second line, and the third line of care or- primary, secondary, tertiary. Midwives, a central element in Dutch maternity care, exist both in the primary care as community midwives, and in the secondary line of care as hospital midwives. Midwives are central to maternal and child development, working independently and being a part of the community practice as well. Care is being provided by community midwives at homes, birthcentres, hospitals and health facility outpatient centres. The Dutch government policy regulates the number of midwives, assures protection of the profession and plays an active role in funding research on the benefits of the "Dutch way of getting babies" (Simmons, E., 2012).

In addition to the existing government register, the Royal Dutch Organisation of Midwives (Koninklijke Nederlandse Organisatie can Verloskundigen or KNOV) developed a voluntary quality register that most midwives joined with an aim to protect the title "midwife". KNOV also acts as a labour union, actively advocating for better working conditions and better wages for midvives (Simmons, E., 2012). 143 midwifery practices offered this approach by 2012 to reduce over-medicalisation (UNFPA, 2014). This is reflective of the Midwifery care model and the political power that midwives hold in the maternal health system in the Netherlands.

Moreover, initiatives such as "Healthy Pregnancy 4 All" and "Promising Start" came into place in 2011, in support of issues around abortion, debt, and social networks. (UNFPA, 2021) Furthermore, in order to optimise referral and risk selection, a manual called the obstetric intervention list (VIL) was created based on a comprehensive list of pre-existing pregnancy and peri-natal disorders. The manual serves as a guideline and leaves the autonomy to make decisions very much with the health professionals (KNOV, 2017).

Hollander et al., (2019) show that the appearance of 'holistic' midwives is a fairly recent development in the Netherlands, representing about one per cent out of all the community midwives. 'Holistic' is a term used in most literature and these midvives fail to follow the recommended hospital care and have come forward to assist births at home. According to KNOV (2017), substandard care has been highlighted in audits, and progress needs to be made to reduce morbidity and perinatal mortality in the Netherlands. Moreover, Hollander et al., (2019) argue that midwives accept many high risk women as the Dutch maternity systems fails women. The system exhibits reliance on protocols with "too much emphasis on risk talk and not enough room for a physiological approach to childbirth" (Hollander et al., 2019, p.7).

Despite the normalisation of birth in the Netherlands, medical pain relief and induction have continued to spiral in the last two decades, with a concomitant reduction in homebirths (KNOV, 2017). So, on one side there is medicalisation but on the other, there are efforts being made to curb over-medicalisation. The presence of maternity assistants, (kraamverzorgste or kraamzorg) does offer a sense of relief right after the childbirth and most women find it extremely helpful. However, Dutch mothers had some expectations from the maternal health system and post-natal care that were not met:

> *"When you give birth at home, the midwife leaves at some point. Then the kraamzorg comes and stays for a week. She helps you around the house and helps you with how to care for your baby. She tells you about how to place your baby on the on the breast sometimes.. how you can hold it and what you can do etc. So, that was very convenient for me. She was a really nice lady, so that's what you need. But, I've heard a lot of other women saying that she[kraamzorg] was so nosey. What's really weird is that after she leaves, your case is closed, you're on your own. Till now, after more than six months, I still have have a scar on my stomache and the muscles under it, doesn't feel good. I will visit an official therapist, maybe she can help me."* (Respondent 10)

Interacting with one known healthcare professional (like a Doula) during their pregancy helps women develop a sense of familiarity that helps them navigate through the maternity system with ease. In the Netherlands, doula care is still in it's infancy. The term "doula" which in Greek means "female slave", was was retrieved in the United States in the late-twentieth century in confluence with supporting scientific of their benefits evidence, a part of a social movement (He, M., 2011).This can be seen as *policy convergence* where the concept and practice has travelled from the United States to the Netherlands.

A Dutch doula describes her role and raises an important aspect of continuous (emotional and physical) support, and post-partum care. This aspect of emergency obstetrics, which is needed when transitioning from a homebirth to a hospital birth, is critiqued in the following quotes:

> *"Doulas are not part of the healthcare system. So, one of the things that's really specific about a doula is the aspect of continuous support and care. No matter what the pathway of care or the transitions of care a birthing person is going to go through, the doula will always be there with them. Whereas, it happens that if you are at home with your primary midwife but you have to be transferred into a hospital, you get handed off into secondary line of care (..)I'm being trained to do so do as nonclinical support persons,*

to provide emotional and physical support to pregnant persons, and to their partners as well. So, they conduct meetings in the antenatal phase with the pregnancy phase and help during labor, delivery and also a bit postpartum." (Respondent 14)

Tensions in care integration and transfer can afftect patients:

"So, my feeling with the maternal health care system here is that it is very good in the section that it has but the transitions with the continuity of care is where there tends to be gaps. So, these transfers of care ,or the navigation of who is in charge of what and things like this is a bit of a confusion for women. Even more so of course for international women who are also working their way through translating and in all of these other things." (Respondent 14)

The lack of attention to emotional well-being and postnatal care is highlighted:

"Maybe the other thing that really pops out to me is thinking about the continuum of care; is the transition from birthing into postpartum. So there's really a big gap of care in the maternal care system. So, if you had a C-section and you're in the hospital you're invited to always come in. You're asked to come in six weeks to do a consultation with the hospital staff, but they very rarely ever ask you about your emotional and mental state in this regard." (Respondent 14)

Professional dynamics, operational inefficiencies and power gaps affected patients:

"...But within a hospital you're working in a hierarchy and this is how hospitals are structured. But these sort of tensions between community midwives or even hospital midwives and doctors affects patients and clients. How is the information traveling and is it traveling back to them in a good way... how is the documentation being seamlessly transferred from the first line of care to the second line of care... This is especially important for birthing persons. Often people make birth plans, and things don't ever go according to plan. The hospital staff don't always look at it so intensely. So, I think this is also a part of this attempt to move towards a more client centered focus of care as opposed to the standards of good birth outcomes from a hospital." (Respondent 14)

In conclusion, the Netherlands offers a variety of choices to women and their in-house post natal support is highly appreciated by women. However, care integration, transfer of care and continnum of care were found to be factors causing dissatisfaction amongst women and care

providers. Be it operational and administrative inefficiencies, the lack of familiarity and not clearly defined accountabilities can cause dissatisfaction amongst patients and even care-providers.

The Dutch maternal care system is one of a kind in comparison to their other western counterparts, where women have a lower level of intervention alongwith lower rates of induction of labour and pain medication. However, this finding cannot be generalised as there are regional variations in medical interventions observed in some studies (Seijmonsbergen-Schermers et al., 2018) With a strong foundation and training for midwives, their independence and professionalism are both maintained and nurtured.

Other developing countries like India, where over medicalisation is forcing women to demand home based care with minimal medical intervention, should take the Dutch Midwifery model of care into consideration. This can not only provide women and care providers with more options to choose from and exercise true autonomy, but also have an impact on maternal morbidity and mortality by addressing in house antenatal and post-natal care (Rowland et al., 2012).

