

WOMEN IN SLUMS AND SEXUAL AND REPRODUCTIVE HEALTH
A REVIEW

ACCESS TO SEXUAL AND REPRODUCTIVE HEALTH SERVICES: BARRIERS FACED
BY WOMEN LIVING IN SLUMS IN NORTH INDIA
A SCOPING REVIEW

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A Thesis Submitted to the School of Graduate Studies in Partial Fulfilment of the Requirements
of the Degree of Master of Science (Global Health)

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McMaster University MASTER OF SCIENCE (2022) Hamilton, Ontario (Global Health)

TITLE: Access to Sexual and Reproductive Health Services: Barriers Faced by Women Living in Slums in North India- A Scoping Review

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NUMBER OF PAGES: 117

LAY ABSTRACT

A significant amount of research has previously been conducted in India, to improve women's sexual and reproductive health. However, women living in North Indian slums still have poor access to proper sexual and reproductive healthcare. Therefore, this study investigated the key barriers faced by women in slum populations when accessing sexual and reproductive health services in Northern India. A review of previous studies was conducted by searching five electronic databases and a total 28 articles were included into the review. This study found that women lacking a proper education and understanding of SRH services, lack of employment and financial resources, and women's husbands and mothers-in-laws were barriers to SRH services. Finally, poor interactions with healthcare providers and the healthcare system, and systemic factors such as behaviours in treatment seeking, son preference, and religion were also barriers to accessing SRH services.

ABSTRACT

Background: A significant amount of research has previously been conducted in developing countries such as India, to improve women's sexual and reproductive health. However, women living in North Indian slums still have poor access to proper sexual and reproductive healthcare. The aim of this thesis is to investigate the published literature to create a consolidated understanding of the key barriers faced by women in slum populations when accessing sexual and reproductive health services in Northern India.

Methods: A scoping review was carried out following the five stages outlined in Arksey and O'Malley's framework. Five online databases (MEDLINE, Global Health, Ovid Emcare, Embase, and Web of Science) were searched. An interpretive thematic analysis was conducted to extract meaningful themes from the data using the Conceptual Framework for Reproductive Empowerment developed by the International Center for Research on Women

Results: In total, 28 articles were identified to be incorporated into the scoping review. The results of this study were grouped according to the CFFRE to understand how they compared in regard to women's reproductive empowerment. This scoping review found reproductive empowerment was significantly hindered by women lacking a proper education and understanding of SRH services, lack of employment and financial resources. Additionally, women's husbands and mothers-in-laws were barriers to contraceptive use. Finally, poor interactions with healthcare providers and the healthcare system, and systemic factors such as behaviours in treatment seeking, son preference and religion were barriers to accessing SRH services.

Conclusion:

This scoping review investigated the barriers faced by women living in slum populations in Northern India to accessing SRH services. The results of this study contribute to the literature by

identifying areas that require improvement to SRH services for women living in slums, and will be integral to implementing strategies and interventions to allow better access to SRH services in the future.

Keywords: Sexual and Reproductive Health, Family planning, Contraceptives, Reproductive empowerment, Reproductive agency, North India, Slums, Scoping Review

ACKNOWLEDGEMENTS

I would like to express my heartfelt gratitude and appreciation to my supervisor, Dr. Deborah DiLiberto, for her consistent guidance and support throughout this thesis project. I am deeply grateful for the time she has invested in me, and for allowing me to pursue my passion on women's sexual and reproductive health in India. Dr. DiLiberto truly pushed me to continuously improve my writing and critical thinking skills in research, and I hope to be a better researcher because of her. Additionally, I would like to express my appreciation to my thesis committee member, Dr. Arathi Rao for her insightful contributions and recommendations to my project, stemming from her wealth of knowledge in sexual and reproductive health. I would also like to thank Laura Banfield for her valuable input which guided the initial stages of my research. To my best friend Seinan Khan, I would like to thank him for his incredible technological skills which assisted me throughout the thesis process, in addition to the endless emotional support and daily zoom calls as we both worked together on our respective projects during the COVID-19 pandemic. Lastly, I want to thank my family for their love and support and instilling in me the importance of pursuing higher education to create positive change and make a remarkable impact on the world one day.

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LIST OF ABBREVIATIONS AND SYMBOLS

ASHA	Accredited Social Health Activist
CHC	Community Health Center
CFFRE	Conceptual Framework for Reproductive Empowerment
FP	Family Planning
HPV	Human Papillomavirus
ICRW	International Center for Research on Women
IUD	Intrauterine Device
IUCD	Intrauterine Contraceptive Device
LMICs	Low-and-Middle-Income Countries
MAS	Mahila Argoya Samiti
NGO	Non-Governmental Organization
NUHM	National Urban Health Mission
PHC	Primary Health Center
PID	Pelvic Inflammatory Disorder
RTI	Reproductive Tract Infection
SES	Socio-economic Status
SRH	Sexual and Reproductive Health
STI	Sexually Transmitted Infection
UP	Uttar Pradesh
U-PHC	Urban Primary Health Clinics

DECLARATION OF ACADEMIC ACHIEVEMENT

The following is a declaration that the content of the research in this document has been completed by Vibhu Bhargava and recognizes the contributions of Dr. Deborah Diliberto, Dr. Arathi Rao and Laura Banfield in both the research process and the completion of the thesis.

Chapter I: Introduction

Access to quality sexual and reproductive health (SRH) services continues to be a challenge for women living in urban slum communities in India (Sanneving et al., 2015). Slum households are located in urban areas (UN-Habitat, 2006). Currently in India nearly 100 million people live in slums, which exposes them to health and environmental hazards (Hazarika, 2010; WHO, 2011). Women living in slum communities are of a lower socio-economic status, have lower levels of education, and experience greater barriers to accessing sexual and reproductive healthcare (Hazarika, 2010; Pundhir & Das, 2021). By 2030 India has committed to providing universal access to sexual and reproductive health services (SRH) and services for family planning (FP) (Population Foundation of India, n.d; United Nations in India, n.d). However, the need for SRH and FP services (wholistically known as SRH services) and women's right to access these services are far from universal throughout the country (United Nations in India, n. d; WHO, n.db).

Justification

While there has been a wealth of research on SRH services for women in India, a consolidated understanding of barriers faced by women in slum populations in Northern India when accessing SRH services has yet to be conceptualized (Hazarika, 2010; Sanneving et al., 2015). The goal of this master's thesis is to conduct a scoping review and investigate the published literature on barriers to accessing SRH services faced by women living in slum populations across Northern India. A comprehensive review is essential to provide consolidated evidence of the barriers that persist as a knowledge deficit currently exists. An overarching understanding of the consolidated evidence will contribute to determining the key barriers involved in access to SRH services in slums overall in North India. The Conceptual Framework for Reproductive Empowerment

(CFFRE) will be used to conceptualize the barriers found according to the concept of women's reproductive empowerment. This thesis will answer the following research question:

What are the barriers faced by women living in slum populations in Northern India to access sexual and reproductive health services?

The first chapter of this thesis will provide background information and justification for the research project. Slums in North India and the vulnerabilities women in slums face, their access to SRH services in the Indian context, and the conceptual framework for reproductive empowerment are described. Chapter two outlines the methods for each step of the scoping review based on the five steps of Arksey and O'Malley framework (Arksey & O'Malley, 2005). The results of the scoping review are presented in chapter three of the thesis. Chapter four examines the discussion of the thesis, where the results of the scoping are deliberated. The strengths, limitations and conclusion are discussed in chapter five of the thesis.

Background

General Overview

By 2030, 60% of the global population will reside in urban areas with 90% of urban growth to occur in low-and-middle-income countries (LMICs) (UN-Habitat, 2018). The trend towards urbanization will have a significant impact on people's livelihoods, including health, economic, social and environmental facets (UN-Habitat, 2018). Urbanization is driven by industrialization and economic growth and as a result forms cities, towns, and metropolitan areas (WHO, 2011). Urbanization occurs when "increasing numbers of people live in high-density communities, with organized provision of basic human necessities such as housing, safe water supply, sanitation and food." (WHO, 2011). In developing countries high rates of urbanization have caused stagnation of economies, and poor planning and governance (UN-Habitat, 2018). Large scale urbanization due

to increased arrivals into cities creates competition for limited resources, placing pressure on public utilities such as housing, sanitation, transport, water, electricity, healthcare, and education (IOM, 2014; Singh 2016b). Approximately one-third of India's population lives in urban areas and according to the latest census in 2011, the urban population is 37.7 million and will increase to 600 million by 2030 (Singh, 2016b). This rapid and large-scale urbanization results in abject poverty localized in slums in major urban centers which is a problem that has persisted for decades (Habitat for Humanity International, 2021; IOM, 2014; UN-Habitat, 2018).

Poverty is a systemic challenge in Indian society that has perpetuated poor health outcomes; it is "a state of being inferior in quality or insufficient in the amount of resources such as food, housing, basic healthcare services and literacy (WHO, 2011). Poverty centralizes around the absence of the individual being capable to function in a suitable manner in society (WHO, 2011). People who are impoverished will likely lack specific capabilities; insufficient access to food or education, be in poor health, or lack political freedoms (WHO, 2011).

Poverty is a hallmark of slums, where slums dwellers are subjected to extreme levels of poverty (Dutta, 2017). It is currently estimated that 1 in 8 people in the world live in slums (UN-Habitat, 2018). It is projected that over 1.2 billion people will live in slums by 2030 with one of the largest slum dweller populations expected to be in South Asia (Habitat for Humanity International, 2021). Slum households are located in urban areas and are usually created in the center of a city due to the proximity to worksites, garbage disposals, industrial waste dumping sites, and sewage disposal sites (UN-Habitat, 2006; WHO, 2011).

A slum household as defined by UN-HABITAT is located in an urban setting and is composed of a group of individuals who live under the same roof (WHO, 2011). The household must meet a minimum of one of the following basic shelter deprivations: lack of access to clean

water supply and sanitation, overcrowding (comprised of three or more individuals per room), lack of access to durable housing that protects against extreme climate, and lack of security of tenure barring forced evictions (UN-Habitat, 2006; WHO, 2011). Otherwise known as informal settlements, slums are constructed without the appropriate legal regulations, and adequate construction and urban planning (WHO, 2011). The overarching characteristics of slums in developing countries include: insecure housing tenure; inadequate basic services; housing settlements that contradict city by-laws; housing on property owned by the state or third-party member; insufficient access to basic services; illegal subdivision of housing; poverty and social exclusion; unhealthy living conditions and hazardous locations (WHO, 2011).

North Indian Slums

The focus of this thesis in particular is on slums in North India. Slum dwellers in North India live in some of the most inhuman conditions that strip them of their dignity, security, and right to basic social services, which negatively impact their ability to live a safe and fulfilling livelihood (Government of India, n.d). This is further highlighted by the high rates of violence and crime and the prevalence of ill-health and disease in slum environments (Government of India, n.d). To demonstrate how marginalized this group is, a significant number of individuals live below the poverty line of just \$1.90 USD per person per day (Banerjee et al, 2020; Brookings, 2022; Minakshi, 2015; WHO, 2011). Investigating the slum population in North India will help to further understand the difficulties faced by women living in these areas.

Slum Growth

The rural population of North India has adopted migration as a strategy to improve their livelihoods and benefit from the opportunities available in urban areas (United Nations ESCAP, 2013; IOM, 2014). In rural areas the population is at risk of losing their livelihoods due to

escalating risks such as: climatic events, indebtedness, poor returns on farming, and limited prospects in rural regions (IOM, 2014; Kumar et al., 2009; Singh, 2016b). Therefore, choosing to move to urban areas provides easier access to work, services, education, and social and cultural opportunities for families and individuals, with the possibility of transferring money back home to rural areas (IOM, 2014; United Nations ESCAP, 2013; WHO, 2011). In addition, urban to urban migration from small urban towns to large cities and natural population growth in urban settings contribute to the increase in population size in urban areas (IOM, 2014; Singh, 2016b). The overall migration and growth of the urban population contribute to shortages in adequate housing, basic services and overcrowding and development of slums (IOM, 2014; Singh 2016b).

Types of Slums

Low-income urban settlements are divided into two main categories, notified or recognized slums, and non-notified slums (IOM, 2014; Subbaraman et al., 2012; Bandyopadhyay & Agrawal, 2013). Notified slums are recognized by the appropriate municipalities, corporations, local bodies or development authorities (Banerjee et al, 2020; Singh, 2016a; Subbaraman et al., 2012). These slums have permanent housing construction, proper electricity supply, commonly available drinking water, and receive basic services provided by local bodies (IOM, 2014; Subbaraman et al., 2012). Non-notified slums tend to be a collection of poorly built tenements crowded together without sanitary drinking water facilities and unhygienic living conditions (Banerjee et al, 2020; WHO, 2011). Non-notified slums are not recognized by the government and therefore, do not receive municipal services (Subbaraman et al., 2012).

Vulnerabilities of the Slum Population

People living in slum areas, particularly women, are burdened with vulnerabilities that have a negative impact on their daily navigation through North Indian society. These vulnerabilities

include, caste system discrimination, lack of formal education, high rates of unemployment, low socio-economic status, and poor living conditions. Understanding the role these vulnerabilities play in women's lives can help to determine the daily obstacles encountered by this population in North India when seeking access to SRH services.

Caste System

The outdated caste system in India continues to play a significant role in all spheres of slum dwellers' lives. Caste hierarchy is categorized as the general category at the top, followed by other backward castes, scheduled caste, and scheduled tribes (Chandrasekhar & Mitra, 2019). The underemployed and poor, mainly belong to the lower scheduled caste and scheduled tribes (Chandrasekhar & Mitra, 2019). A significant number of lower caste members are unskilled or poorly paid semi-skilled workers in the informal sector (Chandrasekhar & Mitra, 2019; Kumar et al., 2009). High caste members also live in slums, however, they have better economic, health and educational outcomes (Chandrasekhar & Mitra, 2019). Slums are the product of socio-economic and cultural factors of India's social system, which prohibits physical, mental, moral, and social development of this vulnerable and oppressed population (Singh, 2016a).

Education

Despite years of efforts to improve education for girls in slums, North Indian states such as Rajasthan continue to have low female literacy rates at 52.12% and 57.18% in Uttar Pradesh (UP) (Census 2011, n.db). With an education, greater employment opportunities are available to women and their income levels can increase (Tiwari & Singh, 2021). However, girls may not be sent to school due to low-income levels and parents' inability to afford the school fees (Singh, 2016a). Boy's education is often prioritized over girls, since the cultural norm is that boys are eventually expected to provide for their families and girls are expected to get married and live with

their husbands' family (Chugh, 2011). For girls who are receiving an education, household chores can be a hindrance to their studies (Tiwari & Singh, 2021). Due to unsanitary drinking water in slum households, girls may be responsible for collecting water from the tanker or municipal tap which can take 2-3 hours of the day (Chugh, 2011). Their shelter may be small and confined, housing many people under one roof and constraining the available space for regular studies (Tiwari & Singh, 2021; Chugh, 2011). The lack of consistent electricity can also make it difficult to study at night (Chugh, 2011). From the onset of puberty to early marriage girls are discouraged from attending school due to their safety as they might experience sexual harassment on the way to school (Chugh, 2011).

Employment

Unemployment rates are high within the slum population (Singh, 2016a). A significant number of women are unemployed and look after the household and children, and elderly family members (Raghav & Joshi, 2019). Employed women tend to have irregular employment mainly as domestic workers, clerks, or sweepers, these occupations have a heavy workload with a comparably poor income and economic security (Bhatnagar et al., 2013; Singh, 2016a). Monthly income can translate to around Rs. 600 for some women which translates to \$7.63 USD as of 2022, with many households having multiple individuals earning an income to attempt to earn enough money for basic necessities (Gupta & Rajpoot, 2014).

Socio-economic Status

Women living in slums are marginalized and mainly of low socio-economic status (SES) (Singh, 2016a). They earn little money and are unable to purchase the basic needs for daily life (Singh, 2016a). SES scales classify individuals or families on different socio-economic strata (Majumder, 2021). India has developed and launched multiple SES scales since the late 20th

century: the Rahudkar scale in 1960, the BG Prasad Scale in 1961, the Udai Pareek scale in 1964, the Jalota scale in 1970, the Kulshrestha scale in 1972, the Kuppuswamy scale in 1976, and the Bharadwaj scale in 2001 (Majumder, 2021).

Kuppuswamy Scale

The Kuppuswamy scale is still widely used today for determining the SES of slum dwellers (Ankitha et al., 2016; Bhardwaj & Pandey, 2021; Majumder, 2021). The scale looks at the educational level of the head of the household as shown in Table 1, occupational status as shown in Table 2, and the total family income earned as shown in Table 3 (Ankitha et al., 2016; Bhardwaj & Pandey, 2021; Majumder, 2021). Families are classified into five economic groups: upper class, upper-middle-class, lower middle class, upper-lower, and lower socio-economic class based on the score, and the range of the score between 3-29 (Ankitha et al., 2016; Bhardwaj & Pandey, 2021). In a Delhi slum, 75% of women belonged to lower middle and upper lower socio-economic status on the Kuppuswamy scale (Bhatnagar et al., 2013).

Table 1. Education level on the Kuppuswamy SES scale (Ankitha et al., 2016, p.33)

SI.No	Education of the Head	Score
1	Profession or Honours	7
2	Graduate or Post graduate	6
3	Intermediate or Post high school dip	5
4	High school certificate	4
5	Middle school certificate	3
6	Primary school certificate	2
7	Illiterate	1

Table 2. Occupation status on the Kuppuswamy SES scale (Ankitha et al., 2016, p.33)

SI.No	Occupation of the head	Score
1	Profession	10
2	Semi-profession	6
3	Clerical, Shop-owner	5
4	Skilled worker	4
5	Semi-skilled worker	3
6	Unskilled worker	2
7	unemployed	1

Table 3. Total family income earned on the Kuppuswamy SES scale (Ankitha et al., 2016, p.33)

SI.No	Education of the Head	Score
1	Profession or Honours	7
2	Graduate or Post graduate	6
3	Intermediate or Post high school dip	5
4	High school certificate	4
5	Middle school certificate	3
6	Primary school certificate	2
7	Illiterate	1

Living Conditions

Slum dwellers live in severely unhealthy living conditions due to a lack of basic services (Singh, 2016a). Shelters are typically made from an amalgamation of bamboo, tin, straw leaves, polythene and lack a lighting source (Bhardwaj & Pandey, 2021). Housing conditions have a high-density population living in a congested space without inadequate ventilation, leading to respiratory diseases such as asthma and bronchitis (Singh, 2016a; Tiwari & Singh, 2021). Slums have visible open sewers, uncontrolled dumping of waste products, polluted drinking and bathing water, and unsanitary living conditions (Singh, 2016a). Unhygienic living conditions and poor

personal hygiene can lead to risk of communicable and water related diseases (Singh, 2016a; WHO, 2011).

North Indian Slums and SRH

Around 49 million women in India have an unmet need for contraceptives (Guttmacher Institute, 2020). In northern states such as UP, 55.3% of young women in slums have an unmet need for contraceptives (Yadav et al., 2020). There are negative health outcomes women experience due to poor access to SRH services. A lack of access to contraceptives and SRH services can lead to unintended pregnancies, where in India 10 million unintended pregnancies occur each year (Guttmacher Institute, 2020; UN News, 2022). In India, poor access to SRH services can lead to women contracting and spreading sexually transmitted infections (STIs) (Garg et al., 2002). Around 14 million women in India are unable to receive treatment for STIs and 3 million women suffer from pelvic inflammatory disease (PID) due to untreated STIs (Guttmacher Institute, 2020). In UP slums women displayed a high risk of morbidity and infection, where high rates of STIs such as chlamydia and human papillomavirus (HPV) were prevalent (Garg et al., 2002). Women in North Indian slums face difficulties in accessing SRH services and bear the burden of having poor reproductive health (Sanneving et al., 2013). There are many factors that contribute to poor reproductive health outcomes such as, inadequate SRH services, early marriage, unplanned pregnancies, and reproductive morbidity. These factors will guide our understanding of the barriers women face to their reproductive well-being.

Definition of Sexual and Reproductive Health and Services

SRH falls into the broad consensus of sexual and reproductive health rights, which encompasses the right to access services (OHCHR, n.d). The focus of this thesis will be on SRH services which is defined by the WHO as “a state of physical, emotional, mental and social well-

being in relation to sexuality, and not merely the absence of disease, dysfunction or infirmity” (WHO, n.da). Sexuality and sexual relationships should be pleasurable and safe experiences that are free from discrimination, coercion and violence (WHO, n.da). The International Conference on Population and Development (ICPD) Programme of Action defines SRH services in the context of primary health care to include:

1. Family Planning;
2. Antenatal, safe delivery and post-natal care;
3. Prevention and appropriate treatment of infertility;
4. Prevention of abortion and management of the consequences of abortion;
5. Treatment of reproductive tract infection (RTI);
6. Prevention, care and treatment of STIs and HIV/AIDS;
7. Information, education and counselling, as appropriate, on human sexuality and reproductive health;
8. Prevention and surveillance of violence against women, care for survivors of violence and other action to eliminate traditional harmful practices, such as female genital mutilation/cutting;
9. Appropriate referrals for further diagnosis and management of the above (UNFPA, 2008)

Inadequate SRH Services in Slums

Women living in North Indian slums receive inadequate SRH services. Government spending on family welfare programs is substantial, however the services provided are inadequate (Hussain, 2001). There is a lack of consistent care at public health clinics, healthcare workers who should be present at the health center to attend to patients are not always present (Hussain, 2001).

Women often find that the health professionals do not provide them with adequate advice, knowledge, or instruction about follow-up appointments (Hussain, 2001). Private hospitals are often the preferred place for seeking health services for women experiencing gynecological problems (Lata et al., 2015). However, women experiencing gynecological or menstrual problems also stated financial barriers and lack of knowledge about health facilities as a reason to not seek out treatment (Lata et al., 2015).

Burden of Poor SRH Services

Early Marriage

Early or child marriage is defined as marriage before the age of 18 years old and is a violation of one's human rights (Vikram, 2021). Nearly half of all young women in India are sexually active by the age of 18 and almost 1 in 5 by the time they are 15 years old, due to early marriage (Patra et al., 2016; Vikram, 2021). Marriages of women under 18 tend to be the norm in India and are arranged by the family, leaving little autonomy for women to choose their spouse (Santhya et al., 2010). Early adolescent marriages diminish educational opportunities or only allow for low levels of education (Santhya et al., 2010). Many adolescent girls are either unaware of FP methods or have difficulty accessing the necessary services (Patra et al., 2016; Young Lives, 2016). Even if they do have access to contraceptives, they are less likely to use them to delay their first pregnancy (Santhya et al., 2010; Vikram, 2021). Therefore, early marriage coincides with early childbearing putting young mothers at an increased risk for maternal mortality since many pregnancies are unplanned due to a lack of contraceptives (Patra et al., 2016; Vikram, 2021). Adolescent mothers are at risk for medical complications such as: preterm birth, poor maternal weight gain, pregnancy induced hypertension, and anemia (Patra et al., 2016; Vikram, 2021).

Unplanned Pregnancy

The burden of unplanned pregnancies falls disproportionately on women living in urban slums. FP methods are less likely to be used due to low autonomy in contraceptive decision making, which in many cases is governed by the husband or mother-in-law (Bhilwar, 2015). Instead, FP decisions should be made between the couple in conjunction with a medical professional (Bhilwar, 2015). Unintended pregnancies can lead to women seeking out induced abortions which are not supervised by a healthcare worker, as was found in a slum in Delhi (Bhilwar, 2015).

Reproductive Morbidity

The burden of reproductive morbidity significantly impacts women in slum populations as they are at a high risk for mortality and morbidity due to reproductive tract infections (RTIs) and sexually transmitted infections (STIs) (Garg et al., 2002). If left untreated the consequences of an RTI can include cervical cancer, infertility, chronic pain, or ectopic pregnancies (Garg et al., 2002). STIs are prevalent in the slum population (Garg et al., 2002). A slum in Delhi found high rates of chlamydia, syphilis, Hepatitis B, Hepatitis C, and HPV in women (Garg et al., 2002).

North Indian Slums and Healthcare

To gain an understanding of how women access SRH services, in-depth knowledge of the healthcare system in North India is required. The Indian healthcare system is based on a three-tier model of care, with additional services being supplemented by NGOs and community healthcare workers. Despite the multitude of services available, women living in slums continue to have poor access to SRH services. Understanding how the healthcare system plays a role in contributing to these barriers will help to reveal why women continue to have difficulty accessing SRH services.

Indian Healthcare System Overview

India subscribes to a decentralized health care delivery model where each individual state is responsible for providing free universal access to healthcare services. All Indian citizens have a right to free outpatient and inpatient care at public government facilities (Commonwealth Fund, 2020). Governance of the health system is divided between the central and state governments (Chokshi et al., 2016; Commonwealth Fund, 2020). Federally, the Ministry of Health and Family Welfare is comprised of two departments; the Department of Health and Family Welfare which engages in organizing and delivering all national health programs, and the Department of Health Research which engages in clinical research, development of health research and ethics guidelines, and outbreak investigations (Commonwealth Fund, 2020). Additionally, the Ministry of Ayurveda, Yoga and Naturopathy, Unani, Siddha, and Homeopathy is responsible for alternative medicine practices (Commonwealth Fund, 2020). The Directorates of Health Services and the Departments of Health and Family Welfare operate at the state level and hold the responsibility of delivering healthcare services at the population level (Commonwealth Fund, 2020). As each state is the provider for its designated population, a significant degree of variation exists in the service delivery models for each state (Commonwealth, 2020).

However, government expenditure for healthcare is severely limited and accessibility issues at public facilities are a pertinent on-going issue including long hospital wait-times, low quality of public health services and infrastructure deficiencies (Commonwealth, 2020; Kasthuri, 2018). Therefore, the majority of inpatient and outpatient care is delivered at high-priced private hospitals where out-of-pocket payments are the primary means for individuals to fund their healthcare (Commonwealth Fund, 2020).

Primary Level Care

India has a 3-tier public health system composed of primary, secondary and tertiary level of health care. Primary level care is the first point of contact for the population to access healthcare and it is divided into three types of centers: Subcenters, Primary Health Centre (PHC), and Community Health Centre (CHC) (Commonwealth Fund, 2020). A Subcenter is the lowest tier of the healthcare system and is designed to provide primary healthcare services, essential medicines, diagnostic services, maternal and child healthcare to a population of 3000-5000 (Commonwealth Fund, 2020). The Subcentre is staffed with an auxiliary nurse midwife or female health worker, male health worker, and one additional female health visitor supervisor (Commonwealth Fund, 2020). The PHC are where patients are referred to from a subcenter and is the first point of contact between a patient and a medical doctor and serves a population of 20, 000- 30, 000. The CHC is a referral center for the PHC and provides obstetric care and specialist consultations and is staffed by a surgeon, general practitioner, gynecologist, and pediatrician (Commonwealth Fund, 2020).

Secondary Level Care

From primary care facilities patients can be referred to a Sub-district hospital which links to referrals to District hospitals, that both encompass secondary level care (Indian Public Health Standards, 2012a). Sub-district hospitals provide access to specialists for both the urban population and rural population of the sub-district which includes 100, 000- 500, 000 people (Indian Public Health Standards, 2012a). Patients can be referred to a District hospital which is a terminal referral center, and offer emergency care, maternity services, and newborn care for large urban centers and cater to both the urban and rural people (Indian Public Health Standards, 2012b).

Public hospitals account for 10 percent of hospitals throughout the country. The remainder are private hospitals that operate in the for-profit sector (Indian Public Health Standards, 2012b). There has been substantial growth in the number of private hospitals due to the poor quality of

care offered in public hospitals. All private hospitals operate based on fee-for-fee service. (Indian Public Health Standards, 2012b). A small number of private hospitals are run by charitable organizations (Indian Public Health Standards, 2012b).

Tertiary Level Care

Tertiary care is a specialized form of consultative health care provided to inpatients following a referral from a health professional at the primary or secondary level (Tertiary Care Institutions, 2017). These hospitals are provided by well-equipped medical college hospitals which focus on super specialty illnesses (Shankar, 2015). The institutions have the personnel and facilities for advanced laboratory and imaging investigation which are not found at the primary and secondary care level (Tertiary Care Institutions, 2017). They are often located in large cities and cater to both the urban and rural population (Tertiary Care Institutions, 2017). Individuals can access private tertiary care which is based on patients' ability to pay (Tertiary Care Institutions, 2017).

NGOs

Non-governmental organizations (NGOs) are essential to filling the gap by providing and promoting healthcare throughout slum communities where residents lack access to basic public services (Sanadgol et al., 2021; Smile Foundation, n.d). The essential health services offered by NGOs mean that people who are unable to access health services due to financial hardships or are unable to lose a day's wage to reach the nearest medical facility can receive the proper healthcare (Sanadgol et al., 2021; Smile Foundation, n.d). For example, the Smile Foundation NGO operates their Smile on Wheels project in the slums of Delhi (Smile Foundation, n.d). Delhi has too large of a population and its public health system is stretched thin and unable to

cater to all individuals (Smile Foundation, n.d). With an equipped mobile hospital staffed with a doctor, nurse, lab technician, pharmacist, and community mobilizer and project coordinator they provide healthcare to slum populations with a specific focus on the health of women and children (Smile Foundation, n.d). Medical consultation, diagnosis and sessions about FP are provided free of cost, reaching over 231,000 individuals within a year of operation (Smile Foundation, n.d).

Urban ASHA

Urban Accredited Social Health Activist (ASHA) is a community level health care provider in the slums (Ministry of Health and Family Welfare, 2014). ASHA are women who reside in the slum and work in a voluntary role for every 1000-2500 people living in the slum (Ministry of Health and Family Welfare, 2014). ASHAs hold a range of responsibilities including, creating awareness amongst community members on social determinants and public health services, escorting women and children requiring medical care to the nearest health facility (U-PHC or CHC), and prioritizing visits to the most vulnerable and marginalized members of her community (Ministry of Health and Family Welfare, 2014). Home visits are also used as a tool to counsel families on birth preparedness, importance of safe delivery, contraception use, prevention of RTIs and STIs (Ministry of Health and Family Welfare, 2014). ASHAs distribute contraceptives and create awareness of FP at the doorstep of households of eligible couples in the slum community (Ministry of Health and Family Welfare, 2014; (RMNCH+A, 2013).

MAS

Mahila Argoya Samiti (MAS) are formed at the slum level and are composed of 10-12 women who cover 50-100 slum households (Ministry of Health and Family Welfare, 2014). The MAS are a local women's collective who focus on issues related to health, nutrition, water sanitation and its related social determinants in slums (Ministry of Health and Family Welfare,

2014). They support ASHA workers and facilitate referral links to health services for maternal, newborn, child and adolescent health (Ministry of Health and Family Welfare, 2014). ASHA and MAS will conduct meetings with women from the slum community to better understand their health conditions and help them work towards improving the health of themselves and their families (Ministry of Health and Family Welfare, 2014).

Seeking Sexual and Reproductive Care in Slums

Members of slum communities in North India seek care from Urban Primary Health Clinics (U-PHC). U-PHC's are usually located within a slum or a half kilometer radius away from a slum, and cater to 25,000-30,000 patients (U-PHC, 2015). Services provided include integrated reproductive, maternal, newborn, child & adolescent health services (U-PHC, 2015). The centers are staffed by two doctors, three staff nurses, one pharmacist, one lab technician, one Lady Health Worker and four to five Auxiliary Nurse Midwives (U-PHC, 2015). When needed, services can be taken to the doorstep of patients' households through outreach services (U-PHC, 2015)

Good Sexual and Reproductive Healthcare

According to the Ministry of Health and Family Welfare's strategic approach to reproductive, maternal, newborn, child and adolescent health in India, reproductive services will be delivered at home or through community outreach (RMNCH+A, 2013). To have good sexual and reproductive care in the community, firstly, comprehensive abortion care should be provided (Guttmacher Institute, 2019; RMNCH+A, 2013). Eight percent of maternal deaths in India are attributed to unsafe abortion practices which can lead to long-term health complications in the future (RMNCH+A, 2013). Medical Termination of Pregnancy services should be available at all Sub-district and District level hospitals (RMNCH+A, 2013). Secondly, intrauterine contraceptive

device (IUCD) insertion should be promoted post-delivery to allow spacing of births between pregnancies (Kanhere et al., 2015; RMNCH+A, 2013). Healthcare providers at all levels at District hospitals should be trained in IUCD insertion in order to promote spacing methods (RMNCH+A, 2013). STIs and RTIs are a significant public health issue in India (Asalkar & Dhakne, 2017; RMNCH+A, 2013). They are associated with adverse pregnancy outcomes, including preterm delivery, postpartum sepsis, congenital infection, and low birthweight (RMNCH+A, 2013). CHCs should offer services for STI and RTI treatment and prevention (RMNCH+A, 2013). Finally, access to modern contraceptive methods need to be readily available at the primary healthcare level, currently there exists a high unmet need and unavailability of services (Muttreja & Singh, 2018; RMNCH+A, 2013).

Healthcare Policies

The National Urban Health Mission

The National Urban Health Mission (NUHM) is a nationwide policy implemented in 2013 by the Ministry of Health and Family Welfare with the purpose of improving the health status of the urban poor (NUHM, 2013). To address the health concerns of the urban poor the policy stated it would aim to create equitable access to available health facilities by taking measures to strengthen the existing healthcare delivery models (NUHM, 2013). The NUHM has a specific focus on the slum population living in recognized and non-recognized slums and aimed to reduce out of pocket expenses for available treatments (National Urban Health Mission, n.d). The policy covers 799 cities within the country which have a population of over 50, 000 and all district level and state headquarters (NUHM, 2013). The objectives of the NUHM include improving the efficiency of the current public health system by revamping governmental primary urban health infrastructure, since the majority of urban primary health facilities have poor infrastructure and

human resources (NUHM, 2013). The policy aims to ensure the population has access to quality healthcare services and promote access to health care at the household level with the aid of community health workers such as MAS and ASHA workers.

The National Health Policy (2002)

The National Health Policy of 2002 has the goal of achieving an acceptable standard of good health amongst the population (National Health Policy, 2002). It aims to have better access to the public health system for vulnerable populations, as the system is plagued with poor infrastructure and has an insufficient amount of medical personnel, by upgrading infrastructure of the existing institutions (National Health Policy, 2002). In urban areas there are little to no public health services available, causing people to seek out private health care, resulting in out-of-pocket expenses (National Health Policy, 2002). The policy will establish regulatory mechanisms to ensure adequate standards are maintained by diagnostic centers and medical institutions, in addition to appropriate conduct in clinical practice and delivery of medical services by health care providers (National Health Policy, 2002). It notes that social, cultural and economic factors contribute to women not having the proper access to public health facilities, the expansion of primary health care facilities will aid in increasing access to women's basic health care (National Health Policy, 2002). The policy also states that altering the staffing norms at public health facilities should help women feel comfortable when seeking care from health providers (National Health Policy, 2002).