4.2 AUTONOMY

Reproductive autonomy and choice of homebirth relied on various factors that differed based on diverse models of car and the extend of medicalisation. The level of autonomy can either restrict or empower women in making medically informed decisions, thereby affecting the utilisation of health services. Most of the respondents found comfort and space extremely important when choosing the right place of birth. At Birthvillage, the way the centre is designed provided a sense of comfort and a safe space. Women chose not to go the hospital as they felt unsafe due to being exposed to an environment of distrust and unnecessary medical intervention. According to respondents, especially mothers, 'safety' for healthcare professionals had a medical connotation, in most cases, very limited to the health of the baby and the mother, which was not what women perceived as being safe. This quote is from an Indian mother, where she talks about emotional safety:

> *"Safety for doctors in hospitals is limited to me and the baby being alright. Unfortunately, healthcare professionals are trained in a way that there is a limit to what can be allowed. For instance, they won't allow me to labour for more than 48 hours after the induction. They'd say it is unsafe to do so, in order to induce me. I mean, what do you mean by safe? That I'll just be alive; is that it? That is not my*

> *definition of safe. For me, safety means that my decision will be respected, that my questions will be answered, and I will be part of the process."* (Respondent 5)

Autonomy and informed choice entailed giving information about the possible courses of action, and the way pregnancy would occur to prepare women beforehand. The absence of adequate information and lack of guidance left Dutch women feeling shocked and powerless:

> *"I had a low-risk pregnancy, but the baby was quite big. I had a nice midwife, but I do feel that I had to ask all the things myself. It would be nice if they would explain everything about the options and give more guidance. You must do all the research yourself. They prepare you for giving birth at home and they give you a pregnancy education or birth course about a normal birth, but not about how you would react if it were a C-section. So, what it entails, how that goes. I think I would have really liked that, so I could've been more prepared. In my head, it was not an option to have a C-section and when you have one, you're really in shock."* (Respondent 18)

Respectful autonomy and reproductive freedom necessitate societies to provide quality maternal care whilst respecting reproductive rights of women. However, obstetric trauma is prevalent in many countries, reflective of quality of obstetric care provided and plays an important role in understanding the nature of medicalisation. The OECD (2017, p.118) describes:

> *"Patient safety during childbirth can be assessed by looking at potentially avoidable tearing of the perineum during vaginal delivery. Tears that extend to the perineal muscles and bowel wall require surgery. They are more likely to occur in the case of first vaginal delivery, high baby birth weight, labour induction, occiput posterior baby position, prolonged second stage of labour and instrumental delivery. Possible complications include continued perineal pain and incontinence."*

Although, not entirely preventable in all cases, obstetric trauma can be minimised by using the right labour management (OECD, 2019) and contributes to a positive birth outcome:

> *"Having a positive birth outcome is not just in the fact that the baby and mother are healthy and alive. At the end that there's a positive reflection and experience of the birth as well and there isn't a trauma. Obstetric trauma is still an issue in the Netherlands as well and many women report it."* (Respondent 14)

A traumatic experience was reported while transitioning from a home birth to a hospital birth in the Netherlands, where a mother found the process rather difficult to adjust to:

> *"It was different from being at home since you arrive at the hospital, and they do all these checks. Honestly, it was kind of traumatising to have so many people, when you're so vulnerable, in so much pain, touching you. They tried to put all these things on Billy's [her son's] head, via my vagina and they couldn't reach him. Multiple people tried with multiple tools, and they also broke my water twice. So, it's a lot going in and out and lot of people around it. I think that was the heaviest part. They also said they were going to induce me during labour and placed a catheter for me to pee and make room for the baby. But it's a really, really a big transition from giving birth at home to giving birth at a hospital. It was hard to adjust. Although the people at the hospital were nice, there's a lot going on in your head to make that transition. It's really a lot."* (Respondent 18)

Autonomy was also seen in creating a safe space for women to feel confident and have a sense of control. Safety and comfort meant creating a 'private space' with regards to the architecture and design of the place of birth. While conceptualising the design of the new Birthvillage centre, an Indian architect responded:

> ***"****The idea was to make a comfortable, peaceful and private space. Even the family was involved, so the space was designed to accommodate people who support the mother during her pregnancy and labour. Sometimes, mothers are accompanied by doulas and midwives, and we had to keep that in mind as well."* (Respondent 16)

Another important prerequisite for women in choosing the place of birth was being able to be accompanied by their partners during check-ups and birthing, which hospitals in India did not warrant. So, they chose birth centres like Birthvillage. Some women opted for the birth centre to not be at the mercy of the doctors, and to be able to make informed decisions independently which is reflective of the agency.

Women often expected involvement and decision-making power in medicalised spaces to assert agency over their birth experiences in retrospect as well in anticipation of birth. The lack of control caused dissatisfaction:

> *"The moment I reached the hospital, nothing was under my control. They got me on to the bed, gave me an IV. Normally in that hospital even family is not allowed. Then the doctor came and checked me and said your labour is very slow, so she induced me. That completely drained me. Later, they shifted me to the labour ward where they had me lie down [in lithotomy position]. During labour, I wanted to move around, but I couldn't move at all due to the IV cannula, nor did the staff let me. After giving birth, I wanted the baby immediately to nurse on me, as I knew about the golden hour of breastfeeding. However, they took the baby away and didn't even give me a chance to nurse the baby for the entire day (..) For the next birth, I was determined to birth in any position I want, and not miss the golden hour of breastfeeding."* (Respondent 3)

In the Netherlands, comfort and support were most important when choosing a place of birth. For instance, a Dutch woman who gave birth at home explains:

> *"I wanted to avoid clinical environments, just to be in my own place with open and relaxed surroundings. Also, to be able to just walk around whenever I want and then do work around maybe, and just feel comfortable. My son was at born at 5:30 AM. Giving birth is not very comfortable at the hospital, and I was really glad doing it at home."* (Respondent 13)

The labour room embodied a space of familiarity for a lot of respondents. Some women explained how knowing the surroundings, the labour room, the birth centre helped them during their births and in developing a relationship with the place of birth:

> *"The labour room that I had, was the same room where I had the routine check-ups. So, it already felt like home, and I didn't feel out of place at all."* (Respondent 9)

For Dutch women, familiarity was reflected in the bonds they developed with their midwives, which for them was extremely crucial for giving birth at home. When asked about the difference between a hospital and home birth to a Dutch woman who gave birth in both settings, she said:

> *"I saw my midwife during the entire pregnancy. So you develop a connection with her, you know, you trust her. Whereas in the hospital, I saw the doctor a few times and he sees a lot of faces. Every eight hours they would change shifts, so you have a different doctor, different nurses. So if you're there for a couple of days, you'd see a lot of different faces and I didn't want that for the second time[birth]. It's not really*

> *personal[at the hospital]. But, with my midwife it was really personal. Being home with her, with that one familiar face, made a big difference for me."* (Respondent 17)

While another Indian mother addresses the aspect of familiarity of staff at the birth centre that shaped her expeience.