The National Health Policy (2017)

The National Health Policy of 2017 aims to inform, strengthen and prioritize the government's role in shaping health systems by investing in health, organizing health services offered to the population, preventing disease, promoting good health and developing and

improving financial protection strategies nationwide (National Health Policy, 2017). The goal of the policy is to attain the highest level of health and wellbeing for all members of Indian society through implementing future policies based on preventative and promotive health care and universal access to health care, provided free of charge (National Health Policy, 2017). This will be accomplished by increasing access, quality, and decreasing cost of healthcare services (National Health Policy, 2017). The objectives of the policy include gradually achieving universal health coverage by assuring availability of free primary health care services for reproductive health, and access to affordable secondary and tertiary health services through a combination of public and private hospitals (National Health Policy, 2017). Additionally, the policy wishes to reinstate trust in the public health care system by making it efficient, patient centric, and have a comprehensive package of services to meet the health care needs of the population (National Health Policy, 2017).

Family Planning Policy (2019)

The Family Planning policy of 2019 was created by the Ministry of Health and Family Welfare to ensure complete knowledge and access to reproductive health services and reproductive choice (Family Planning, 2019). The policy aims to reduce the unmet need for contraceptives and increase use of modern contraceptive methods to enable men and women to make responsible choice and achieve their desire family size (Family Planning, 2019). The objectives are in line with the goals of the National Health Policy of 2002 and India's commitment to the International Conference on Population (ICPD) and Development and Sustainable Development Goals (SGDs) (Family Planning, 2019). The spacing contraceptive methods which are reversible and can be discontinued at the individual's desire include: oral contraceptive pills, condoms, IUCD, and contraceptive injectables (Family Planning, 2019). Permanent irreversible contraceptive methods offered include male and female sterilization (Family Planning, 2019). Additionally, the

emergency contraceptive pill is offered (Family Planning, 2019). A program facilitated by the policy includes the home delivery of contraceptives by ASHAs to the doorstep of eligible couples (Family Planning, 2019).

North Indian States and Union Territories Background Information

This thesis focuses specifically on the geographic area of North India where large slum populations, high rates of poverty, and significant levels of gender discrimination severely affect women's access to SRH services. North India is composed of six states and two union territories, Himachal Pradesh, Punjab, Uttarakhand, Haryana, Rajasthan, Uttar Pradesh and Chandigarh, and Delhi, respectively. High rates of poverty in the slums of Jaipur, Rajasthan, have led to ill-health, which subsequently leads to further poverty (Awasthi & Chaudhary, 2021). In the absence of an adequately funded public health system or coverage for health insurance, many slum dwellers are unable to pay out of pocket healthcare expenses due to impoverishment (Awasthi & Chaudhary, 2021). Similarly, in Dehradun, Uttarakhand, slum dwellers are unable to access SRH services due to low-income levels, and an insufficient number of hospitals for a large population size (Gupta et al., 2015). Slum dwellers in Jaipur, Rajasthan, Ludhiana, Punjab, and Mathura, UP also had limited access to government hospitals (Gupta & Guin, 2015). The state of UP has the largest population in India, with slum-dwellers having high fertility rates and high unmet need for FP methods (Yadav et al., 2020). Slum women in UP also demonstrated having poor knowledge of FP methods in a study by Yadav et al (2020). When young women in particular attempted to access FP methods, healthcare providers imposed barriers to FP, resulting in an unmet need (Yadav et al., 2020).

Delhi has some of the largest number of slums with a total of around 757 (Centre for Policy Research New Delhi, 2017). There is rampant gender discrimination in slums and women are prone to high levels of sexual violence. For example, women share public sanitation facilities with

other slum members (Centre for Policy Research New Delhi, 2017). Often sanitation areas are located in precarious spaces, where personal hygiene and sanitation activities may cause exposure to gender-based violence and harassment by male slum-dwellers (Centre for Policy Research New Delhi, 2017). Women therefore take a calculated risk each time they undergo basic hygiene and sanitation activities (Centre for Policy Research New Delhi, 2017). UP also has some of the most pronounced gender disparities in education and employment (Hebert et al., 2020). The majority of slum men have working paid jobs, whereas women are unemployed due to being homemakers and family caretakers (Hebert et al., 2020). Sexual harassment is prolific in public areas of UP slums, which hinders women's mobility and can lead to confinement and being cut-off from education (Hebert et al., 2020).

State of Himachal Pradesh

Himachal Pradesh is a hilly mountainous state in the Himalayas and contains many natural resources (Government of India Development Report, n.d). The state has a total population of 6, 864, 602 according to the 2011 census and contains 12 districts (Himachal Pradesh Official Website, n.d). Around 14% of households are located in urban areas (NFHS-5 Himachal Pradesh, 2021). Together the cities of Shimla, Solan and Kangra make up half of the urban population in the State (Government of India Development Report, n.d).



Figure 1. Map of India with the state of Himachal Pradesh highlighted in red (Menhard, 2019d).

State of Punjab

Punjab is located in the northwest of India and contains a blended geography with the vast majority of the region containing highly fertile land (Gateway to Sikhism, 2022). The south-east region contains semi-arid desert land and hills are located in the north-eastern region (Gateway to Sikhism, 2022). Five prominent rivers run through the state: the Satluj, the Beas, the Ravi, the Chanab and the Jhelam (Gateway to Sikhism, 2022). Farming is the main occupation and wheat, maize, rice, legumes and cotton are grown in abundance (Gateway to Sikhism, 2022). Punjab has a total of 22 districts with a population of 27, 743, 338, and the official language of the state is Punjabi (Countries and their Cultures, n.d; Gateway to Sikhism, 2022). Around 37.49% of the population resides in urban areas, of which the cities of Amritsar and Ludhiana house the vast majority of urban inhabitants, where a significant number of urban slums are located (Singh et al., 2021). Among currently married women ages 15-49, the contraceptive prevalence rate is 67% and the use of modern FP method is 51% (NFHS-5 Punjab, 2021).



Figure 2. Map of India with the state of Punjab highlighted in red (Menhard, 2019e).

State of Uttarakhand

Uttarakhand is a hilly state located in the foothills of the Himalayan mountains, full of natural resources such as glaciers, fresh water, forests, and mineral deposits (Uttarakhand Government Portal, n.d). Two major Indian rivers flow through the state, the Yamuna and Ganga rivers (Embibe Uttarakhand, 2020). It is predominantly an agricultural state in addition to eco-tourism (Embibe Uttarakhand, 2020; (Uttarakhand Government Portal, n.d). Uttarakhand has 13 districts with a population of 10, 086, 292 and the main language spoken in the region is Hindi (Embibe Uttarakhand, 2020; (Uttarakhand Government Portal, n.d). The use of modern FP methods is around 58% in married women between the ages of 15-49 (NFHS-5 Uttarakhand, 2021). A significant number of slums are located in the capital city of Dehradun with poor water, sewer and lavatory facilities (Gupta et al., 2015). There is poor access to education in the slums, where the few government schools have very poor infrastructure, thus, resulting in literacy rates in Dehradun slums to be 35.26% (Gupta et al., 2015). Around 20% of girls in slums do not attend school and look after the household work with their mothers (Gupta et al., 2015).



Figure 3. Map of India with the state of Uttarakhand highlighted in red (Menhard, 2019g).

State of Haryana

Haryana is a tropical climate with mainly plains as the geographic terrain (Haryanaonline.in, n.d). It is primarily an agricultural state, but the economy is also driven by the software industry, and a significant automobile industry, along with manufacturing plants (Haryanaonline.in, n.d). The state is composed of 21 districts with a population of 27, 388, 008 in 2021/2022 according to the Aadhar Statistics (IndiaGrowing.com, n.d; Minakshi, 2015). The main languages spoken include Hindi, Haryanvi, Bagri and Mewati (Drishti, n.d). Based on the 2011 census the female literacy rate in the state is 65.94% and the use of modern FP method among married women ages 15-49 is 61% (Drishti, n.d; NFHS-5 Haryana, 2021). According to the 2011 census, 34.79% of the population lives in urban areas, and out of the 154 towns, 75 of them contain slums (Minakshi, 2015). The cities of Faridabad, Hisar and Gurgaon contain the largest slum number of populations in the state (Minakshi, 2015).



Figure 4. Map of India with the state of Haryana highlighted in red (Menhard, 2019c).

State of Rajasthan

Rajasthan contains fertile plains in the eastern region and the western region is covered in sand dunes with dry infertile land housing the Thar Desert (Eye on Asia, n.d; Rajaras, n.d). A large portion of the economy deals in minerals, textiles, and agriculture in addition to industries such as mining, manufacturing, water supply, gas, and electricity (Embibe Rajasthan, 2021; Eye on Asia, n.d). The state is divided into 33 districts with a population of 68, 548, 437 according to the 2011 census (Eye on Asia, n.d; Rajaras, n.d). The main languages spoken in the state include Rajasthani, Hindi, Bhili, Punjabi, and Urdu (Embibe Rajasthan, 2021). Around 62% of married women ages 15-49 use modern FP methods (NFHS-5 Rajasthan, 2021). The capital city of Jaipur houses around 20 urban slums (Awasthi & Chaudhary, 2021).



Figure 5. Map of India with the state of Rajasthan highlighted in red (Menhard, 2019f).

State of Uttar Pradesh

The Northern region of UP contains the Himalayan foothills, the central region has fertile soil and flat topography, and the southern region contains small hills (UPonline.in, n.d). The state is rich with natural resources and agriculture is a significant component of its economy where wheat, rice and sugarcane are harvested (ENVIS Centre: Uttar Pradesh, 2017; UPonline.in, n.d). Of the married women between the ages of 15-49, 62% of them use modern FP methods (NFHS-5 Uttar Pradesh, 2021). The state is divided into 75 districts and the capital city is Lucknow (Maps of India, n.d). UP is one of the most populated states in the country, and according to the 2011 census, the population was 199, 581, 477 (ENVIS Centre: Uttar Pradesh, 2017). Around 44, 500, 000 people lived in urban areas in 2011 (Town and Country Planning Department U.P, n.d). There are 293 towns reported as slum towns and the UP government has recognized 4,678,326 slums to exist in the state (Times of India, 2013).



Figure 6. Map of India with the state of Uttar Pradesh highlighted in red (Menhard, 2019h).

Union Territory of Delhi

Delhi is a city and Union Territory containing the capital New Delhi (UNCCD COP14, n.d). Geographically it contains the Yamuna River, Aravalli range in the southern region, and the Thar Desert in the west and plains in the middle (Profile of Delhi, n.d). Trade and commerce are the two main economic sources of the city (Profile of Delhi, n.d). Major sectors include, retail, tourism, foreign and domestic organizations, and the IT industry (Confederation of Indian Industry, n.d). The main languages spoken in the city include: Hindi, English, Urdu, and Punjabi (Delhi Helpline, 2011). The use of modern FP methods among married women ages 15-49 is 58% (NFHS-5 Delhi, 2021). Between 1941-1951 Delhi had an explosive 90% population growth due to the rapid pace of urbanization, and currently 75% of Delhi is urbanized (Delhi Human Development report, 2013; Profile of Delhi, n.d). Based on the 2011 census the population of Delhi is 16.75 million but has been projected to be much larger since then (Delhi Human Development Report, 2013). In 2009 there were 4390 slums in the city and currently more than 45% of Delhi's

population resides in slums, unauthorized colonies or unplanned settlements (Delhi Helpline, 2011).



Figure 7. Map of India with the state of Delhi highlighted in red (Menhard, 2019b).

Union Territory of Chandigarh

Chandigarh is located in the foothills of the Shivalik Range of the Himalayas and the Union Territory is surrounded by forests (Embibe, 2021). The economy is driven by services and manufacturing industries such as: basic metals, auto parts, machine tools, pharmaceuticals (Embibe, 2021). The fertile soil produces crops, and the vast majority of the population work in government offices (Census 2011, n.da). The official language of the city is English, but Hindi and Punjabi are also spoken frequently (Embibe, 2021). The city has a population of 1, 026, 459 according to the 2011 census and is divided into 5 towns and 25 villages (Census 2011, n.da). One-third of the population resides in slums and there are 17 main slums with a population of 317, 053 (Indian Journal of Community Medicine, 2007).



Figure 8. Map of India with the state of Chandigarh highlighted in red (Menhard, 2019a).

Scope of the Problem

Gaps in the Literature

A significant amount of research has previously been undertaken to improve women's sexual and reproductive health in Northern India by investigating the individual barriers to SRH services faced by women living in slums. However, women continue to have limited access. Previous studies have investigated the knowledge and attitude of women living in slums towards acceptance of FP methods, and the utilization of FP methods by couples in UP slums (Kumar et al., 2005; Neyaz et al., 2015). Other studies have researched the unmet need for FP methods among married slum women and the factors contributing to the unmet need (Pal et al., 2014; Yadav et al., 2020). Likewise, there has been research examining women's acceptance of FP methods during the post-partum period to promote spacing out future births (Achyut et al., 2016a; Gupta et al., 2018). Several authors have investigated causes of reproductive morbidities in the slums of Delhi and UP and the treatment seeking behaviour of women (Bhatnagar et al., 2012; Bhilwar, 2015; Garg et al., 2001).

However, missing from the literature is a comprehensive investigation that consolidates and conceptualizes the myriad of barriers that are faced by women in slum populations in Northern India when accessing SRH services. The Conceptual Framework for Reproductive Empowerment will be used to conceptualize the barriers found according to the concept of women's reproductive empowerment. To our knowledge, the concept of women's reproductive empowerment has not been discussed in the context of barriers to SRH services in the slums of Northern India. Additionally, previous scoping reviews have not focused on North India as a whole, but instead have investigated each state separately and focused on the individual barriers. These gaps are significant as there has been limited research conducted on the multiple barriers to reproductive empowerment as a whole in slums, which is essential to providing proper sexual and reproductive care to women. It is important to understand the key barriers involved in access to SRH services in slums overall in North India. One approach to address the gaps in the literature is to consolidate and conceptualize the barriers by mapping them out according to the CFFRE. The framework provides an opportunity to consider how reproductive empowerment might be hindered at three different levels of women's experience with accessing SRH services including the individual level, in immediate relationships, and by members of the community and society at large. Barriers to accessing SRH services can be consolidated to each level of the framework, providing clarity around the associated individuals and factors that need to be involved to overcome those barriers.

Conceptual Framework

Conceptual Framework for Reproductive Empowerment

To comprehend how barriers to SRH services impact women from slum populations, it is important to understand how barriers impact their reproductive empowerment. Understanding reproductive empowerment is critical to creating relationships both intimate and not, that have an

equal power balance between individuals, and women are able to assert their sexual and reproductive needs (Vizheh et al., 2021). This can be done by applying the conceptual framework for reproductive empowerment (CFFRE). The framework is a socio-ecological model that was developed by the International Center for Research on Women (IWRC) (CFFRE., 2018). The goal of the framework is to provide clarity on what reproductive empowerment means and how to measure it. Reproductive empowerment is defined as “a transformative process and an outcome, whereby individuals expand their capacity to make informed decisions about their reproductive lives, amplify their ability to participate meaningfully in public and private discussions related to sexuality, reproductive health and fertility, and act on their preferences to achieve desired reproductive outcomes, free from violence, retribution or fear” (CFFRE., 2018). Reproductive empowerment is a function of agency, divided into three areas, voice, choice, and power (CFFRE., 2018). At the center, agency is performed through the individual, immediate relational and distant relational, which are nested within one another, and are expressed through decision making about SRH, leadership in SRH and collective action around SRH (CFFRE., 2018).

Agency

Agency is the capacity of individuals to take deliberate action to achieve their reproductive desires and is at the core of the framework (CFFRE., 2018). There are three interrelated processes of agency: voice, choice, and power (CFFRE., 2018). Voice is the ability for individuals to advocate for their own reproductive interests and articulate their opinions and be a part of discussions related to their reproductive wellbeing (CFFRE., 2018). Choice allows individuals to make and influence decisions about their reproductive lives and includes having access to a range of reproductive options, being informed, and having the freedom to make decisions free from social and economic costs (CFFRE., 2018). Power enables individuals to be influenced or

influence others through social, economic, or emotional influence or by physical force (CFFRE., 2018). Power can be visible in social interactions or invisible by acting through internalized power structures like class and gender (CFFRE., 2018). At each level of agency, individuals will draw on resources in their interactions with actors and relationships. Resources can be financial assets, proper knowledge of contraceptive methods, or awareness of social structures impacting reproductive empowerment (CFFRE., 2018).

Individual Level Agency

Individual level agency is the ability of individuals to define their reproductive desires and goals. Individuals use their voice to ensure they have meaningful engagement in the decision making of their goals (CFFRE., 2018). Resources that are important in individual reproductive agency include: sexual and reproductive health knowledge, having access to different methods of contraception, understanding where and how to access SRH services (CFFRE., 2018). Individuals should have self-efficacy regarding their reproductive health such as: having an education, having the ability to negotiate on their own behalf, and self-esteem (CFFRE., 2018).