> *"At the birth centre, whoever is around, be it midwives, doctors, nurses, they all interacted with me. I knew them and it seemed like they are family. But at the hospital, I was surrounded by strangers, no matter how much they try and sweet talk, they're still strangers."* (Respondent 3)

Informed decision making involves understanding the risks and benefits of the procedure. An Indian doctor (and mother) expresses her dissent about the lack of informed decision making:

> *"I think you really need to know if it's a natural birth delivery, normal[vaginal] birth or a caesarean. You need to be informed about everything, so that you can make those decisions and those decisions are not forced upon you. I'm not a huge advocate on saying 'oh, you ought to go for a natural delivery', it's more about being aware of everything that is available to you and then make those choices."* (Respondent 15)

Informed consent was a recurring theme during interviews. From examining women without permission, to inducing, a lot of women reported of the lack of choices and being informed adequately to exercise true autonomy. Even though the Netherlands report lower rates of induction during labour, women expressed discontent on being induced too soon:

> *"I don't think I was ready to be induced yet. Perhaps, that's the reason why I didn't get him [the baby] out. I had a lot of contractions, and they were forceful."* (Respondent 10)

On being asked what needs to change in the maternal health system in the Netherlands, a Dutch mother remarked:

> *"I don't know if there needs to be a change, but I think informed consent is a big thing now. I think that especially in hospitals, the unnecessary medical interventions; that needs a little bit of work. When you're in the hospital, the interventions start really soon and when you're at home it's a totally different thing. Perhaps, you think about it more when you're at home than when you're in the hospital. When I was in the*

> *hospital[for my first delivery], the doctor said something and I was like 'You'd know better, I trust you.' But when I look back, I think, well of course he knows stuff, but I should think about it too. It's my body, it's my child and I should make a decision and not trust his opinion and go ahead with his choice."* (Respondent 17)

These stories show that informed decision making requires patient autonomy and a collaborative effort between care providers and birthing persons. Be it making birth plans or antenatal and postnatal care, women ought to feel their decisions are respcted and valued in order to make uncoerced choices. The absence of options thereatened autonomy and more so in cases when when women were kept in dark about various medical risks associated with certain procedures. Fostering mother's agency requires understanding individual cases within a system of diverse cultural beliefs and societal pressures. Trust in the medical system and building a relationship with care providers had a enormous impact on the overall experience of birthing for women. Familiarity and institutional support helped women voice their opinions, and have their needs addressed.

Reproductive and medical autonomy are ethically and morally more complex than it seems, and requires an integrated approach in order to achieve desirable health outcomes whilst empowering women's agency. Medicalisation in terms of inducing during labour without discussing the risks, and not abiding by informed consent were seen as a violation of autonomy and discouraged women from choosing hospitals.

4.3 EMBODIMENT

Embodiment was a recurring theme in most of the interviews with Indian mothers and doulas and a few Dutch mothers. This concept not only helps zoom into the bodily lives of women, carving out their experiences but this 'body episode' unravelled the relationship with materiality (Warren, 2004). This beautiful experience of a mother at Birthvillage touches upon materiality and more importantly, the story behind 'things' that appealed to her:

> *"Birthvillage had these essential oils, and incense sticks, I remember the smell of lavender when I walked in. They had Indian handmade products and furniture like Rajasthani pillowcases, very homely and ethereal. There were baby pictures all over the walls, which gives you this feeling about holding your own baby. They had these sheer curtains in the waiting area. These mirror curtains which were actually made*

> *by girls from Tejas home which Priyanka (midwife) runs. This home helps minor girls with unplanned pregnancies, since their parents don't know how to take care of this situation and are scared to keep the girls home due to social stigma. They [Tejas home] teach them art and craft to keep their morale up and these girls make handicraft items. It's a nice feeling to know that this is made by these girls."* (Respondent 9)

What this birth story brings out is the presence of mundane objects such as *mirror or sheer curtains* that helped the mother develop an intimate relationship with the birth centre and altered the relationship with her own body. A 'nice feeling' embodies meaning helping the mother associate her midwife with something more humane, more compassionate. One can witness an inseparability between human and non-human elements, the plurality of which is evident. When asked a Dutch doula about the influence of materiality and how is home birth is different from hospital births, he said:

> *"So, at home is also kind of preferred. Well, preferred is not the right word, because whatever a birthing person chooses is the best course of action for them. Being at home provides a sense of security, safety, and relaxation that a hospital just cannot give. So, being able to have your own smells, knowing your bathroom, if you have your bathtub; all those things are super important. If you can have your dog there, your other children, changing the lighting, having your own playlist to play, having your favourite sheets. That actually does show up as being very helpful in creating a comfortable and relaxing environment."* (Respondent 14)

She further elaborates the importance of visualization of the space and movement at homes, which is reflected in the way Dutch hospitals are built:

> *"I think movement is important as well as visualizing the actual space, more so in the labour stages than the birthing stages. That's one thing that being at home affords birthing people that a hospital can't always do. In the Netherlands, we are fortunate that in every hospital, you're not in a ward. When you're in suites, you have a private room and a private bathroom. So, you have a lot less room than you might have in your apartment or your house, but it's still possible if you're not connected to an I.V, for instance, an epidural. But this movement helps with the experience and the pain reduction a lot, so that's really important."* (Respondent 14)

Expanding on visualisation, the view from the window helped a woman connect with nature during her labour:

> *"This labour room had a big window and there were trees outside. When my client was in labor, she would go to the loo and take a pause, look outside the window, and just observe at how this tree was moving with the wind."* (Respondent 1)

Well-being is another aspect touched upon in the interviews where my respondents said that they paid special attention to what they eat, how they feel emotionally and physically during pregnancy. The contrast between a hospital and a birth centre lies not only in the way women and their babies are treated, but how the physical act of feeling and touching of the baby inside them makes them develop a deeper bond with the place of birth, the midwife, and the baby. Objects such as the pinard horn and measuring tape are mentioned, which help the mother discern her experience from a typical hospital setting. A Pinard horn happens to be the oldest tool for auscultating foetal heart tones and was used by midwives in Europe and still in certain developing countries especially in resource-poor settings:

> *"Everybody around me associated birth with a scary attitude and I didn't like that. I mean, I exercise, have healthy food habits and a good lifestyle. I thought I can do it [birth naturally] (..)During our usual antenatal check-ups at the OB/Gyn clinic, the doctor asked my husband to stay out and only let my mother-in-law in. I found that very weird. I mean he's equally responsible for this, why should he go out? Even when they examine the baby, they never touch and measure the baby. It's just a routine procedure, they check your vitals and blood pressure, that's it! At Birthvillage, they asked about my diet and exercise routine. They measure the baby with a tape and check the position of the baby. At the beginning of the 3rd trimester, we knew where the baby was; where the toes are the hands were. We could hear the baby's heartbeat with a long handheld tube like device [pinard horn] which is very ancient and nice. They [Birthvillage staff] knew the baby as much as we did. We were very well connected with the baby and the birth centre, it was like a house, not a hospital."* (Respondent 4)