Immediate Relational Agency

Immediate relational agency is the ability of individuals to use their voice and choice when interacting with actors in their immediate environment such as family members, martial partners, and peers (CFFRE., 2018). Resources that are essential to individuals are comprehensive sexual and reproductive information, education, and self-efficacy (CFFRE., 2018). Resources within the martial partnership include trust, types of communication, and whether violence or reproductive coercion is present within the relationship (CFFRE., 2018). Parents and in-laws also play a role in facilitating or inhibiting the agency of individuals about their reproductive decisions (CFFRE., 2018).

Distant Relational Agency

Distant relational agency is the ability of individuals to exert their voice, choice, and power in their interactions with actors outside of their immediate relationships such as: healthcare providers, religious leaders, the political system, or health system (CFFRE., 2018). At this level of agency, political and legal frameworks play an essential role in defining access to reproductive rights, by providing or limiting services based on age, sex, or marital status (CFFRE., 2018). Individuals can be disempowered if there is a lack of choice in the types of reproductive services offered, as they cannot exert their choice and voice in decision making (CFFRE., 2018). Elements such as caste, social class, and patriarchy are internalized by individuals and can influence their reproduction by bearing children to prove fertility, norms of favoring certain sex compositions of children, or interacting with biased healthcare providers (CFFRE., 2018).

Three key areas of expressing reproductive agency

SRH decision-making is when individuals are able to use their voice, choice, and power to engage in reproductive decisions both in the public and private sphere (CFFRE., 2018). Decisions are made about themselves and others in their relationship, with the vast majority of decisions taking place either autonomously or at the immediate relational level (CFFRE., 2018). Leadership in SRH allows individuals to play a role in shaping processes and structures related to their reproductive well-being, and challenge power to expand their choice (CFFRE., 2018). Finally, SRH collective action enables groups to come together and work towards improving their status, increasing their voice, and power, which cannot be done through taking individual action alone (CFFRE., 2018).

Empowerment and the Lifecourse

Reproductive empowerment fluctuates throughout an individual's life, as they pass through the various life stages. Over the course of time, power and voice are negotiated and renegotiated throughout the three levels of agency and choice will vary to reflect more or less empowerment (CCFRE., 2018). Factors that occur throughout life such as age and childbearing, can influence how family members, peers, and society interact with the individual, therefore, changing individual's reproductive empowerment (CCFRE., 2018).

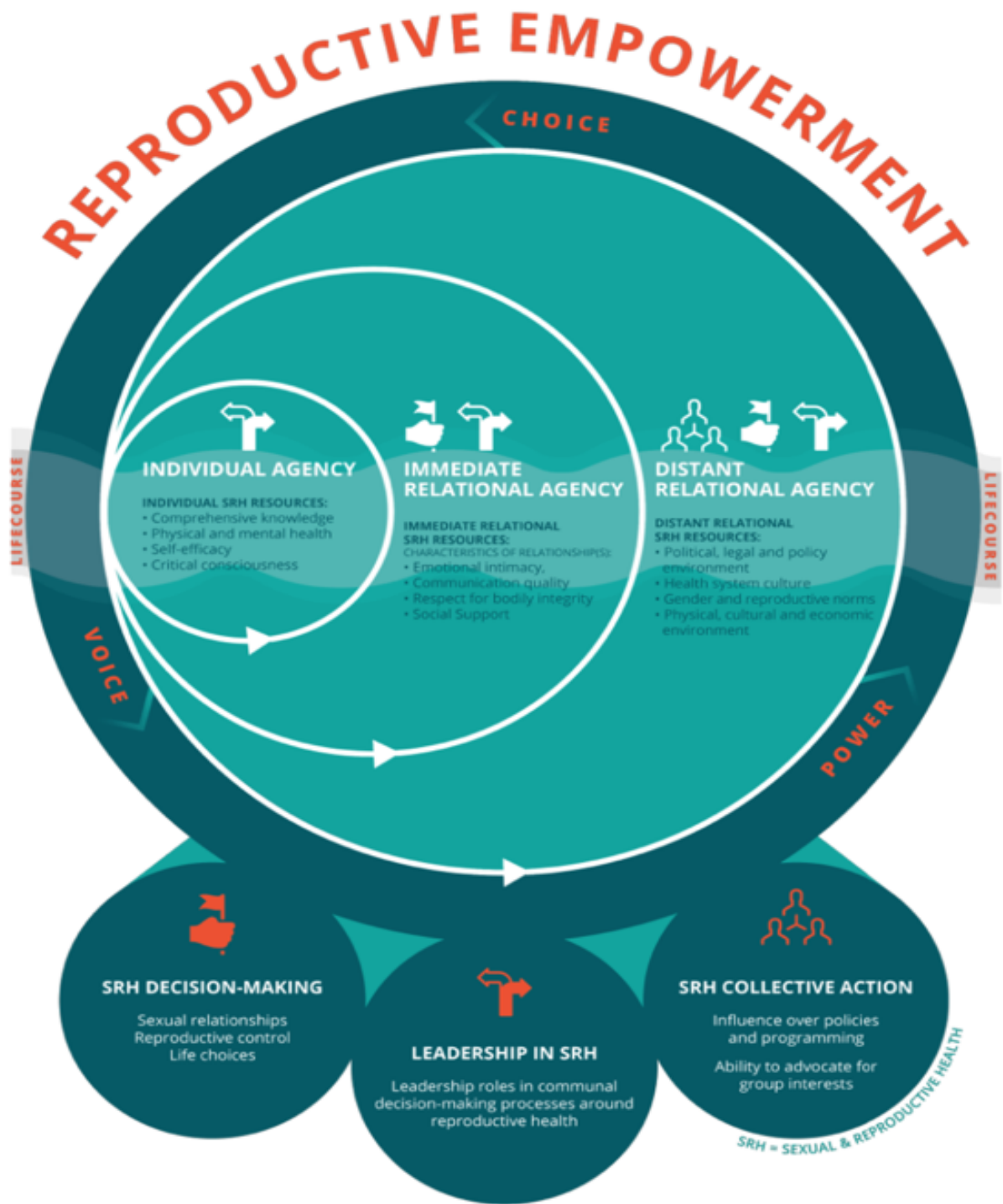


Figure 9. Conceptual Framework of Reproductive Empowerment

Chapter II: Methods

Scoping Review Strategy

A scoping review methodology was used for this study. The aim of a scoping review is to map out the key concepts of a large body of literature in a rigorous and transparent manner (Arksey & O'Malley, 2005; Pham et al., 2014). Importantly, a scoping review can accommodate a body of research that might be complex and heterogeneous (Temple University Libraries, 2022; University of Manitoba Libraries, 2017) and can include quantitative, qualitative, or mixed method studies, which allows the review to include as much information as possible (University of Manitoba Libraries, 2017). Furthermore, a scoping review is useful for identifying areas that require further investigation (Tricco et al., 2016).

The purpose of this study is to examine the range of barriers faced by women living in North Indian slums when accessing SRH services in six different states and two union territories in Northern India. The study designs and research outcomes of the body of research on this topic are expected to vary significantly, therefore, a scoping review was chosen as the best fit with the purpose of this research study and the body of research on the study topic.

The scoping review followed the five stages outlined in the framework by Arksey and O'Malley including: (1) identifying the research question, (2) identifying relevant studies, (3) study selection, (4) charting the data, (5) collating, summarizing, and reporting the results (Arksey & O'Malley, 2005).

Step One: Identify the Research Questions

The research question is the first component of a scoping review and requires identifying a question that is broad enough to encompass the wide range of published literature on the research topic while also specifying the purpose of the scoping review, the study population, and study

outcomes (Levac et al., 2010; Arksey & O'Malley, 2005). The purpose of this study is to examine the barriers to accessing sexual and reproductive health services (study outcome) faced by women living in slum populations in Northern India (study population). The research question is:

1. What are the barriers to accessing sexual and reproductive health services faced by women living in slum populations in Northern India?

Step Two: Identify the Relevant Studies

Search Strategy and Search Terms

The second stage involves creating an effective search strategy through the usage of keywords and key concepts that pertain to the review (Arksey & O'Malley, 2005). Based on the research question, four key concepts were delineated 1) women, 2) slum population 3) Northern India and 4) sexual and reproductive health services. Key words for each of these concepts were defined as outlined in Table 4.

The search strategy was piloted using one database (Medline) to conduct the keyword search. Due to the broad nature of the topic area, the database resulted in over 40, 000 articles of which the vast majority were irrelevant articles. The search strategy was then further refined twice by excluding certain MeSH terms to yield fewer and more focused terms, which provided the relevant articles.

Table 4. Keywords used in electronic database search

<u>Population</u>	women	OR terms for women “Wom?n” OR “girl*” OR “female” OR “mother” OR “daughter” OR “wife” OR “housewives” OR “housewife” OR “schoolgirl” OR “schoolgirls”
	AND	
<u>Geography</u>	Slum populations in Northern India	OR terms for slum population “slums” OR “informal settlements” OR “urban slum” OR “slum dwellers”
		OR terms Northern India “North* India” OR “Himachal Pradesh” OR “Shimla” OR “Punjab” OR “Punjabi” OR “UT Chandigarh” OR “Chandigarh” OR “Uttarakhand” OR “Dehradun” OR “Haryana” OR “Delhi” OR “New Delhi” OR “Rajasthan” OR “Rajasthani” OR “Jaipur” OR “Uttar Pradesh” OR “Lucknow”
	AND	
<u>Outcome</u>	Sexual and reproductive health	OR terms sexual health services “Abortion” OR “induced abortion” OR “pregnancy termination” OR “contracepti*” OR “contraceptives” OR “contraception” OR “contraception usage” OR “birth control” OR “sexual health” OR “sexual rights” OR “sexual health education” OR “reproducti*” OR “reproductive health” OR “health services” OR “reproductive health services” OR “reproductive rights” OR “SRHR” OR “SRH” OR “pregnancy” OR “family planning” OR “obstetric*” OR “gynecology” OR “gynaecology” OR “women’s health” OR “women’s health services” OR “female health”

Electronic Database Search

Five online databases were utilized to find relevant articles for the scoping review: MEDLINE, Global Health, Ovid Emcare, Embase, and Web of Science. Primarily, health science and biomedical databases were used as these fields relate closely to the research topic. MEDLINE

was used for its literature concentration in life science and biomedicine (National Library of Medicine, 2021). Global Health covers literature related to international public health along with biomedical and life science (EBSCO, 2022). Ovid Emcare is a nursing database containing information related to obstetrics and gynecology, family practice, medicine and nursing and healthcare information and management (Wolters Kluwer, 2022). Embase is dedicated to articles involving biomedical research (Elsevier, 2022). Finally, Web of Science is a multidisciplinary database including science, social science and arts and humanities (University of Toronto Libraries, 2021). These five databases cover the geographical context of Northern India and provide a broad scope of articles that are inclusive of the six states and two union territories.

Step Three: Study Selection and Eligibility Criteria:

Inclusion and exclusion criteria

After conducting a broad search of the literature to gain familiarity with the key concepts, an inclusion and exclusion criteria was constructed to allow consistency in the decision-making process when eliminating irrelevant studies (Arksey & O'Malley, 2005). Table 5 demonstrates the details of the inclusion and exclusion criteria.

Table 5. Inclusion/ exclusion criteria applied to the article review

Research Question		What are the barriers facing women living in slum populations in Northern India when accessing sexual health services?
Inclusion Criteria	Language	English language studies
	Article Type	Published research (peer-reviewed) investigating barriers and facilitators to accessing sexual and reproductive health care for women - Include all study designs: mixed methods, quantitative and qualitative studies
	Population	Include studies with sex workers, girls, adolescence, mothers living in slum settings across Northern India
	Restriction on Gender	Include all studies where participants identify as a woman
	Location	Studies to be included only focus on slums in North India composed of states and union territories: - <u>States</u> : Himachal Pradesh, Punjab, Uttarakhand, Haryana, Rajasthan, Uttar Pradesh - <u>Union Territories</u> : Chandigarh, Delhi
	Study Outcomes	Study results or discussion that reports on ability to access to care in slum settings
Exclusion Criteria		- Studies not located in North Indian slums - Studies focusing on reproductive health of men or LGBTQ+ - Studies focusing on rural populations - Studies focusing on clinical trials related to sexual and reproductive health (ex: drug -testing) - Studies relating to maternal health, antenatal health, perinatal health

Screening protocol and Citation Management

Two reviewers applied the inclusion and exclusion criteria to all published materials during the screening process of title screening stage and the full text screening stage (Arksey & O'Malley, 2005). In the title screening stage, the two reviewers independently examined the abstracts of the study if the title did or did not provide a sufficient amount of information to apply the inclusion/exclusion criteria. At the end of this stage, there were a total of 73 conflicts, which the two reviewers discussed together by re-applying the inclusion/exclusion criteria and MeSH terms. A total of 59 articles moved onto the full-text screening stage. Full copies of the articles were

acquired for all except three articles which were excluded from the study. The two reviewers separately read through the 56 full articles to determine if they would be included in the review (Arksey & O'Malley, 2005). The final step involved the two reviewers collectively discussing the 31 conflicts in the full text screening stage, where the inclusion/exclusion criteria was applied for a final time. A total of 28 studies were included in the scoping review.

Step Four: Charting the Data

Data Extraction

The data charting staged involved “charting” key information extracted from the articles to be included in the scoping review (Arksey & O'Malley, 2005). “Charting” requires synthesizing and interpreting qualitative data by categorizing material according to key issues and themes based on the research question (Ritchie & Spencer, 1994 as cited in Arksey & O'Malley, 2005).

Table 6. List of the key information that was charted from the data

Key information charted from the data
1) Author(s)
2) Year of publication
3) Country of origin
4) State/ Union Territory
5) Study located in slum
6) Study definition of slum
7) Population (women, age range, adults, elderly, sample size)
8) Age Range
9) Sample Size
10) Aims of the study
11) Methodology (quantitative, qualitative, mixed methods)
12) Barriers faced by women in study
13) Reproductive services accessed by women in study
14) Services offered

Step Five: Collating, Summarizing and Reporting Results

This step is the final stage of the scoping review process, which involves charting the data into an excel spreadsheet. This was divided into three distinct steps as suggested by Levac et al., (2010) to improve consistency. This involved analyzing the results, reporting the results, and applying meaning to the results (Levac et al., 2010).

Appendix A. provides a full overview of the studies selected in this scoping review. The appendix provides details on list of author(s), year of publication, country of origin, state/union territory, if the study was located in a slum, study definition of slum (if any), population, age range (if any), sample size (if any), aims of the study, methodology used (if indicated), barriers to SRH services faced by women in the study (if any), and reproductive services accessed by women in the study (if any), services offered in the study (if applicable)

Analyzing the Results

The results were analyzed using the Conceptual Framework of Reproductive Empowerment. An interpretive thematic analysis was used to extract meaningful themes from the data in relation to the conceptual framework. Themes related to Individual Level Agency, Intermediate Relational Agency, and Distant Relational Agency were identified and associated with the research question.

Reporting the Results

The primary researcher of the study reported the results that relate to the research question. Measures were taken to ensure bias, and any confounding variables were limited. This involved re-reading through the studies to ensure the precise information was recorded in the data extraction. In addition, a consistent approach was applied to data extraction of each article.

Applying Meaning to the Results

The final step involves findings from the research being used to implement change on the ground in slum settings throughout North India. Findings from this research can be put into practice and inform policy change in the region. The discussion and recommendations in this thesis contribute to the ongoing initiatives to eradicate barriers for women accessing SRH services.

Chapter III: Results

Description of the Literature

Five electronic databases of published material yielded a total of 2412 citations which were exported into Mendeley which automatically removed 9 duplicates. The citations were then imported into a web-based systematic review software called Covidence, where 357 duplicates were removed by the program, leaving a total of 2046 articles. After the removal of duplicates, each database provided, 1) Global Health (428 articles), 2) Embase (1207 articles), Ovid Emcare (11 articles), Medline (377 articles), and 5) Web of Science (22 articles). The scoping review process is outlined in the PRISMA flow diagram (Figure 10). The diagram demonstrates each step of the scoping review in chronological order. The number of studies in each section is displayed in the diagram.

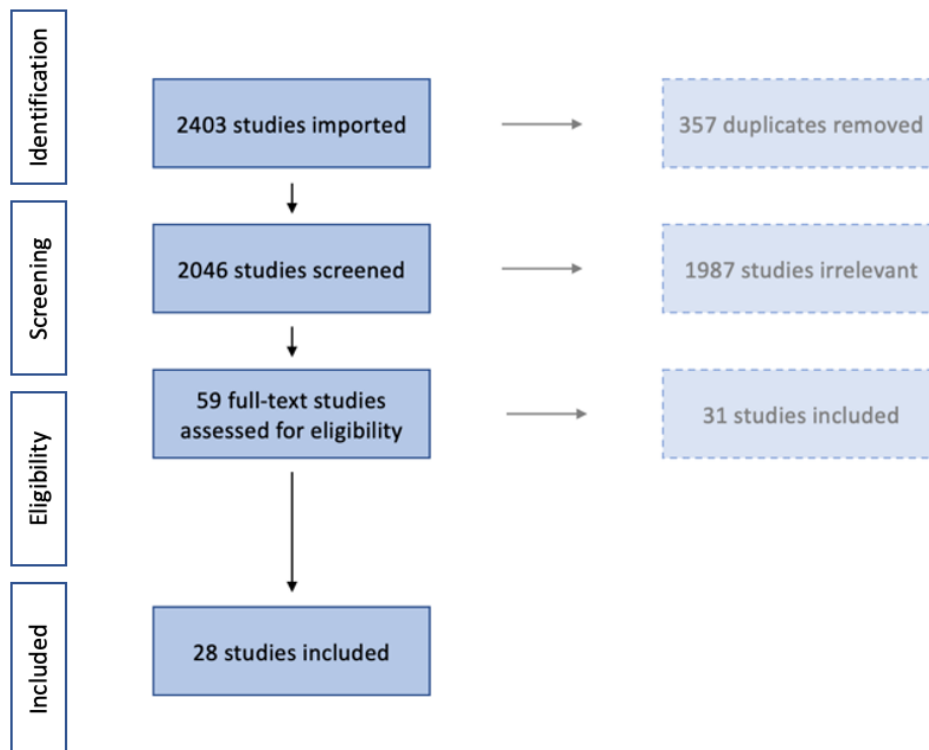


Figure 10. PRISMA Flow Diagram

The inclusion and exclusion criteria were applied throughout the different stages of the screening procedure. Title screening yielded a total of 205 articles for abstract screening. After completion of abstract screening 59 articles moved onto full text review. A final count of 28 articles were relevant to this study and were used in the data extraction phase.