One respondent painted the picture of her childbirth experience as being '*out of the ordinary', 'out-of-body''* which throws light on her relationship with her body and the place of birth. When asked about what made her choose Birthvillage, she said it didn't take much time for her to make up her mind because:

> *"I saw that (birth) room and it just felt like that room embodied all that good energy. When I saw that image, I'd want to go in. I think that room embodied that image of all those women who have been there. It is a very warm, muted atmosphere, not right in your face, no jarring and just waiting for the next mother."* (Respondent 5)

Most respondents were unenthusiastic about hospitalization, even though the mechanistic model was dominant in the interviews. Based on the experiences shared, Midwifery, on the contrary looks at birthing more holistically and treats each mother differently relying on natural processes. Birthvillage introduced the concept of Lamaze classes to impart birth education to women and their partners. The concept is new to India and widely prevalent in the US. When inquired about their pre-natal period and what went into preparing themselves to birth like they wanted, a mother excitedly responded:

> *"They had these fitness sessions, more like 'fitness positive meditation'. It almost felt like a 'feel good' kind of a session. These classes helped taking care of your mental and emotional health. We had these Lamaze classes; I think this was definitely the game changer for me. Personally, as a medical doctor, I thought I knew everything about pregnancy. I wanted my husband to be part of this whole process with me, and he was equally invested. After starting these sessions, I realized how much we don't know as medical doctors, how much we're not taught, and how much we take for granted."* (Respondent 15)

At Birthvillage, Lamaze classes were found to be effective in most cases and not just in terms of antenatal preparedness for women, but also for educating their birth support:

> *"For my first birth, I attended all the Lamaze classes. For the second birth, I attended some classes as a refresher course, since you already know the drill. I mostly went for my birth support-my mother and my cousin; for them to know about various birthing positions, to get a layout of the place and know what's going to happen."* (Respondent 15)

The idea of embodiment is palpable here, where labouring women use Lamaze classes while rehearsing relaxation and breathing. Moreover, it helped some women in strengthen bonds with their partners and also educate their birth-support. These theories and instruments are being used to explore motherhood and are responsible for altering women's feelings. Giving

each individual mother the kind of specialised ‘holistic’ medical care can be seen as the embodiment of birth.

Embodiment and materiality served another purpose; the design and layout of the place of birth touched their experiences in affective ways (Huopalainen & Satama, 2020). When asked to talk about how birth places should be built and what makes a good birthing experience, an Indian doula from Birthvillage talks about birth being wild, in a manner in which it has agency. Birth, here, embodies *wildness* and *primality*:

> *“What the system is trying to do is to contain birth, but birth is primal. Birth is like a wild woman, and that's why women are transformed when they have their birth, because for the only time in their lives, they know that they touched their wild (..)You have to understand the topography about bringing in elements, be honest and true if you really want to be build good birth centers.”* (Respondent 1)

Embodiment, from an architect’s perspective was seen in the co-evolution of the place and simultaneous interaction of the environment with birthing bodies:

> *“During labour, women have this urge of getting the baby out of their bodies, that's the only thing they’d say. There is additional emotion till then, but the moment the pain kicks in, it's a whole different story. So, the mindset is very tricky and dangerous. That is when the environment around you can actually interact with the person in pain or in distress, and calm that person down. You should have a good space around you and naturally, one’s mood and temperament; everything changes.”* (Respondent 16)

Figure 2 Birth room for water births at Birthvillage

The place of birth has been a central theme in all interviews mainly because it influenced the way women perceived birth, experienced it the way they envisaged, and recollected it. An Indian doula describes her own birth experience wherein she emphasises on the availability of space:

> *"I remember this point in time of my own homebirth. I felt like I couldn't be inside[the house], it felt claustrophobic because I saw the walls. I was pacing about on the terrace and just seeing the sky and looking up at the stars, changed the nature of what I was feeling. I know that it changed how my labor went, but outdoors is not replaceable by anything else. Now if you can't be outdoors, then I would say, lots of space is very crucial."* (Respondent 1)

The visual space and the image of the wooden bed was enough for some women to choose the birth centre:

> *"When I came across Birthvillage, and looked at the pictures, I zeroed in on it virtually. I wanted to be in this dream like, beautiful sanctuary you know. It felt warm*

and it felt like home. Then, I saw the picture of the big wooden bed and it kind of called out to me. I had decided by then, this is where I want to end up at." (Respondent 5)

Figure 3 A dimly lit birth room with a wooden bed at Birthvillage

Places of care are driven by architectural ambitions and patient narratives. Various strategies are employed to create architectural assemblages. All sorts of experiences, good and bad were taken into account when designing the birth centre. This process of understanding design from an *emic perpective* added more profoundness into the conceptualising the place of birth. De Groot (2020) demonstrates that the objective of employing an emic perspective is to develop a more customised and specified knowledge of 'the user', in comparison with the much broader concept frequently used in architecture.

Figure 4 The newly constructed Birthvillage (2021)

This user perspective is reflected while answering how Birthvillage was conceptualised and what went behind the design. The architect behind the new birth centre shares how birth stories and his own experience of having a child helped his team construct the new birthcentre:

> *"I was on the receiving end initially, since we had the first baby at the birth center. So, we were their clients and we got to see the interface that dealt with them handling people coming from outside. Our process began with understanding how the system works from an insider point of view. We also used stories from clients, that Birthvillage shared,(..)combined those with our own experience of birth (..)One of the architects actually had an experience with the childbirth. People designing such a project should have some kind of an experience on birthing and what happens during the process."* (Respondent 16)

Landscape design is an important feature of healthcare institutions. Not only when it comes to providing space for movement and using nature to serve as a therapeutic environment, but to preserve the natural ecosystem. The use of naturally available resources aids sustainability and Birthvillage used native trees to incorporate landscaping:

> *"As a principle, we follow certain systems for the climate. For example, we aim to reduce the amount of maintenance and energy spent on the building. Then, the basic principle of our practice includes using everything tropical and sustainable. So practically sustainable, not to the extent of going for stuff that needs to be brought about from large distances and then implemented here with a huge expense of energy already. But what is practical to the location; without destroying the ecosystem in that space. There were a lot of mahogany trees, little bit of rubber, couple of mango. We didn't cut much."* (Respondent 16)

Architects use certain themes as the foundation to create spaces catered to their users and make them feel more at home. Using pale undertones, wooden patterns and green spaces can stimulate the senses of the patients and bolster their well-being:

> *"Most of the center is made of exposed concrete, walls are creamy white, rustic finish floors. The two themes we kept in mind were flexibility and freedom. The room has a wooden pattern to give it a homely feel and we have built in tubs. You can also have an inflatable tub to birth outside. For consulting, there are courtyards and green spaces. There are training spaces outside, where [birth education] classes will be conducted. (..) We went in for simple tones, no jarring colors, something that is calming enough, since the people who come here are already distressed."* (Respondent 16)