Nature of the Literature

A significant number of articles that were excluded related to India in general but did not specifically pertain to SRH. Some of the recurrent topics throughout the screening process that were excluded were: HIV, breast cancer, anemia, respiratory illness, obesity, maternal health, child health, nutrition, vaccines, HPV, tuberculosis, typhoid, substance abuse, tobacco use, diabetes, mental health, oral health, breast-feeding, hypertension, intimate partner violence. Many articles that were screened out were located outside of the research context in Western and Southern India. Other articles contained keywords related to slums in the title but upon further analysis of the abstract or full text, the study was not conducted in a slum or within an urban poor population. In the full text screening phase, three articles were excluded because the full text documents could not be located (Singh et al, 2003; Tripathi, 2020; Yadav, 2015), and three articles were duplicates (Yadav, 2020; Hazarika, 2010, Rizvi et al., 2015).

There were 8 (28%) studies that investigated contraceptive use, 7 (25%) which investigated family planning, and 3 (10%) studies looked at the use of modern contraceptive methods. Additionally, 2 (7%) studies examined abortion practices and 2 (7%) studies examined reproductive morbidity. Finally, the topics of son preference, reproductive tract infections, family planning and unmet need for family planning, women's decision making for reproductive health, and male participation in women's reproductive health each had one study (3%) in the scoping review.

Temporality of the Articles

Appendix B. provides a full overview of the studies selected in this scoping review, divided chronologically by year published. The appendix provides details on list of author(s), year of publication, barriers to SRH services faced by women in the study (if any), and reproductive services accessed by women in the study (if any), services offered in the study (if applicable).

A total of 2 (7%) of articles were from 2001, 1 (3%) of articles were from 2004, 2005, 2009 and 2010. 3 (10%) of articles were from 2012, 2 (7%) from 2013, 4 (14%) from 2014, 5 (17%) from 2015, 2 (7%) from 2016), 1 (3%) from 2017, 2018, and 2019. 2 (7%) articles were from 2020. and 1 (3%) article was from 2021). Divided by decade, a total 5 (17%) articles were from the 2000's, 20 (71%) articles were from the 2010's, and 3 (10%) articles were from the 2020's.

Lack of women's SRH knowledge was a barrier in early 2004 and was seen again in the review 10 years later in 2014, and again in 2015, 2017, and 2019. Similarly, husbands were seen as a barrier to accessing SRH services for women in 2001 and appeared as a barrier again in articles in 2013, 2014, 2015, 2017, and 2020. Taboo of women seeking out treatment for gynecological morbidities and FP methods and contraception was first recognized in the review in 2001, and continued to persist in 2012, 2015, 2017, and 2020. Similarly, son preference as a barrier to women accessing SRH services was noted in 2001 and 2004 and has continued a decade later into 2014. The poor public healthcare facilities, inadequate health care workers, and lack of variety in contraceptive methods, were barriers in this review starting in 2010, 2012, 2014, and 2015. Mothers-in-law as barriers to FP and contraceptive methods was seen in 2014 and 2015. Additionally, religious beliefs as barrier to FP and contraceptive methods was seen in 2012, and again in 2021. Women's lack of financial resources was seen as a barrier in 2015, and

unemployment was seen as a barrier in 2017 and 2020, this was not a factor in the early 2000's. Finally, lack of women's education as barrier was noted starting in 2010, 2012, 2014, 2016, 2017, 2020, and 2021.

Methodologies of the Articles

Appendix C. provides a full overview of the studies selected in this scoping review, divided by three types of methodologies: quantitative, qualitative, or mixed methods. The appendix provides details on list of author(s), methodology, barriers to SRH services faced by women in the study (if any), and reproductive services accessed by women in the study (if any), services offered in the study (if applicable).

The articles included in the scoping review had three types of study design: mixed methods, quantitative and qualitative. There were 8 (28%) mixed method studies, 3 (10%) were a cross sectional study with semi-structured questionnaires, 2 (7%) were a descriptive cross-sectional study with interviews, 1 (3%) was a cross sectional study with a semi-structured questionnaire and biological sample collection, 1 (3%) was a questionnaire and interview, and 1 (3%) was an interview and survey. A total of 10 (39%) studies were quantitative in nature of which, 3 (14%) were a cross sectional study, 4 (14%) were a cross sectional study and questionnaire, 1 (3%) which was a longitudinal data collection survey, and 1 (3%) which was a randomized control non-inferiority trial. A total of 9 (32%) studies were qualitative in nature of which, 5 (14%) were interviews, 1 (3%) which was interviews and case studies, 1 (3%) which was interviews and longitudinal design, 1 (3%) which was a semi-structured questionnaire, 1 (3%) which was a focus group. Finally, 1 (3%) methodology was not reported in the study.

In cross-sectional studies, the results reported found, religious beliefs were a barrier to using FP methods, couples had a lack of SRH knowledge for FP methods and there as a high unmet

need for FP methods for women with fewer sons. In cross-sectional studies with questionnaires, two studies found embarrassment and shyness as reasons for unmet need and non-use of FP methods, and one study found unemployed women were non-users of contraceptives. Another study found son preference, and opposition by husbands and mothers-in-law were found to be barriers to women accessing FP methods. In addition, one study found inadequate public health facilities and healthcare providers in these facilities to be barriers to women accessing SRH services. A cross-sectional study with an interview survey found a high unmet need for FP among women whose husbands discouraged use.

In studies that conducted interviews, two studies found women were pressured to have sons by their husband, two studies found women's lack of education as a barrier to using FP methods, and one study found lack of treatment seeking for reproductive health issues. One study found lack of variability in the contraceptive methods available as a result for unmet need. A study conducting focus groups found women could pay little to no money to access vaginal ring contraceptives. In a study with semi-structured questionnaires, husbands were a barrier to FP use. Lastly, in a study with interviews and case studies found women were pressured to have sons, threatened with physical violence by their husband for using contraceptives, and found public health facilities to be inadequate and without the consistent presence of healthcare providers.

In cross-sectional studies with semi-structured questionnaires, husbands and mothers-in-law were barriers to accessing contraceptives. Two other studies found there was an underutilization of FP services from public health facilities and women lacked the SRH knowledge of when emergency contraceptive pills should be utilized. In a cross-sectional study with semi-structured interviews and biological sample collection the study found only few women with reproductive morbidities and or RTIs to seek out and comply with treatment. Similarly, in two

descriptive cross-sectional studies with interviews, women with gynecological problems chose to seek treatment due to embarrassment and lack of SRH knowledge along with husbands' negative attitude towards contraceptives were barriers to use in the second study. A study conducting a questionnaire and interview stated common reasons for the discontinuation of modern contraceptives to be due to wanting a more effective method. Finally, in a study with interviews and a survey, women found they were provided with a lack of information on postpartum family planning by healthcare providers at public clinics.

Geographic Distribution

The geographic location of the studies included in the review is Northern India. Of the articles included in the scoping review the largest percentage of articles were from the state of UP 18 (64%). Of the slums investigated in UP, 4 (14%) articles were based in the city of Aligarh, 3 (10%) articles explored Agra, Allahabad, and Gorakhpur, and 2 (7%) articles looked at slums in Moradabad and Varanasi. The Union Territory of Delhi contained the second highest percentage of studies 7 (25%), followed by Rajasthan which contained 2 (7%) studies. The remaining states: Himachal Pradesh, Punjab, Uttarakhand, Haryana, and UT Chandigarh were each a region of interest in one study (3%). Finally, one study (3%) drew data from the NFHS-3 which looked at states across India.

Population Characteristics

13 (46%) studies looked at only women as their population group and 15 (54%) studies looked at married women or couples or women in union. 21 (75%) studies focused on women of reproductive age which refers to women in the age range of 15-49 (United Nations World Fertility and Family Planning, 2020). The Indian Majority Act, 1875, Act No.9, states that “every person domiciled in India shall attain the age of majority on his completing the age of eighteen years and

not before” (Indian Kanoon, n.d). Therefore, 4 (14%) studies in the review included only adults as their study participants, and 3 (10%) studies did not report the age of participants.

Mapping Barriers According to the Conceptual Framework for Reproductive Empowerment

The results of this study have been grouped according to the Conceptual Framework for Reproductive Empowerment. This is to understand how the results found compare in regard to women’s reproductive empowerment, at the individual level, intermediate relational level with women’s interaction with intimate partners and close family members, and at the distant relational level in regard to systemic norms and healthcare services.

Women’s SRH and Individual Level Agency

Self-efficacy with regards to an individual’s SRH enables individuals to have the self-confidence and knowledge to negotiate with actors on behalf of themselves (Edmeades et al., 2018). Four barriers were found to negatively impact a woman’s self-efficacy: lack of education, lack of SRH knowledge, unemployment, and lack of financial resources.

Lack of Education

Education plays a role in individuals having the skills to be self-efficient and seek the necessary care for their SRH needs (Edmeades et al., 2018). Ten studies found education levels of women in UP to be a barrier to accessing SRH services required for their reproductive health. Achyut et al. 2016b, assessed the integration of FP into maternal health services for women to use modern methods postpartum and space out pregnancies. Women who had lower education levels were less likely to use postpartum FP methods compared to women with 12+ years of education. Five studies investigated the usage of modern contraceptives and FP methods amongst women (Hazarika, 2010; Pundhir & Das, 2021; Shaikh & Dwivedi, 2014; Sharma et al., 2012; Singh et al., 2019). There is a consensus among these five studies that women with low education levels or

who were illiterate were less likely to use contraceptives and modern contraceptives. Shaikh & Dwivedi (2014), additionally found that couples with no education were less likely to use FP methods compared to women with an education. Studies that looked at unmet need for FP or non-use of FP found it to be high amongst women who were illiterate or had no education (Pal et al., 2014; Speizer et al., 2012; Yadav et al., 2017; Yadav et al., 2020).

Lack of SRH Knowledge

Correct SRH knowledge is an important resource that impacts an individual's reproductive agency, allowing them to be actively involved in their SRH decision making (Edmeades et al., 2018). Three studies found that women in UP slums lacked proper knowledge in FP and contraceptives (Shaikh & Dwivedi, 2014; Singh et al., 2019; Yadav et al., 2017), and one study in Chandigarh found women lacked knowledge about the emergency contraceptive pill (Puri et al., 2009). Singh et al., (2019), assessed the knowledge and practice of contraceptive spacing methods and reason behind poor practices, to which they found that 38.8% of couples had no knowledge of spacing methods. Shaikh & Dwivedi (2014) reported that 37.8% of women did not know about contraceptives when it came to FP. Yadav et al., (2017) found that women who were non-users of FP around 64.4% had no knowledge of contraceptive methods. Puri et al., (2009), wanted to evaluate the use of emergency contraceptive pills among women in slums. Women were unaware of the correct time span in which emergency contraception should be taken or where it was available, despite it being accessible for free without a doctor's prescription at government hospitals.

Unemployment

Employment provides an individual with the self-efficacy to have the self-confidence and knowledge to negotiate with actors on behalf of themselves and seek out SRH services. There was

a lack of self-efficacy in two studies where women were unemployed. A study conducted in UP found that 71.6% of women who did not use contraception were unemployed (Yadav et al., 2017). Similarly, Yadav et al., (2020) found that unmet need for FP was high amongst women who were unemployed and from lower and upper-lower socio-economic status. Therefore, unemployment was a barrier to women having the self-efficacy to utilize FP methods.

Lack of Financial Resources

Financial assets are resources that allow individuals to pursue their reproductive desires and goals (Edmeades et al., 2018). Das et al., (2015) studied vaginal ring acceptability in a group of women from the slums of Delhi. A barrier to women using the rings was their inability to afford to pay more than a miniscule amount of money for the ring. Lata et al., (2015) investigated the prevalence of healthcare seeking amongst a group of women living in UP with reproductive morbidities. Women who reported gynecological or menstrual problems stated lack of money as a reason for choosing to not seek out treatment.

Women's SRH and Immediate Relational Agency

Immediate relational agency is the ability for individuals to exercise their choice and voice about their reproductive goals in interactions with the actors in their immediate environment (Edmeades et al., 2018). Women's husbands and their mothers-in-law were actors in the immediate environment that were a barrier to women's reproductive agency.

Husbands

In order for individuals to have agency, they need to be able to exercise their voice and choice with actors in their immediate environment, such as a partner (CFFRE, 20108). Nine studies found that husbands were a barrier to women's ability to access or use reproductive services. When comparing two studies in Delhi which investigated how women access or

attempted to access abortions and contraception, both studies had similar findings (Bhilwar et al., 2015; Dutta et al., 2004). Women had low autonomy in contraceptive decision making, which was ruled by their husbands, including the decision of childbearing, number of children, type of contraceptive and time of use, and inability to have an abortion (Dutta et al., 2004). High rates of self-reported induced abortions were a result of husbands governing the decision to use contraceptives (Bhilwar et al., 2015). Seven studies (Das et al., 2015; Gupta et al., 2018; Hussain, 2001; Kumar et al., 2005; Pal et al., 2014; Rizvi et al., 2013; Yadav et al., 2017) explored the unmet need or utilization of contraceptives, FP and postpartum FP in women living in Delhi and UP. Common reasons for why women chose not to use contraception was due to the husband's negative attitude or women felt they needed to convince the men of usage in order to receive their approval. In more extreme cases men wouldn't allow women to speak with the counsellor guiding women on contraceptive use (Gupta et al., 2018) or threaten women with physical violence if they chose to use contraceptives (Hussain, 2001).

Mothers-in-law

In-laws can act as resources that are power inhibitors to the agency of an individual. (CFFRE, 2018). Familial relations, particularly the role the mothers-in-law play in the daughters-in-law's reproductive health were found to be a barrier in women accessing contraceptives and FP methods in Delhi and UP. Three studies examining contraceptive use, abortions and unmet need for FP came to this consensus (Bhilwar et al., 2015; Shaikh & Dwivedi, 2014; Yadav et al., 2020). High rates of induced and unsupervised medical termination through the use of pills and medically terminated abortions were seen when mothers-in-law were the decision-makers (Bhilwar et al., 2015). Similarly, barriers to FP or unmet need of FP were seen when there was opposition to

contraceptive use due to expectations of early childbearing (Shaikh & Dwivedi, 2014; Yadav et al., 2020).

Women's SRH and Distant Relational Agency

Distant relational agency is the ability of individuals to use their voice, choice and power in their interactions with people in their community and beyond, in addition to coping with the systemic factors in society (Edmeades et al., 2018). Four barriers were found to negatively impact women's distant relational agency: healthcare facilities, women's treatment seeking behaviours, son preference and religion.

Community Level Actors-Healthcare Facilities

Individuals interacting with systemic actors such as healthcare providers or systemic institutions such as healthcare facilities can experience a power imbalance, where women lack the power to voice their reproductive concerns resulting in top-down decision making by the healthcare provider (CFFRE, 2018). India has inadequate healthcare facilities which make it difficult for individuals living in slums to receive proper care and delivery of services (Michielsen et al., 2011). Seven studies found that the healthcare facilities in urban areas were inadequate when women in Delhi and UP accessed contraceptives and FP at public health centers (Achyut et al., 2016b; Barden-O'Fallon et al., 2014; Hazarika, 2010; Hussain, 2001; Lata et al., 2015); Neyaz et al., 2015). Three studies found issues with healthcare providers at the clinics. Hussain (2001) identified that health workers were at the government facilities inconsistently, making it difficult for women to seek care. The vast majority of women living in slums are of low socio-economic status and therefore, rely on services provided by the public health system which lack both medical and non-medical staff (Hazarika, 2010). Healthcare providers were unable to provide adequate information to women on postpartum FP methods, even though they suggested women space out

future pregnancies (Achyut et al., 2016b). Despite their low SES, Neyaz et al., (2015) found that only 23.6% of couples from slums chose to use FP services at public health centers. Likewise, of the women who sought out treatment for reproductive morbidities, 48.6% went to a private hospital and only 28.9% went to a public hospital (Lata et al., 2015).

Systemic Factors-Treatment Seeking Behaviours

Systemic factors are internalized by individuals and directly impact the outcomes of their reproductive agency, as women choose to not seek out SRH services. Seeking treatment related to reproductive health issues was seen as taboo for certain women in five studies (Bhatnagar et al., 2012; Garg et al., 2001; Lata et al., 2015; Yadav et al., 2017; Yadav et al., 2020). As Bhatnagar et al., (2012) found, of the women living in Delhi who had reproductive morbidities or RTIs related to abortion, pregnancy, or childbirth, only 65% of women sought out and complied with treatment. Women believed chronic gynecological morbidities were a part of womanhood they must endure, and therefore, chose not to seek out or comply with treatment. Similarly, only 27.8% of women living in Delhi who developed RTIs due to a history of abortions, causing PID, used intrauterine devices (IUDs) and sterilization, causing RTI/STIs, and who did not maintain perineal hygiene, sought out treatment (Garg et al., 2001). In two studies by Yadav et al., (2017) and Yadav et al., (2020), they investigated non-use of FP and unmet need for FP respectively in UP. Over half of women in both cases cited embarrassment, hesitancy, and shyness for neglecting use of FP methods.

Systemic Factors-Son Preference

Patriarchal elements contribute to the norms regarding preferred sex composition of children, and preferring sons over the daughters. Four studies found son preference to be a barrier to women using sexual and reproductive health services (Calhoun et al., 2013; Hussain, 2001; Pal

et al., 2014; Pal et al., 2020). Hussain (2001) found that due to socio-economic and cultural reasons it was essential for women living in Delhi slums to give birth to a son and women were blamed if they birthed a girl. Furthermore, women were pressured to have more children until a son was born, even if they did not want to. In UP Pal et al., (2014) found that unmet need for FP is associated with women who have a fewer number of sons and Calhoun et al., (2013), found that family sex composition is linked to the use of FP methods, where women relied on FP methods once they had the number of sons desired. Finally, post-sterilization regret in women was studied throughout all six states in North India (UP, Rajasthan, Haryana, Himachal Pradesh, Punjab, Rajasthan, Uttarakhand, and Uttar Pradesh) by Pal et al., (2020) who found women who only birthed daughters had higher levels of regret than those who birthed only sons.

Systemic Factors-Religion

Religion is another systemic factor that impacts reproductive empowerment. Two studies found religion to be a barrier to women's contraceptive and FP use in UP, India (Pundhir & Das, 2021; Sharma et al., 2012). Pundhir & Das (2021), studied the knowledge and utilization of modern contraceptives and found that women practicing other religions besides Hinduism were less likely to use modern contraceptive methods. Sharma et al., (2012) found that Muslim women in the study chose not to use FP due to religious beliefs.

The barriers to reproductive agency at the individual, immediate relational, and distant relational level found in this scoping review (Figure 11). The figure displays the barriers found at the three levels of reproductive agency.

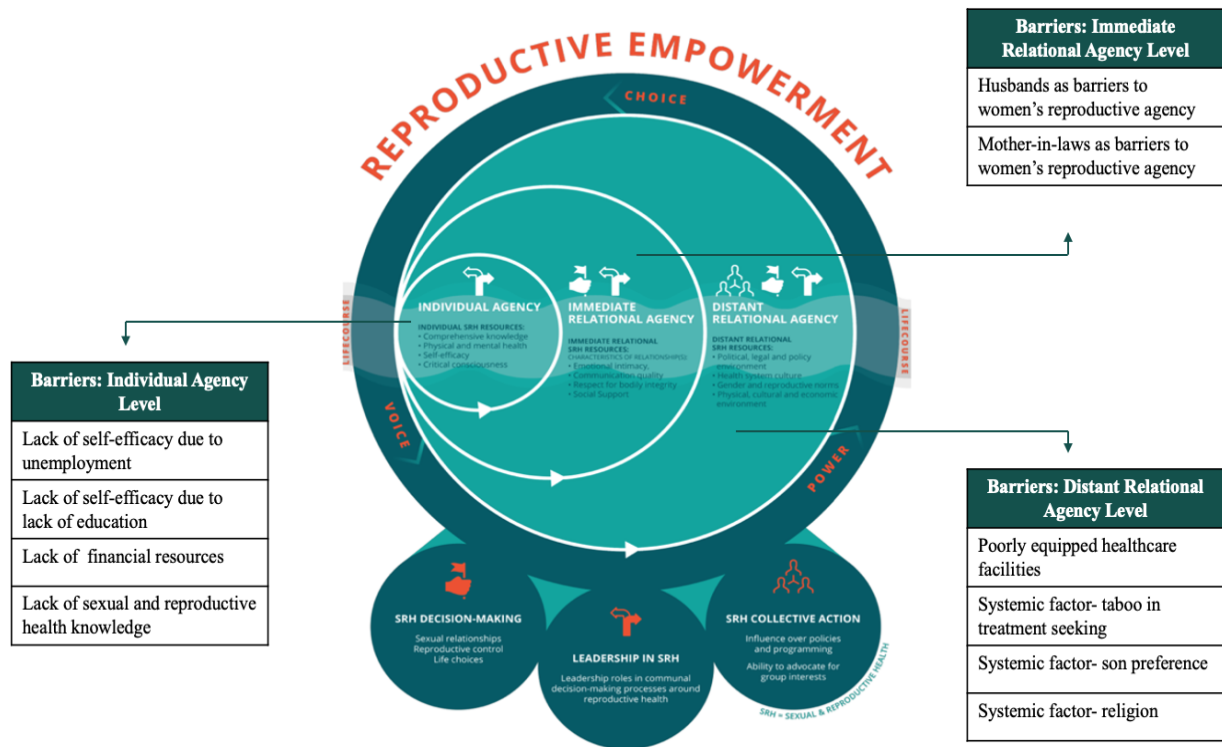


Figure 11. Barriers to reproductive agency at the individual, immediate relational, and distant relational levels

Chapter IV: Discussion & Recommendations

Overview

The objective of this master's thesis was to investigate the published literature that examined the barriers women living in slum populations in Northern India face when accessing SRH services. A scoping review was conducted by taking a systematic approach to identifying the barriers and mapping them out according to the CFFRE to determine the key barriers involved in access to SRH services in slums throughout North India. Conducting a comprehensive review was essential to providing consolidated evidence to the barriers that exist according to the CFFRE. Five online databases were searched and after screening resulted in a total of 28 articles. This review highlights the need for a cultural shift within North Indian society, as many of the findings relate back to ubiquitous and persistent patriarchal norms. Reproductive health autonomy was significantly hindered by members of women's families, lack of financial resources, and poor interactions with the healthcare system. Additionally, women were found to lack the proper education and understanding of SRH services which limited their use of contraceptives. The key findings were considered through the concept of reproductive empowerment and were found to be consistent with the wider literature on the barriers women face living in slums. Similar to this study, the wider literature revealed that in other developing countries many barriers exist to women's autonomy and decision making on contraceptive use and SRH services (UNFPA, 2021).

Few events are as life changing to a woman's life than those tied to reproduction, therefore, women should have the agency to freely make decisions about their reproductive health (CFFRE, 2018). The results of this study will support new ways to approach improving access to services for women in slums through the concept of reproductive agency. Using the CFFRE as a new lens can shed light on the gaps in the current thinking about SRH services in terms of reproductive

empowerment and self-efficacy, SRH knowledge, women's unemployment, and lack of financial resources. Furthermore, new approaches can be identified to address the gaps in reproductive empowerment and the impact of actors in women's immediate environment, in addition to actors and systemic factors in their community. Identifying and implementing novel strategies will support better access to SRH services for women living in slum populations in Northern India and similar contexts.

Individual Level Agency

Lack of Self-Efficacy- Education

This study found that a lack of education for women living in slum populations was a common barrier to using FP or contraceptive methods. In both the private sphere at home and the public sphere at health clinics, women encountered difficulties in actively participating in discussions related to their reproductive goals. This finding aligned with the CFFRE and demonstrated at the individual level, a lack of education suppressed women's voice, as they were unable to advocate for their reproductive interests and articulate their own opinions related to their reproductive livelihood (CFFRE, 2018). Self-efficacy is imperative in reproductive empowerment. One component of self-efficacy is critical consciousness, which allows an individual to be aware of the social structures that may influence their unique situation (CFFRE, 2018). The CFFRE indicates that due to a lack of education, women are unable to make observations and critique reproductive cultural norms which exist within their society (CFFRE, 2018). Moreover, the framework states that individuals without self-efficacy may be unable to conceptualize alternatives to these persisting norms to further their reproductive agency (CFFRE, 2018).

The results of this scoping review are consistent with research conducted by Gupta & Rajpoot (2014), where they found that although illiterate female participants residing in slums had

knowledge about FP methods, this did not translate into actual usage of FP methods, as the authors found it challenging to convert participants knowledge of FP into practice (Gupta & Rajpoot, 2014). They also found that the educational status of mothers affected their acceptance of FP methods for future spacing of births between children (Gupta & Rajpoot, 2014). These two discoveries by Gupta & Rajpoot (2014), support the idea that education plays a vital role in awareness of the benefits of FP methods (Gupta & Rajpoot, 2014). Similarly, Moursund & Kravdal (2003) investigated women's education and contraceptive use in India. They discovered that the probability of women's contraceptive use increased significantly with increasing educational levels. The more frequent use of contraceptive methods by women who had an education resulted in a stronger desire to stop childbearing (Moursund & Kravdal, 2003).

Together, the findings from this study and the wider literature demonstrate that women who lack an education are unlikely to use FP methods, as they may lack the critical thinking skills necessary to push back against reproductive cultural norms within society. It is crucial to ensure that from a young age, girls living in slum populations can access an education, even for just a few years, as this could provide them with the decision-making skills to voice and choose their reproductive needs later in life. This can be extremely difficult in marginalized populations like slums where girls often need to work to support their families and education is not a priority (Tiwari & Singh, 2021). However, governmental benefits such as conditional cash transfers could provide short term income support and incentivize poor families into ensuring that their daughters are educated (International Institute for Population Sciences Mumbai, 2010). An example of a conditional cash transfer scheme that had significant benefits is the Ladli Scheme in Delhi, which aimed to end discrimination against girls and promote their enrollment in education (International Institute for Population Sciences Mumbai, 2010). The scheme showed an enrollment of 275, 651

girls with a total of 25, 000 girls who passed their 10th standard exams (International Institute for Population Sciences Mumbai, 2010).

Lack of SRH Knowledge

The current study found that a number of women were completely unaware of basic FP methods, contraceptive methods, or the emergency contraceptive pill. SRH knowledge is integral to women's reproductive agency and without it, women may lack complete awareness of their own reproductive rights. This includes possessing the correct knowledge of contraceptive methods, knowing where to access SRH services, and knowledge of individual rights regarding sexual and bodily integrity, key factors of reproductive empowerment in individual level agency (CFFRE, 2018). CFFRE states that a lack of SRH knowledge means that individuals are unable to fully engage in meaningful SRH decision-making mechanisms, their ability to make choices about reproductive processes, such as limiting the number of offspring or choosing not to reproduce is constrained (CFFRE., 2018).

The findings of this study on a lack of SRH knowledge are in line with a study conducted in the slums of Accra, Ghana, where like North Indian slums, women had a low prevalence of SRH knowledge due to socio-cultural norms surrounding sex education and many of them worked in the informal sector (Seidu et al., 2022). The authors discovered that women who had no form of sex education were less likely to use contraceptives, whereas those women who were educated had a higher chance of contraceptive usage, with the possibility of consistent contraceptive use throughout their lifetime (Seidu et al., 2022). As Mbizvo & Phillips (2014) found, in a review of 80 developing countries, when people are provided with proper SRH education, they are able to protect themselves from reproductive morbidity and mortality, such as factors associated with RTIs, HIV, unintended pregnancy and reduce unprotected sexual activity, all of which contribute

to women having the power of knowledge of their reproductive wellbeing. When proper SRH education is provided, it can help women delay their sexual debut, limit unprotected sexual activity, and use contraceptive methods to prevent unwanted pregnancies (Mbizvo & Phillips, 2014).

The result of this scoping review together with the wider literature demonstrate that the uptake of FP methods prior to sexual debut, and postpartum FP methods will not be used, used incorrectly, or used inconsistently if women do not possess SRH knowledge. In 2017, India's National Health Policy prioritized availability to free and comprehensive primary health care services for reproductive health and expanded provider base for reproductive health services (WHO, n.db). In India's 2020 FP commitment, the government stated it would expand the range and reach of availability of contraceptives (Government of India, 2017). If FP methods are provided at health clinics, NGOs, or by community health workers, at free or at little cost to women living in slums, women will become more aware of the availability of services. Furthermore, continued work on building women's comprehensive sexual education could be conducted in using the expertise of Urban ASHA workers, to create an understanding of where knowledge gaps lie in the availability and accessibility of various FP methods.

Lack of Self-Efficacy- Unemployment

The results of this study showed that unemployed women did not use FP methods and simultaneously the unmet need for FP was also highest amongst unemployed women. Employment provides individuals with the financial freedom and autonomy to make their own spending decisions free from influence of actors in their environment, and therefore seek out FP methods (CFFRE, 2018). The CFFRE indicates power is an enabler for choice. Unemployed women have a limited amount of power and little to no economic influence, instead they are dependent on the

decisions of employed family members who have the economic means to influence their reproductive decision-making (CFFRE, 2018).

The lack of self-efficacy found in this study matches observations from previous studies. Traditional gender roles in Indian society result in women bearing responsibility for unpaid household and childcare work, while men are the breadwinners of the family (Banerjee & Raju, 2009). Bangladesh houses large slum populations with high poverty rates, located in overpopulated urban areas that are consistently growing (Patel et al., 2019). A study in Bangladesh explored socio-demographic determinants of FP methods and found usage to be higher in employed women compared to unemployed women (Kamal, 2011). Employed women compared to unemployed women were also 65% more likely to prefer modern methods of contraception (Kamal, 2011). Employment status was shown to be strongly associated with contraceptive use, ultimately allowing women more autonomy and control over decision-making processes (Kamal, 2011).

The finding of lack of unemployment in this study and previous literature shows that due to the lack of financial freedom, unemployed women have little autonomy over their reproductive needs. The vast majority of families living in slums are some of the poorest members of society and are severely economically limited, with many families unable to fulfill their basic needs on a daily basis (Brookings, 2022). This can make it extremely challenging for women to have autonomy and control over financial resources for their own reproductive needs. In studies where they engaged men in using SRH services, it was shown that their attitude towards women's SRH decision-making changed (Stern et al., 2015). Stern et al., (2015), used a gender transformative approach that engaged men with high levels of gender inequitable attitudes as clients in a three-year long intervention in accessing and providing knowledge about men's SRH services. The

intervention demonstrated that men became more involved in women's FP and even chose to escort their wives to access SRH services.

Lack of Financial Resources

This study indicated that a lack of finances was a barrier both to seeking out healthcare for women with reproductive morbidities, and for women who were considering the usage of vaginal ring contraceptives. Furthermore, financial assets were identified to be a difficult factor for women living in slums, as many of them are some of the poorest members of North Indian society. These results further support the idea that financial resources are an essential resource to reproductive agency, otherwise choice is limited in the contraceptive options that are available (CFFRE, 2018). Additionally, a lack of financial resources does not allow women to have the freedom and capacity to make decisions about their reproductive goals (CFFRE, 2018).

The findings of our study are consistent with a study conducted by Pandit & Nagarkar (2017), who investigated an urban slum in Pune, Maharashtra where similar to North Indian slums, many women were homemakers, unskilled laborers or domestic help. They recognized RTIs, a type of reproductive morbidity, as a major public health concern which ranks second after pregnancy-related issues to loss of healthy life in women (Pandit & Nagarkar, 2017). They found that women were not seeking treatment for reproductive morbidities due to financial barriers. Park et al., (2022), conducted a scoping review looking at the slums in LMICs and found that the cost of healthcare was a significant barrier to seeking care and utilizing the health services offered (Park et al., 2022). Many slum residents were also unable to seek out care as they could not afford to miss work and lose their daily wage (Park et al., 2022).

The result of this scoping review and literature demonstrate that a lack of financial resources is a barrier to seeking SRH services. Many slum women conduct precarious work such

as domestic help, where they are poorly paid or have unfixed pay, and are deprived from benefits such as medical insurance, maternity, or mandatory leave (Kikhi, 2018). Due to the unequal balance of power that exists between employer and employee, a day off is rare and requires negotiation with the employer which will likely result in a wage cut (International Labour Office, 2010; Neetha & Palriwala, 2011) Therefore, it is necessary to identify ways to increase and stabilize financial resources in order to address this barrier by employers paying domestic workers a fixed pay to create a stable income. In addition, further regulation and protection of domestic worker's rights is imperative to allow women to take time off work and address their SRH needs without the risk of decreased wages.

Intermediate Relational Agency

Actors in the Immediate Environment-Husbands

The results of this study found that husbands were a barrier to women exercising and expressing their reproductive desires and preferences. Husbands were a barrier to women accessing abortion, contraception, FP methods, and determining the number of children to bear. Some husbands had a negative attitude towards contraception use or threatened their spouse with physical violence for choosing to use contraceptives. These results are not in line with the CFFRE, which indicates that at the intermediate level, reproductive agency is exercised by women participating in SRH decision making and using their power and choice to discuss reproductive goals with the actors in their immediate environment (CFFRE, 2018). Instead, the results of husbands as barriers demonstrate that the power dynamics in women's marital relationships were completely unbalanced. The husband-wife power dynamic is one of the most crucial to shaping choice and voice, as this social interaction is the most influential in shaping women's reproductive lives (CFFRE, 2018). Relationship specific resources that restrict reproductive empowerment

include the presence of violent or coercive practices and poor communication, such as the inability of women to bargain and negotiate on their behalf (CFFRE, 2018).