The place of care influences the well-being of the care-providers as well. Light and nature were incorporated in care spaces to make the atmosphere more positive and pleasant to work. The Indian midwife shares her philosophy behind conceptualisation of the new birth centre:

> *"We wanted a place with a lot of light and an inner courtyard. Without light, it can feel very depressive. When labour is going on, people want to walk and move, it's private yet they want to feel at home. I for one, wanted some feel of green all the time. So, every birth room has a garden and a mahogany tree. Inner space where you can be completely free. Moreover, it's very important for the staff to not feel claustrophobic and be able to breathe. The centre is surrounded by a river and ample nature, so we have plenty of light and breeze from all sides."* (Respondent 19)

The architecture of the place of birth and the materiality helped women remember and associate the place of birth and unravel their relationship with midwives, care providers, doctors within the space along with various surgical and non-surgical objects. Birth stories as

assemblages offered insights into the entanglement of various socio material aspects at the place of birth. Lamaze classes helped women re-investigate their own relationships with their bodies and involve their families and support persons in shaping their experience. Embodiment and materiality were also felt in the design and layout of the place of birth, and the interaction of space and the environment with the birthing person. The feeling of being at home resonated with the way the place of birth was built, the objects therein and the people that surrounded the place of birth.

At the birth centre, mothers found it easy to move around the space during labour. Materiality at the place of birth like the smell of the candles, essential oils, glass curtains, wooden furniture, dim lights helped them relax and feel at ease. They developed a sense of attachment to the labour room since they used to go there frequently for their antennal check-ups. At home, women felt free to decorate their own birthing rooms with pictures on the wall, the kind of music they liked and have their partners around them the entire time. For most women, the homebirth experience was beautiful and they remembered minute details about the place of birth. The place of birth significantly impacted their well-being and made them feel more connected and in control. Built environments also offered fascinating insights into how patients valued materiality in products that are central to their identity.

4.4 Spectrum of Medicalisation

Medicalisation of maternal systems presented two contrasting movements: one related to the institutionalisation of birth and medical dominance, and the other related to a societal shift against pathologizing birth. The blurry lines that adjoin the dichotomy of birth are evident in the following interviews.

4.4.1 Normalisation of birth

As (Hermus et al., 2015) demonstrated, Dutch maternal system operates on the belief that birth, pregnancy and puerperium are natural, physiological processes**.** When women were asked about their perceptions about the maternal system in the Netherlands, they mostly had similar responses:

> *"I think the Dutch system is characterized by this philosophy of childbirth/pregnancy not being a medical condition. So 'have faith in your body' and there's a lot to choose from."* (Respondent 14)

One can not only see the presence of a non-medicalised system here, but also what is interesting is the variety of options that women are presented with when deciding where to

give birth and how. Normalisation of birth, however, might not have the same meaning and experience for non-Dutch women living in the Netherlands. A Dutch doula talked about normalisation and the various problems associated with it, especially in relation to ex-pat mothers living:

> *"The Dutch view pregnancy generally as physiological and natural, and you really have to have a high risk to be considered to get a medical indication. (..) I think, for internationals, normalisation can swing a bit too heavy because it's so new to them. It can feel like, 'you don't think I'm strong enough?' They start to feel a bit ashamed because of this culture where everyone is telling them 'You can do it, it's normal, it's the normal way to give birth, it's a natural way to give birth, the only way you can have true autonomy.' I see it even with midwives and childbirth educators, where they say, 'I don't really have a preference one way or the other', but they show that they have preference. These are some of the subtle/ non subtle messages to women."* (Respondent 14)

While sharing her own experience, she talks about the significant aspect of validation and choice. Despite many options available to birth, there is still a gap in empowering women in making the right choices. Moreover, this following quote highlights that in some cases, normalisation can become the *norm* up to an extend that it interferes with having women exercise true autonomy:

> *"On Sunday, I was assisting a childbirth education course and I was talking to a Canadian international. She's going to give birth here and she was telling me this exact same thing, she said 'Sometimes I feel bad that I'm going to give birth in a hospital', or 'they don't say anything directly, but make me feel bad.' I think this is very difficult for a birthing person. It's one thing to help people, helping them explore the options, but it's another thing to be like 'You're really going to give birth in a hospital? You know, you don't have to do that right, it's totally normal here, everyone does it at home, it's not a problem. You don't really need pain relief, it's not that painful.' This is basically the opposite of validation actually, the opposite of supporting a person through choice, which can be a struggle with normalisation."* (Respondent 14)

Half the Dutch respondents shared her dissatisfaction about the lack of postnatal visits the Netherlands, this can be attributed to normalisation of birth, as reflected below:

> *"...I find it weird is that there are very less check-ups; even if you compare it to other countries with less check-ups; with around 10 weeks, and at 20 weeks. They start to increase a bit every month. In the last month, you have three checks or something. When you're pregnant for the first time, you're waiting to see your doctor and waiting to go for another check, but maybe that's just the luxury position I'm in. Maybe other women are too stressed and it goes much faster for them."* (Respondent 10)

4.4.2 Humanisation of birth

> *"Women do a big disservice to themselves by not voicing out their opinion"* (Respondent 5)

One pervasive theme that emanated from birth experiences of women was de-medicalisation of birth and the move towards trusting their body's capacity to reproduce naturally, with only necessary medical intervention. Various factors such as obstetric violence, social control by the government on women's bodies and a certain kind of medical dominance have resulted into a move towards humanisation of birth (Clesse et al., 2018). Listening to women's voices is more important than ever to actively find solutions to humanise the profession, the practice, and the policies. More so when socio-cultural norms drive the utilisation of maternal health services:

> *"An average Indian woman is submissive by nature; she would always be accompanied with her mother or mother-in-law. The culture is such that she would rarely even speak let alone knowing her own rights. So, if you explain a certain procedure to her, she will not question it. Therefore, in a diverse country such as ours, a lot of it comes down to translating to what an Indian woman will understand."* (Respondent 19)

The way hospitals are built is reflective of the extend of over-medicalisation. Care providers face the dilemma of either mimicking the system or excluding from it. Critiquing the current state of maternal health and constructs within the system, a doula insightfully points out:

> *"Profit is one reason for the current way we build places of birth, but the bigger one is convenience, which runs through every construct that we have. Another thing about convenience is time. If you really want to support a healthy labor, you have to be able to say you might take 12 to 15 hours, our room is available to you, whatever time you need. Whereas this construct that we have in maternity care, is about a quick*

> *turnaround. Care providers are a part of this industrialized and mechanized system of care. It's about the training, its not a personal flaw. They've gone through a system that shows them a process, and they have not experienced nor learnt any different. For isntance, you tell women, that they have to dilate in so many hours."* (Respondent 1)

Asking women to dilate in a particular time, is only one of the many reasons for women from India still demanding 'Humanisation of birth'. Childbirth abuse is common in India, especially in rural areas. Right from verbal abuse (shouting, passing unsavoury comments) to physical abuse (forceful C-sections and inducing during labour, episiotomies), women are tortured in their most vulnerable states. This goes against human dignity and jeopardises human rights. An Indian mother shares her resentment and the reasons for deciding against giving birth at the hospital:

> *"I didn't like the idea of being on the plastic sheets on the hospital beds, pushing on my on my back with people in the room staring into my vagina without giving me any kind of space and time…People talking on their phones,giggling that's the last thing I wanted. I couldn't imagine what would happen [if I were birthing there].Even if it was a small little nursing home and it was just a dai or whatever, they'd say 'Why don't you push?' Using unsavory comments like 'If you could get penetrated in bed then why can't you do this?' When you can't lactate,they'd obsess at your breast. There is a complete lack of sensitivity towards our women."*(Respondent 5)

On the brighter side, 'humanisation' for care providers also meant forming a connection with their clients. Midwives believed that their practice helped them develop a bond with their clients. When asked what she thinks about the midwifery practice and the maternal system in the Netherlands, a Dutch midwife said:

> *"Very nice because low risk people receive personal care as they get to know you. They can call us for a question even at night if they are worried about something. I can also help them, going to their homes to listen to the heartbeat of the child. It's very personal and a great system."* (Respondent 11)

Most Indian mothers also stressed the importance of being able to talk freely and clear all the doubts they had. It made them feel more connected to their midwives and care providers:

> *"When my husband and I went to Birthvillage, suddenly we were in this house and it didn't seem anywhere close to a hospital. Priyanka (midwife) answered all the questions we had, unlike a gynaecologist [in the hospital]. She was checking me in between, always with permission, and it felt like a very warm and friendly environment. First, she would check my body and then she'd feel the baby unlike a hospital, where they check the heartbeat of the baby with a machine. It felt so personal and nice."* (Respondent 2)

A magnitude of differences was observed in the kind of medicalisation of birth within the midwifery model of care and the medical model. While Netherlands fell on the spectrum of medicalisation towards normalising birth and comparatively high autonomy, India was on the other extreme with an over-medicalised system and low autonomy of women (Figure 5). These contrasting movements reflect diverse cultural and social practices within childbirth that have shaped policies over years. Midwives generally adopted the non-medicalised approach to pregnancy by supporting natural, physiological birthing. Normalisation of birth is a phenomenon noticeable in the Netherlands, which was rather critiqued by mothers due to a lack of postnatal checks and the emphasis on normalcy which didn't fit too well with internationals. The stigmatization associated with women choosing anything other than what the 'norm' is, was seen as a flaw in the maternal health system in the Netherlands. This sense of confirming to the usual way of birthing naturally, threatened women's autonomy especially when they were made to feel somewhat of an anomaly.

Humanisation is a movement to fight unnecessary medicalisation in face of unethical childbirth practices and reduce iatrogenic risks. Here, treating birth as a physiological process with minimal medical interventions and professional midwives was favoured by women. Women reported verbal and physical abuse in hospitals and callousness made them explore other options. Midwifery offered humanised care where not only did the mothers feel more nurtured, but it also appeared to helping care providers connect more meaningfully with their clients.

In summary, home births were mostly preferred by both Indian and Dutch mothers because of the following reasons:

1. It made them feel at home
2. They wanted to be accompanied with their partners
3. They wanted to have a choice and autonomy in making decisions about their own bodies

4. Due to a lack of confidence and trust in the maternal health system (This was more pronounced in India than the Netherlands)
5. They did not want to be induced in labour
6. They felt more in control when their questions were answered, and their doubts cleared.
7. They wanted to hold their babies right after they were born, bond with them and exercise the right to experience the golden hour of breastfeeding. (Again, more pronounced in India than the Netherlands)
8. They preferred having their own midwives around them (more pronounced in the Netherlands than India)

Midwives and doulas were inclined towards home births because:

1. They had more decision-making power at homes rather than the hospital
2. They found that women were more relaxed in familiar surroundings and that had better health outcomes
3. They believed in the natural or physiological way of giving birth
4. Homebirths helped them form a connection with their patients since it was more intimate and special
5. Better working conditions and more autonomy than in hospitals

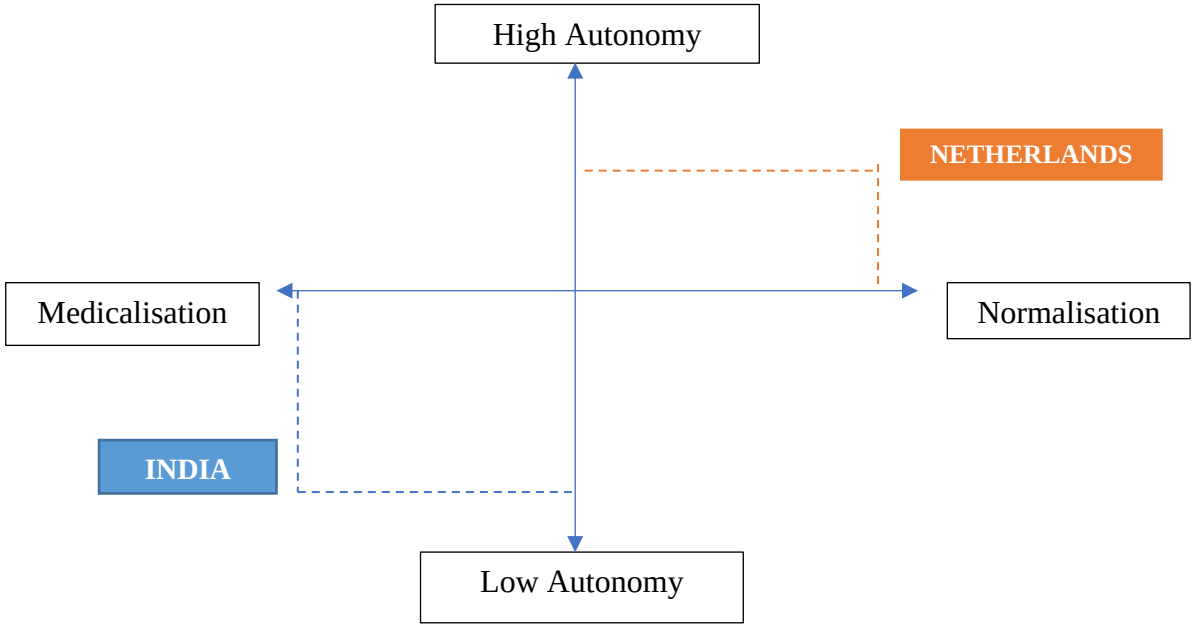

Figure 5 Spectrum of Medicalisation

CHAPTER 5 DISCUSSION AND CONCLUSION

The place of birth is the point of convergence for patients, healthcare professionals and policymakers. Technological advancements in healthcare have given rise to medicalisation, causing a surge of institutional deliveries with amplified medical intervention. In this thesis, I set out to understand the medicalisation of childbirth, by comparing two very different countries in terms of birth policies and care-giving practices. The influence of materiality at places of birth and the co-existence of diverse care practices on well-being of patients, offers a new paradigm in the milieu of health architecture.