The findings of our study match a paper that examined women's health and reproduction in 23 Sub-Saharan African countries they considered women's power in relation to her husband (Annan et al., 2021). When women's power was acknowledged by her husband, it was associated with good health outcomes, and when women assigned themselves greater decision-making power, it was better for their reproductive health (Annan et al., 2021). Furthermore, the difficulties women face when negotiating contraceptive use with their husbands could be overcome with the innovation of improved contraceptive technologies (Mbizo & Phillips, 2014). Methods that are less dependent on consistent and perfect use either by the husband or the wife could reduce frequent opposition to usage by the husband (Mbizo & Phillips, 2014).

Underlying this barrier, and the possible ways it can be addressed, is a pervasive lack of proper sexual education and a lack of understanding of women's reproductive needs by men in North India (Bloom et al., 2000). Patriarchal cultural norms are rooted in Indian society, and men often feel they do not need to understand or speak about women's reproductive health. Pakistan has similar patriarchal factors that place women in vulnerable positions compared to men (Hameed et al, 2014). When Pakistani couples had joint-decision making in contraceptive use, requiring the support and involvement of the husband, the empowerment measures used in the study indicated a substantially greater use of contraceptives compared to female-only decision-making of contraceptive use (Hameed et al, 2014). This indicated that husbands play a critical role in contraceptive decision-making and usage (Hameed, 2014). Therefore, women in slums would benefit from similar interventions involving husbands in contraceptive use.

Actors in the Immediate Environment- Mother-in-law

The current study showed that mothers-in-law were a significant barrier to women accessing contraceptive and FP methods due to the expectation that the daughter-in-law's would bear children. Family members in the immediate environment play a key role in impacting the choice and voice of women with regard to their reproductive preferences. The CCFRE states that reproductive agency at the immediate relational level is dependent on the interactive effects of multiple familial relationships, and the opinions of mother-in-law's carry a significant weight (CCFRE, 2018).

Similar to our study, other studies show that a number of families in India live in multi-generational households with their mother-in-law's, this number may be greater for slum households in order to save on expenses (Speizer et al., 2015). Studies indicate that despite Indian cultural norms holding patriarchal values, mother-in-law's have a high-power status usually limited to the household and expect daughters-in-law to show servitude towards their husband's family (Kumar et al., 2015). Therefore, a considerable power imbalance exists which restricts daughter-in-law's reproductive empowerment.

The findings of our study are consistent with the study conducted by Char et al., (2010). They conducted interviews in Madhya Pradesh, India to understand the patterns of FP decision-making and the influence of mother-in-law's (Char et al., 2010). Their study found that mother-in-law's had considerable influence in couples' reproductive health and had a conservative outlook on modern contraceptive methods (Char et al., 2010). The present result of this study and the literature show that as the majority of daughters-in-law live in a patrilocal family, there is a considerable power imbalance that exists where daughters-in-law are unable to voice their reproductive goals. Mothers-in-law are power inhibitors to agency of SRH decision making and

reinforce gender norms related to childbearing (Char et al., 2010). To overcome this barrier the efforts of urban ASHA workers could be utilized. Urban ASHA workers are key administrators for FP services at the community level in slums (Human Rights Law Network, n.d). One of their main goals is to provide FP counselling to newly married couples, couples with three or more children, and couples who are non-users of contraception (Human Rights Law Network, n.d). It would benefit daughters-in-law if counselling could be extended to educate mothers-in-law on the benefits of contraceptive and FP methods to the health and well-being of couples.

Distant Relational Agency

Community Level Actors- Healthcare Facilities

The study found inadequate healthcare facilities, insufficient healthcare providers, and contraceptive method failure were barriers to using FP and contraceptives. Without proper access to healthcare infrastructure, healthcare professionals, and more effective contraceptive methods, women cannot effectively use FP methods to keep themselves healthy and reach their reproductive goals. The framework shows that at the distant relational level, individuals should be able to exert their voice, choice, and power in their interactions with actors outside of their immediate relationships in order to be reproductively empowered (CFFRE, 2018). As in the case of health providers in this study, the framework indicates that SRH services provided, often occur in a top-down manner, disempowering and limiting individual's choice when seeking services (CFFRE, 2018). The framework further points out that slum women's interactions with healthcare providers are framed in the context of interactions with systemic actors and are shaped by power imbalances since providers are part of the health system which is a social institution (CFFRE, 2018).

This result from the scoping review is consistent with other studies that demonstrate scarce funding by the government towards public health facilities, and inadequate amounts of FP supplied

to clinics, making them inaccessible to women (Koeing et al., 2000). Mbizvo et al., (2014) found in their review of developing countries that greater number of choice and access to contraceptives could potentially reduce the unmet need for FP (Mbizvo et al., 2014). However, they found in the majority of developing nations, choice of contraceptive methods is limited, particularly in the public health system and women are unable to choose methods best suited to their reproductive needs (Mbizvo et al., 2014).

Contributing to this barrier and possible ways it can be addressed requires a shift in the provider-patient relationships and improvement in public health infrastructure. Predominantly due to a lack of monetary assets, female slum dwellers in the public health system were discriminated against, stigmatized, and either chose to forgo treatment, or were forced to passively accept the verbal and physical abuse (Michielsen, 2011). This exposes the significant challenges women face to seek out SRH services. Structural change in training of healthcare providers is needed in providing for vulnerable patients in order to reduce the rampant abuse that currently exists within the system.

The National Urban Health Mission (NUHM) implemented in 2013 was created to make essential primary care available to the urban poor and reduce out of pocket expenses (Ministry of Health and Family Welfare Government of India, n.d). However, slum dwellers in Mumbai accessed care from a mixture of public and private providers due to the perception that quality of care was better and safer through private providers (Naydenova et al., 2017). Accessing private care resulted in high out-of-pocket expenditures resulting in more poverty (Naydenova et al., 2017). As demonstrated in Mumbai, better planning and coordination of health services across public and private providers and creating essential public-private partnerships strengthened the capacity of community-based care (Naydenova et al., 2017). This partnership could address the

need for affordable community care, as private clinics see patients in a timely manner, allowing patients to earn their daily wage (Naydenova et al., 2017). Furthermore, the NUHM stated the need to create partnerships with health service provider NGOs (Ministry of Health and Family Welfare Government of India, n.d). Thus, establishing coordination between the public and private health sector in addition to NGOs could result in greater accessibility of SRH services for women. Developing this health partnership could promote progress towards providing the availability and affordability of good quality contraceptive methods and a full range of methods. As noted earlier in the study by Mbizvo et al, (2014), these changes could result in a higher contraceptive prevalence rate.

Systemic Factors-Treatment Seeking Behaviours

The results of the current study show that seeking out treatment for reproductive health issues was seen as taboo and women felt that gynecological morbidities were a normal part of womanhood they had to endure. Additionally, some women were embarrassed and ashamed to seek out FP methods and therefore did not use them. The CFFRE states that systemic factors that persist within society become internalized by women and obstruct their direct participation in SRH decision making about reproductive health outcomes (CFFRE, 2018). Patriarchal elements exist within women's social interactions with actors in their environment, making it difficult for socially and economically disadvantaged slum dwellers to advocate for their reproductive needs (CFFRE, 2018). Additionally, systemic factors impact leadership in SRH, where women find it difficult to challenge power in the public or private sphere and expand on their choice of reproductive agency (CFFRE, 2018).

The lack in treatment seeking supports the ideas of Pandit and Nagarkar (2017), who studied the prevalence of RTIs and STIs in a Maharashtra slum. Untreated RTIs can cause

miscarriage, still birth, ectopic pregnancy, infertility, and cervical cancer in women (Pandit & Nagarkar, 2017). They found that a high burden of RTIs and STIs in the population was due to limited healthcare seeking behaviour amongst women (Pandit & Nagarkar, 2017). The women stated that the taboo surrounding women's reproductive health caused them to fear disclosing their symptoms to healthcare workers, they felt shy, were unaware of the health services offered, or had no reproductive healthcare decision-making autonomy as reasons for not seeking treatment (Pandit & Nagarkar, 2017). A study in rural Tamil Nadu also assessed the health seeking behaviour of married women with sexual health issues (Ravi et al., 2014). The perception of reproductive health issues was seen as normal, women felt shy, in addition to the lack of treatment facilities was a barrier to seeking out treatment for RTIs and STIs (Ravi et al., 2014). Taboos in the community surrounding discussions of unsafe sex practices made it difficult to raise awareness about RTI and STI prevention (Ravi et al., 2014).

The findings of this study and literature show a cultural shift needs to occur to allow women to adopt behaviours which benefit their reproductive health. Similar to our study, in Pune, Maharashtra India women in urban slums had high rates of gynecological morbidities and few women sought treatment (Pardeshi et al., 2017). The study identified two possible facilitators to treatment. Firstly, India's NUHM stated that the expertise of Urban ASHA and Mahila Arogya Samitis (MAS) could be used to improve women's access to health care services (Pardeshi et al., 2017). Further advancement of this concept could result in community health workers educating slum women on the long-term health implications of gynecological morbidities and facilitating treatment seeking by accompanying women to health centers (Pardeshi et al., 2017). Secondly, they found when women accessed female health care providers, or specialists in obstetrics and gynecology, women sought treatment (Pardeshi et al., 2017). Therefore, it would be beneficial to

increase the number of female healthcare providers in the public health system as this could increase treatment seeking behaviours.

Systemic Factors-Son Preference

The results showed that women either feel or are pressured by their husband and family members into having offspring until a son is born, and usage of FP methods or contraception was an afterthought only once a son was produced. The results indicate that patriarchal norms in Indian society dictate a preferred sex composition of offspring and favor women having sons over daughters. The CFFRE states that in such society's women feel compelled to prove their fertility through childbearing, their choice in reproductive decision making is limited as they are coerced into bearing children (CFFRE, 2018). The pressure for women to produce male offspring limits their ability to engage meaningfully in discussions related to their reproductive interests and articulate their reproductive goals in their immediate relationships (CFFRE, 2018). Women do not have the autonomy to choose whether to include opinions of immediate relationships into their reproductive decision-making processes, societal and familial pressures have made the reproductive decisions on her behalf (CFFRE. 2018).

Similar to our study, a qualitative study explored factors influencing reproductive health and well-being among women living in Indian mining communities (D'Souza et al., 2013). Mothers who had daughters were pressured with the preference of sons by lack of support and hostility from her husband and mother-in-law (D'Souza et al., 2013). Similarly, a study conducted in an urban slum in West Bengal found that many couples had a strong preference for sons driven by patriarchal values (Kumari et al., 2018). They also found that contraceptive prevalence was low and preference for sons led to repeated pregnancies in women (Kumari et al., 2018).

Central to this barrier and possible ways it can be addressed is the lack of reproductive empowerment due to son preference, resulting in the lack of FP and contraceptive use. Northern states showed a very low child sex ratio in both the 2001 and 2011 census with very high levels of son preference, and the states of Punjab and Haryana had the worst child sex ratio in the country (Mitra, 2014). Son preference has shown to be damaging to the health and well-being of women who are subjected to repeated pregnancies, abortions, and female infanticide (Mitra, 2014). This process deteriorates their health since they may not have access to an adequate diet, nutrition and pre- and post-natal care, in addition to undernourishment and anemia from multiple child bearings (Mitra, 2014). The government of India, grassroot NGOs, and women activists have been promoting the value of the girl child for years in India through campaigns in urban areas (Mitra, 2014). It is necessary that this process continues with campaigns that target the patriarchal norms and values that persist in urban slums, in efforts to grant women agency over their own reproductive goals.

Systemic Factors-Religion

The results show that religious beliefs can be a hindrance to women using contraceptive and FP methods. The CFFRE demonstrates that at the distant relational level actors in the community such as religious leaders possess internalized and invisible power, which can inhibit reproductive empowerment (CFFRE, 2018). Power is present in all social interactions and women may feel uncomfortable opposing powerful figures within their community, thereby suppressing their voice and choice in SRH-decision making (CFFRE, 2018).

The barrier of religion is consistent with a study by Sowmya et al., (2020) who studied the extent of contraceptive usage and barriers to lack of contraceptive use among women in a slum in Udupi district Karnataka, India. They found religious beliefs were a barrier to contraceptive use in

women (Pandit & Nagarkar, 2017). In a slum in western Gujarat, Khan & Kotecha (2019) looked at the proportion of postpartum women using contraceptives and whether the use of maternal health services impacted contraceptive use during the postpartum period (Khan & Kotecha, 2019). The most common reason cited for women choosing to not use contraceptive methods was religious constraint (Khan & Kotecha, 2019).

A fundamental underlying reason for the barrier of religion could be due to a lack of initiative taken in India to educate religious clerics and clarify misconceptions surrounding contraceptive use. The results should be interpreted with caution, as a study by Adedini et al., (2018), engaged with religious clerics of differing faiths to change the norms on FP and contraceptive use in Nigeria. Women who considered themselves to be very religious found that messages exposing them to FP practices was associated with greater modern contraceptive usage (Adedini et al., 2018). These findings may translate to India if steps are taken to communicate and implement interventions in religious group settings.

Empowerment and the Lifecourse

Reproductive empowerment is a dynamic and ever-changing process experienced throughout the life course (CFFRE, 2018). Women's empowerment is influenced by factors such as her age, and bearing children, which can change an individual's social position within society (CFFRE, 2018). Especially in patriarchal societies with strict gender norms, parenthood is seen as a new life stage and entry into adulthood where peers and family members offer greater respect to individuals (CFFRE, 2018).

Methodologies of the Articles and Interpretation of the Findings

Cross-sectional studies look at a health outcome at a specific point in time and place and is quite rigid in terms of the information that is gathered due to its quantitative nature (Setia, 2016;

USC Libraries, n.d). This methodology was applied in a wide range of results found in this study. Cross-sectional studies with questionnaires and cross-sectional studies with interview surveys are similar as they are quantitative, and the questions asked are structured in nature of the information obtained from participants (USC Libraries, n.d). Therefore, the studies depict how prevalent an outcome was at a specific point in time but do not delve into understanding how or why an outcome as occurred (Setia, 2016; USC Libraries, n.d). In the scoping review, the quantitative studies were able to reveal religion, a preference for sons, embarrassment and shyness, and opposition of mothers-in-laws and husbands were attributed to non-use for FP or unmet need for FP.

Qualitative research methodologies such as interviews allow the researcher to understand the phenomena in its natural setting and gain the experience of participants subjective realities through the process of interviews (Robson & McCartan 2016, p. 286). The interviews conducted in the studies included in this scoping review gained insight into the experiences of the participants and how they perceive the barriers to accessing SRH services (Almari, 2019). Interviews are flexible and adaptive which provided a more in-depth explanation of the barriers that persist in slums (Almari, 2019). Therefore, these studies were able to reveal that women's education was the reason why they had an unmet need or were less likely to use modern contraceptives, or were pressured to have sons by family members, which resulted in non-use of FP. Similarly, focus groups provide a diversity of in-depth opinions and the ability to understand the experiences of participants from a social rather than individual perspective (Kitzinger , 1995). This revealed that women could only afford to pay very little money to access vaginal ring contraceptives. Furthermore, interviews with case studies shows further detail as individual case studies generate in-depth and multi-faceted understanding of complex issues of the participants (Crowe et al., 2011).

Cross sectional studies with semi-structured questionnaires and descriptive cross-sectional studies with interviews are mixed methods studies are able to address different research questions in a single study (Robson & McCartan, 2016). Such as the cross-sectional studies with semi-structured questionnaires finding women had low autonomy in contraceptive decision making due to opposition from their mothers-in-law and husband, and an underutilization of FP services due to poor public health facilities. Additionally, descriptive cross-sectional studies with interviews found women did not use contraceptive methods due to lack of knowledge, or their husband's negative attitude towards contraceptives. An advantage of mixed methods studies is that they develop a complete understanding of the research problem by combining the strengths and weakness of quantitative and qualitative methods in convergent designs, such as combining interviews with surveys or questionnaires with interviews (Creswell & Clark, 2017). This demonstrated that women were given a lack of information about postpartum family planning from public healthcare providers, and women discontinued modern contraceptives as they wanted more effective methods, respectively.

The findings from the scoping review of the barrier's women living in slums encounter when accessing SRH services in relation to quantitative, qualitative, or mixed methods study design, vary based on study design. Women's lack of education and lack of financial resources were the two barriers solely found in quantitative studies. Women's unemployment, women's lack of SRH knowledge, the opposition of mothers-in-law, and religion were the four barriers solely found in quantitative studies. Husbands as barriers, inadequate healthcare facilities and healthcare providers, taboo in treatment seeking, and son preference were each a mixture of quantitative, qualitative and mixed methods research designs.

Temporality of Articles and Health Policies

The National Urban Health Mission (NUHM) is a nationwide policy implemented in 2013 by the Ministry of Health and Family Welfare to address the health concerns of the urban poor, by creating equitable access to health facilities (NUHM, 2013). The NUHM has a specific focus on slum populations living in recognized and non-recognized slums and aimed to reduce out of pocket expenses for available treatments (National Urban Health Mission, n.d). An article from the scoping review published in 2015, demonstrates that women in slums continue to pay out of pocket expenses for SRH services. The study by Das et al. (2015) stated that barriers to women using vaginal ring contraceptives was due to their inability to afford to pay, or pay very little money. A study by Lata et al., (2015) found that women who reported gynecological problems cited lack of money for reasons as to not seek treatment.