In both countries, I focused on home births and midwife led care to highlight salient aspects of care-giving. However, some women also shared their past experiences with hospitals and obstetric care, which shaped their choices, thereby illuminating salient aspects of their maternal health systems. By uniting two different worlds of birth narratives and policy analysis, I contribute to eventually developing a more attuned dialogue between care-providers, policymakers, and patients to aid a thick understanding of the medicalisation of childbirth in India and the Netherlands. This study also contributes to policy implications in maternal and childcare by using intersectoral learnings from architecture, health, and policy to develop a multi-stakeholder approach to combat operational bottlenecks.

Medicalisation, being a global phenomenon, has diverse perspectives in mainstream discourses. Some attach it to safety in childbirth practices and as an indicator of economic, social and medical progress, whereas in other discourses advanced technologies and increased medical intervention have become subject to criticism. This study complements the work of other feminist critics who describe medicalisation of childbirth as a violation of autonomy (Sharma et al., 2013, Cahill, 2011).

Based on the level of autonomy, two movements were observed in the extend of medicalisation: normalisation of birth in the Netherlands and over-medicalisation in India (Fig.5). This assesment was made based on high number of c-sections, induction during labour and the lack of continuity of care reported in interviews, which have led to a need for de-medicalisation and humanisation of birth.

As Mayra et. al (2020) stated, there is potential to avert about 83% of maternal deaths, stillbirths, and neonatal deaths when medical care is managed by professionally trained midwives. Considering this, it is essential to address issues related to India's midwifery education, regulation, and practice capacities.

By approaching birth stories as assemblages (Fig. 1), the amalgamation of the theoretical models of care, embodiment and materiality, and birth policies came to play. Socio-materiality thus influences well-being to varying degress based on multiple human and non-human factors at the place of birth. I also argue that listening to women as active paricipants in policy making is inevitable to ensure safe and happy motherhood and achieve the desired maternal health outcomes.

Comparing the extend of medicalisation in countries helps in making evidence-based policies based on sound medical evidence. Although, I cannot comment on the ethical justifiability of policies, the maternal health policies in the Netherlands are based on strong medical evidence in relation to risks and benefits. This has a huge impact on policy makers making important decisions about where birthing is safe and render their support for homebirths. The same cannot be said for India as their reliance on evidence-based medicine is questionable, especially when it comes to high c-sections in low-risk pregnancies. Hospitalisations do take place based on medical risks in pregnancies, but these referrals should be based on sound epidemiological evidence on maternal mortality rates. In fact, evidence-based medicine should lead policy decisions and not the other way around.

Midwifery led care is central to the maternal and child system in the Netherlands and midwives are the primary birth attendants. In house post-natal care is a unique aspect and can offer support to women and improve health outcomes. Other countries can learn from the quick referral system in the Netherlands which is governed by a formal indications list (VIL) and normalisation of childbirth. Birth centres like Birthvillage in India, offer a refreshing change in the paradigm of childbirth. Run and owned by midwives, Birthvillage is a good case study for exploring the potential of building more user-centric places of care and thereby reducing over-medicalisation. India can benefit from creating better birth centres with green spaces to offer a therapeutic environment for care providers and mothers.

5.1 PRACTICAL CONTRIBUTION

This multi-dimensional study that incorporates sociology, architecture and health policies can be used by a diverse group of professionals like architects, policy makers and care providers. The study contributes to important insights for obstetric and midwifery practice by suggesting a move from normalisation and medicalisation of birth to humanisation of birth. Informed consent is being neglected in both countries by varying degrees and every mother deserves to know the risks and side effects of inducing during labour. This requires health system strengthening and ensuring equitable health is provided without compromising on the quality of care. Regulation and patient feedback can reduce information asymmetry thereby aiding informed decision making.

Following evidence-based medicine, and WHO guidelines of pre-natal and post-natal checkups can solve a lot of maternal morbidities. Postnatal trauma is documented in many births and the emotional well-being of women is not addressed with the current system, despite significant in-house post-natal support. Doulas, can help in providing emotional support to mothers and their partners, and ensure that international/ex-pat couples are empowered to make the right choices. Moreover, risk assesments in case of high and low risk pregnancies should be unbiased, and based on sound medical evidence.

In both countries, a few main areas of improvement were illustrated after examining the extend of medicalisation. Primarily, there is an urgent necessity to move toward a humanised model of care and transition towards individual maternal care. This also implicates correcting power gaps in maternal health systems by training healthcare professionals and expanding the workforce to address unmet needs. There is a need to refocus on continuity of care to ensure emotional well-being and psycho-social support to women and their partners. Furthermore, to prevent over medicalisation, a policy recommendation is to conduct evaluation of cost

effectiveness in order to limit the use of unnecessary medical interventions. Moreover, using the voices of women to create evidence-based policies and complementing feedback of care providers with existing policy documents can help in reducing health inequalities by addressing systemic lacunae.

In the Netherlands, the transition from midwifery care to obstetric care (and vice versa) is not without flaws. This study highlights the important aspect of care integration, continuum of care, and transfer of care. The underlying power gaps between various levels of care and between care providers-obstetricians and midwives should be kept under check, since it only compounds the vulnerability of the patients. Multi stakeholder governance can help resolve this issue by involving various actors and developing a more integrated approach to maternal care.

For a diverse country like India, still struggling with maternal mortality, social and cultural conditions, beliefs and practices should also be taken into account for evidence-based policymaking, not only to reduce maternal mortality and morbidity but to reduce inequalities (Sharma et al., 2016). In India, birth educators and lactation consultants should work together to ensure women can exercise their right to breastfeed their children right after they are born, unless there are any complications. Midwifery education should be encouraged for birth attendance even in private hospitals with a special focus on the golden hour of breastfeeding. The increased demand for delivery services needs to be complemented with regulation, planning and setting quality compliance standards across institutions.

The lack of accountability and transparency in governance can lead to poor health outcomes, and should be combatted with results based financing and appropritae grievance and redressal mechanisms. Finally, cash schemes focussed on increasing uptake of births in hospitals and community health centres should incorporate both caesarean and natural deliveries to reduce unnecessary medicalisation.

From a health and architecture perspecticve, creating an optimal birth environment based on evidence-based design thinking (EBDT) (Folmer et al., 2019) instead of evidence-based design (EBD) should be incorporated in building healthcare institutions. Within this framework, users/patients are central to the innovation process, and the responsibility of the process of design lies with the healthcare professionals. Built environments can influence women’s well-being and the spatial dimensions of care institutions should be designed to address both physical and emotional needs of childbearing mothers. Empathy and intuition are important aspects in deriving the meaning of birthplaces and developing an in-depth

understanding of the socio-material aspects such as movement and visualisation to improve perinatal outcomes.

5.2 THEORETICAL CONTRIBUTION

In conclusion, this study also contributes to theoretical debates on medicalisation and materiality at the place of birth through the introduction of birth policy assemblages. It challenges the existing dichotomization of birth in literature namely, the midwifery and the medical model and the home birth vs hospital birth debate, by using birth stories as a means to understand diverse care practices. The comparison of places of birth in two different countries highlights certain salient aspects of caregiving and materiality which help us learn about the interactions of the built environment using the existing models of care. Birth, however, lies somewhere in between and women need relentless support from multiple healthcare professionals to give birth safely. The idea and perception of safety is also contested wherein the general theoretical discourses within childbirth practices and maternal policies often overlook a major component of wellbeing: a positive birth experience, which also affects the development of the child. The continuum of care often narrowly focuses on the place and time of birth with little attention to the aspect of well-being, which this study aims to contribute to.

I also contribute to the theoretical discussion of birth by conducting a comparative analysis which helps us to go beyond dichotomies in debates on medicalisation. Generally, comparisons and discussions about the medicalisation of birth are very country focussed or sometimes specific to certain cultures. We notice maternal mortality and morbidity trends, use historical, institutional and sociological analysis to draw comparisons, learnings and policy developments. However, this thesis helps us go a step ahead and learn more about the salient aspects of caregiving at birth and what goes into creating built environments to support women and care providers. Birth policy assemblages, therefore help us develop a more comprehensive view on maternal health by incorporating materiality and architecture, birth experiences and maternity policies at places of birth.

5.3 REFLECTIONS AND LIMITATIONS

The strength of this research lies in the amount and quality of the interviews. Phenomenological narratives helped in developing a rich description and provided important insights into childbirth practices at places of birth. Combining document analysis with interviews helped in data triangulation, adding reliability and accuracy to the research. The findings of the study will encourage policymakers and other stakeholders with an interest in

planning, implementation and funding of evidence-based interventions to improve maternal health outcomes. Moreover, urban planners can use the architectural insights for building user-centric places of birth. However, there were certain limitations to the study.

India, being a diverse country, the results of my study need to be adjusted to other states and regional variations in India. This study took place in Kochi, Kerala which is the most literate state in India. The women I interviewed were highly educated, some of them lived in other countries before. This may not hold true for all the states and urban cities in India.

The other limitation is the comparative study in itself which was daunting, but could have been focussed on one country. Due to the pandemic, I was not able to visit the birth centre in India (although I did travel to India in March), which was limiting since I was unable to conduct face to face interviews and observations. This had an effect on the immersiveness and thick description, as much as the study intended to achieve. In the Netherlands, I had to choose participants who gave birth in different birth centres and homes, since recruitment from one specific institution was not feasible due to confidentiality concerns. Although, this did help broaden my knowledge of the maternity system.

Furthermore, during research, the attempt was to provide an unbiased account owing to my prior work experience in maternal care hospitals in rural India, and the a priori knowledge of the healthcare system. Having practised dental surgery in India for more than three years, my idea of caregiving has evolved and I've unlearned certain non-discursive and discursive formations in caregiving whilst conducting this study. While phenomenological experiences and policy analysis aided in immersion and added more complexity to the topic, I found myself struggling sometimes whilst attempting to unite these two very different worlds of objectivity and subjectivity in health policy research. Bringing these two different methods together; one at the policy level and the other at the experiential level, has had an impact on the research findings.

Through this phenomenological analysis of the subjective, I have attempted to understand the objective. The praxis, processes and placed care assemblages in childbirth in my own country (India) and a country I now call home (The Netherlands) have influenced my writing, compelling me to look at health policy from various perspectives.

5.4 Recommendations for FUTURE RESEARCH

Under-treatment and over-treatment both can affect health outcomes. Further research should be done to determine the types of risks for each individual (mother), to provide optimal care

for both mother and the child. Since well-being was found to be a neglected issue in both countries, research should zoom into the praxis of care.

Another area that can add value and depth in understanding birthing practices is an exploration of the traditional midwifery practice and Complementary and Alternative Medicine (CAM), which falls on the other end of the medicalisation spectrum. Many studies elicit dominant medical systems dictating various health practices and highlighting deficiencies in traditional practices that need to be rectified or even eradicated. Research focussed on geopolitics and rural-urban dichotomies can be productive in assessing unmet needs, geographical and financial barriers related to maternal and child care. Another area of inquiry that future researchers could engage with is impact evaluation to assess the maternal health policy and utilization of services to counter operational inefficiencies.

Further research is also needed to understand the factors responsible for the maximisation of birth at homes, and the effects of humanising medical care in the short and long term. In summary, a moral enquiry of medicalisation of childbirth can bring light to ethical issues related to sexual reproductive health rights (SRHR) and childbirth practices to address reproductive behaviours and systemic challenges.

CHAPTER 6 BIBLIOGRAPHY

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APPENDIX:

ANNEX 1

General information	- Where are you from? - How long have you been in India/NL? - How old are you? - Do you mind if we record this interview? -
THEMES: **Autonomy and choice of birth**	- Have you experienced natural birth or had a hospital birth in the past as well? - If yes, could you describe your experience in both settings? - Why did you choose one over the other? Can you elaborate? - What made you decide giving birth at the birthing centre? - How did your family/friends take it and what were their views?
Embodiment	- Can you describe your overall birthing and labour experience? - Can you describe your interaction and experience with midwives? - Can you describe your labouring process? During the labouring process, who was around you, can you share details of space/place or the setting? - How were the curtains, bedsheets, towels? - What comes into your mind when I say the word 'home'? - How was the birthing centre prepared?
Medicalisation Diverse perceptions/meanings related to 'natural' birth linked to place (hospital vs home)	- Can you describe your birthing experience at the hospital? - How was the home birthing experience different form the hospital?
Architecture and design of the place of birth	- What went behind designing the new Birthvillage centre? - Was the design inspired by something? - How was the space and place conceptualised? - How long did it take and what was the design philosophy behind it?
Maternal health policies in India and NL	- How has your experience been a midwife/doula been in the Netherlands/India? - How does your dream birth centre look like?

(To Doulas, midwives, and Doctor(s))	- How is the maternal health care system in India/ NL and what are your views about home birth? - How many women have you helped with giving birth at home and how is it different from the hospitall? - In your experience, how does materiality affect or influence women? - How many of these home births had to be taken to the hospital? - What is the difference between doula and midwife? - How is your own experience assisting in deliveries at home and hospitals? - What would you like to change in the current maternal system in India/ NL? - How does the care transfer procedure happen, in case of complicated cases?

ANNEX 2

Results framework:

Theme	Codes
Autonomy and choice of birth	• Institutional Support • Comfort • Safety • Familiarity • Agency • Informed consent • Confidence and trust in system
Embodiment	• Materiality • Conceptualization and design • Medicalisation • Normalisation • Humanisation • Training of healthcare professionals
Extend of medicalisation	• Care Integration • Lack of clarity on the roles and responsibilities Doulas and Midwives • Transition from 1st line to 2nd line of care • Continuum of care • Design of place of birth • Informed consent • Humanisation & wellbeing • Normalisation • Golden hour-breastfeeding (India) • Lack of postnatal check-ups (NL) • Lack of birth centres (India) • Birth education (India)