In India only 11% of the country has some form of health insurance (Shahrawat & Rao, 2011). The poor quality of public health services and lack of health insurance coverage leads to the poor accessing private health care and paying high out of pocket expenses (Mishra & Mohanty, 2019; Shahrawat & Rao, 2011). Around 60% of households living below the poverty line chose to make out of pocket payments for private care instead of accessing the free public health care available (Shahrawat & Rao, 2011). Due to concerns of high out of pocket payments and low insurance coverage for the poor, the government had launched schemes such as the Universal Health Insurance Scheme for individuals living below the poverty line (Shahrawat & Rao, 2011). Despite this, these schemes were unable to attract a large number of people (Shahrawat & Rao, 2011).

The National Health Policy of 2002 aims to create better access to the public health system for vulnerable populations, as the system is plagued by poor infrastructure and an insufficient number of medical personnel (National Health Policy, 2002). Its goal is to establish

regulatory mechanisms to ensure adequate standards are maintained by medical institutions, in addition to appropriate conduct in clinical practice and delivery of medical services by health care providers (National Health Policy, 2002). The expansion of primary health care facilities will aid in increasing access to women's basic health care (National Health Policy, 2002). The latest National Health Policy developed in 2017 has found 15 years later, similar issues persist in the public health care system. Its goal is to attain the highest level of health and wellbeing for all members of Indian society through preventative and promotive health care and universal access to health care (National Health Policy, 2017). This will be accomplished by increasing access, quality, and decreasing cost of healthcare services (National Health Policy, 2017). Additionally, the policy wishes to reinstate trust in the public health care system by making it efficient, patient centric, and provide a comprehensive package of services to meet the health care needs of the population (National Health Policy, 2017).

In this scoping review, three articles found that women were not satisfied with the health care provided at public health facilities. In 2010, eight years after the development of the National Health Policy of 2002, Hazarika (2010) found that women in slums were accessing reproductive services from public health facilities, which had an inadequate amount of both medical and non-medical manpower. This is despite the 2002 policy stating it would improve on the number of medical personnel (National Health Policy, 2002). In 2015, the study by Neyaz et al., (2015), indicated there was an underutilization of FP services from the public sector, as most couples preferred to access services from the private sector, indicating that the public health system is in fact not accessible for members of the vulnerable population (National Health Policy, 2002). Finally, Achyut et al., (2016b) found there was a lack of information provided to women by health providers about using FP methods postpartum. Therefore, the goal of ensuring

standard medical practice is maintained by the public facility was not met in this instance (National Health Policy, 2002).

The majority of women in India do not visit public health facilities due to poor quality of care, long wait times, limited availability of drugs, and lack of attendance of medical personnel (Bagchi et al., 2020; Rout et al., 2019). Despite their inability to pay the urban poor are increasingly choosing to access private care even for minor illnesses such as a cold or fever, in the absence of functioning public health system (Bagchi et al., 2020; Rout et al., 2019).

The Family Planning policy of 2019 was created by the Ministry of Health and Family Welfare to ensure complete knowledge and access to reproductive health services and reproductive choice (Family Planning, 2019). Spacing contraceptive methods which are reversible include: oral contraceptive pills, condoms, IUCD, and contraceptive injectables (Family Planning, 2019). Permanent irreversible contraceptive methods offered include male and female sterilization (Family Planning, 2019). Additionally, the emergency contraceptive pill is offered (Family Planning, 2019). Two articles from by Speizer et al., (2012) and Barden-O'Fallon et al., (2014), indicated that women found that a lack of variety or wanting more effective contraceptive methods, to be barriers to using contraceptive methods. However, even in the policy of 2019 there is still exists a lack of variability of contraceptives offered at public health centers, which limits the variety of choice offered to women. The birth control vaginal rings, birth control patch, internal condom, diaphragm, birth control sponge, spermicide and gel, and cervical cap could be included include a wider range of contraceptives (Planned Parenthood, n.d).

A data mining project in India investigated women's patterns of contraceptive use and found women were constrained in modern contraceptive usage, due to lack of steady access to

contraceptive supplies (Chaurasia, 2014). Rahman et al., (2022) found that while India has a “basket of contraceptives programme” to allow couples the freedom to choose their preferred form of modern contraceptives (Rahman et al., 2022). There were persistently low levels of usage, indicating that need to review the types of methods available (Rahman et al., 2022). In fact, they found that traditional contraceptive methods such as the rhythm and withdrawal method were more prevalent amongst poor households in North India due to poor coverage of services available (Rahman et al., 2022).

Policy Implications of the Findings

Previous research has only investigated barriers to accessing SRH services by state or union territory, where authors like Rizvi et al., (2013) have studied the knowledge of contraceptives and its practice among married women in the urban slums of Uttar Pradesh, or Kumar et al., (2005), who investigated women’s attitude towards FP and the factors that restrict usage in a Delhi slum. It is important to look at North India as a whole, when investigating the barriers women in slums face to accessing SRH services to gain an overall understanding of the barriers that exist. The nationwide nature of this research complements national health care policies across India such as the NUHM and the National Health Policy. Key stakeholders who will benefit from this research include policy makers part of the Ministry of Health and Family Welfare part of the Indian Government, non-governmental organizations providing SRH services, healthcare providers at urban clinics, and ASHA workers.

The NUHM created by the Ministry of Health and Family Welfare has stated one of the objectives of the national mission is to create a more efficient public health system in cities by strengthening the existing governmental primary urban health infrastructure (National Urban Health Mission, 2013). The policy states that due to poor infrastructure and lack of human resources, the majority of primary health facilities function at a sub-optimal level (National Urban

Health Mission, 2013). Instead, the goal is to create an urban healthcare system to meet the needs of the urban poor (National Urban Health Mission, n.d). The results of this scoping review show that poor public healthcare facilities continue to be an issue and as a result are barriers to women in slums using FP methods and contraceptives, limiting women from keeping themselves healthy and reaching their reproductive goals.

Another objective of the policy is to ensure quality healthcare services are provided by developing the capacity of health care workers in the public health system to provide quality care (National Urban Health Mission, 2013). Further efforts are needed to reach this goal as this study found inadequate healthcare workers to be a barrier to women using FP and contraceptives as they faced discrimination and stigmatization and were compelled to seek out care from private health clinics instead. Additionally, proper health care would include health care workers providing proper SRH knowledge to women in their clinic about FP methods, different forms of contraceptive methods and the emergency contraceptive pill.

The National Health Policy of 2017 stated one of its goals as reinforcing trust of the public into the public health care system by making it patient centric with a comprehensive package of services and products to meet the population's health care needs. A result of this study found that contraceptive method failure was a barrier to using FP and contraceptives methods and patients desire more effective contraceptive methods. This requires expansion of the available contraceptive methods available. India's annual family planning report indicates that contraceptive services offered under the National Family Welfare program are limited to oral contraceptive pills, condoms, IUCD, emergency contraceptive pills, contraceptive injectables, and female/male sterilization (Ministry of Health and Family Welfare, 2019). This could be expanded to include;

birth control vaginal rings, birth control patch, internal condom, diaphragm, birth control sponge, spermicide and gel, and cervical cap (Planned Parenthood, n.d).

Finally, the NUHM stated to promote access to improved health care at the household level through community-based groups in slums like the Mahila Arogya Samitis who are provided leadership and guidance by ASHA workers (National Urban Health Mission, 2013). This objective is in line with results from this study where it was found that ASHA workers could play an integral role in women in slums overcoming societal taboo in treatment seeking for gynecological morbidities and FP methods. Furthermore, ASHA workers can improve SRH knowledge amongst mothers-in-law who were found to be barriers to women accessing contraceptive and FP methods due to expectations of childbearing.

Recommendations

A total of five recommendations have been formulated in response to the results of this thesis.

1. It is important that healthcare providers working in the public health system are properly trained to serve and treat vulnerable patient populations and providers are aware of factors that may lead to poor patient care such as: discrimination, implicit bias, and gendered bias towards women living in slums. These efforts will aim to make public health care providers more accessible to women in slums, by women using their voice, choice, and power when interacting with trained providers to seek out their reproductive goals and are empowered by their provider to accomplish these goals. Furthermore, the current power imbalance that exists between patient and provider will be mediated by implementing a collaborative approach where women can feel comfortable discussing and exploring their reproductive needs with their provider.

2. The second recommendation is to understand that the problem of accessing SRH services is not isolated to women, and instead extends to encompass their partner and partner's family

members. Educational interventions need to target intergenerational households so SRH education can be disseminated throughout the family unit through the expertise of ASHA workers. It is essential to educate husbands on the importance of women's reproductive needs and the crucial role abortion, contraceptive methods and FP have on their reproductive health and empowerment. Interventions need to address the significance of women's reproductive autonomy in determining the number of children they wish to bear, without external coercion from mothers-in-law. Education will aid in creating a balanced power dynamic in the marital relationship, which is consequential to influencing women's reproductive goals, by generating proper communication channels about reproductive needs between women and their husband and family members.

3. Third, community health workers have been integral to women in slums accessing SRH services. Significant value can be gained from employing a greater number of community health care workers in slums and increasing their pay to take on further responsibilities in disseminating SRH knowledge to reduce the stigma associated with treatment seeking for reproductive morbidities. This will aid women in overcoming the patriarchal elements that exist in their social interactions with actors in their environment who inhibit women from advocating for their reproductive health. Women will also be supported in challenging power in public or private spaces when choosing to expand their reproductive agency.

4. Fourth, is to implement measures to ensure access to an education for girls, despite the obstacles that persist in slums. A formal education will allow individuals to have self-efficacy and the decision-making skills to advocate for their reproductive goals and be actively involved in discussions related to these goals. Additionally, they will be able to critique reproductive cultural norms that exist in North Indian slums, which without an education may have diminished their

empowerment. Through an education, future employment will allow women to have economic means, power, and choice to make decisions about their own reproductive goals

5. Fifth, is to continue campaigns on the importance of gender equality that demonstrate the value of the girl child in North Indian society. Women will no longer be coerced into bearing sons, as girls will be recognized as important members of North Indian society. Women will also be empowered to have the choice in determining the number of offspring they want to have, as family pressures to bear sons are removed. This will create a cultural shift away from patriarchal norms and instill value of women and their reproductive empowerment.

Future Research

A significant amount of future research needs to be conducted in the North India states of Himachal Pradesh, Punjab, Uttarakhand, Haryana, Rajasthan, and Chandigarh, to investigate the slum populations. The vast majority of articles in this scoping review and the current literature are based in Uttar Pradesh and Delhi. As a result, this provides a limited understanding of what might be the situation of slums in the other states and union territory, and the impact living in slums have on women's reproductive health.

Additionally, further research should conduct qualitative studies. India derives a significant amount of understanding about SRH and FP from the National Family Health Survey which is a large-scale multi-round quantitative survey conducted across India at the household level intermittently, since 1992, for a total of five surveys have been released (National Family Health Survey, n.d; Microdata Library World Bank, 2019). Therefore, conducting preliminary qualitative research, especially in states where little research has been conducted in slums, and grounding the research in the experiences of women in these states and their ability to access sexual and reproductive health is essential. This would be beneficial to developing an overall in-depth

understanding of the current situation of sexual and reproductive health access on the ground in slums.

ASHA community workers have played an essential role in aiding women's SRH in slums. Further research should look into pilot programs where ASHA workers help disseminate basic SRH knowledge of FP and contraceptives methods to women and their family members to understand the benefits to their reproductive health and goals. Additional pilot programs should investigate the advantage of ASHA workers in aiding women in slums to overcome societal taboos in treatment seeking for gynecological morbidities and shame associated with seeking out FP methods. This will help to further policy changes on the role of ASHA workers in slums to have greater responsibilities in women's sexual and reproductive health.

Chapter V: Conclusion

Strengths

Research in the area of sexual and reproductive health of women in India has been taking place for decades. Applying a scoping review framework permitted the ability to map out the existing body of research on SRH and women in slum populations. The steps of the review were followed systematically, and a second reviewer was incorporated into the study to limit bias and elevate the quality of work. In collaboration with the university librarian the keywords were carefully selected to cover a broad but concise area of SRH research. Additionally, five databases were used to ensure coverage of different fields such as, life science, biomedicine, nursing, global health, social science and humanities.

Limitations

This study had several limitations. One of the challenges in conducting this study in the Indian context was to ensure that the databases used in the study included a sufficient number of articles coming from Indian researchers. A total of five databases which indexed articles were used as opposed to targeting specific publishing models or publishers, allowing a greater number of articles to be incorporated from each database. Second, a significant amount of the research that occurs in India is conducted and then immediately implemented on the ground within the country, as the priority is to implement the research in a timely manner. Therefore, a lot of the research does not get published since academia is not the main concern within the country. The review is not representative of the grey literature which was not included in this study due to time constraints. Using grey literature could be beneficial in future research since numerous NGO's and charity organizations operate on the ground throughout India. Data collected by NGOs could be more thorough and up to date, compared to the academic literature. Finally, all articles used in this

study were written in the English language. This may have resulted in a significant number of articles not being included that were written in North India's main language Hindi or the languages indigenous to each of the six states and two union territories. However, English is prevalent in India and many researchers who are a part of academic institutions speak and write the language and have contributed to the published literature on SRH in India, in the English language.

Conclusion

This thesis investigated the barriers faced by women living in slum populations in Northern India to accessing SRH services. The scoping review was undertaken in a systematic manner to map out the published literature on barriers to SRH services in slum populations. Conducting a comprehensive review was essential to providing consolidated evidence to the barriers that exist. The goal of this research is to clarify and define the barriers that currently continue to persist for women living in slums.

The results of this study contribute to the literature by identifying areas that require improvement to SRH services for slum women and will be integral to implementing strategies and interventions to allow better access to SRH services in the future. Changes to norms and values in the patriarchal nature of Indian society will allow women the agency over their reproductive well-being. Members of women's families, lack of financial resources, and poor interactions with the healthcare system were all shown to be barriers to accessing SRH services. Women who lacked a formal education and knowledge of SRH services and FP methods were limited in their use of contraceptives. It is necessary to overcome these barriers in order to create better access to SRH services and ultimately have a reproductively empowered female population in the slums of North India.

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Appendix

Appendix A: Data Extraction Table

The data extraction table can be accessed through the google drive link below

<https://docs.google.com/spreadsheets/d/1gAkDEaG74Pabvng9E1e-ALvPI9UbrlxJ-Rrk3MNAxw/edit#gid=735061821>

Appendix B: Data Extraction Table Temporality

The data extraction table is divided by temporality in chronological order

Articles	Author(s)	Year of Publication	Barriers faced by Women in Study	Reproductive Services Accessed by Women
Perceived reproductive morbidity and health care seeking behaviour among women in an urban slum	Suneela Garg, Meenakshi, M.M.C. Singh, Malti Mehra	2001	<ol style="list-style-type: none"> 1. History of abortions was found to be a significant predictor of occurrence of vaginitis and Pelvic Inflammatory Disease (PID) 2. Women who did not maintain perineal hygiene were more likely to report lower reproductive tract infections 3. Use of intrauterine device and sterilization was found to be significant predictors of symptoms of RTI/STI 4. Only 27.8% of those experiencing a reproductive health problem sought treatment 	N/A
Do women really have a voice? Reproductive behavior and practices of two religious' communities	Sabiha Hussain	2001	<ol style="list-style-type: none"> 1. Due to socio-economic and cultural reasons it was considered essential to give birth to a son, even if the mother did not want any more children 2. Women felt the government services at the health centers for FP were inadequate and the visits by healthcare workers were irregular 3. Men disapproved of their wives use of contraceptives and threatened them with physical violence if women chose to use FP 4. Women were pressured by their husbands and family members to have sons and were blamed if they gave birth to a girl 	Use of contraceptives and FP
Knowledge, awareness and extent of male participation in key areas of reproductive and child health in an urban slum of Delhi	M Dutta, M.C. Kapilasharmi, V.K. Tiwari	2004	<ol style="list-style-type: none"> 1. More than half of men interviewed did not think it was necessary to disclose symptoms of sexually transmitted diseases to their wives 2. In 63 % of husbands wanted sons even when their wives were not interested due to, family lineage, economic support, or performance of last rites 3. Decision on time to have first child, number of children, choice of contraceptive methods, adopting a contraceptive, time of contraceptive adoption and length of its use, unwanted pregnancy and abortion were decisions taken by husband and women had little right to take independent decisions on these matters 4. In 94% of husbands were aware abortion is legal, 62% of them did not approve of abortion due to moral and religious grounds, only 10% of men cited concern for women's health for not approving abortion 5. Hardly any awareness amongst male and female respondents about use of condoms to prevent STIs 	Contraceptive and abortion use
Attitude of women towards family planning methods and its use - study from a slum of Delhi.	Kumar S, Priyadarshni A, Anand K, Yadav BK	2005	<ol style="list-style-type: none"> 1. More than 90% subjects said that weakness is the main side effect from OCP followed by irregular menstruation (55.5%) and headache 2. In 85 % of cases women narrated weakness after tubectomy 3. In 88.8% of cases after CuT women had backache, cramps, and weakness 	Contraceptive use = OCP, CuT, Tubectomy

			<p>4. Two-thirds of women did not use FP because they wanted more kids or a son</p> <p>5. Many did not prefer FP due to side effects and other health problems</p> <p>6. In 15% of cases the husband did not allow use of FP</p> <p>7. In 5% of cases women were unaware of FP methods</p>	
Emergency contraception in women of slums in Northern India	Sonia Puri, N.K Goe, Alka Seghal, Dinesh Walia, Chetna Mangat	2009	<p>1. The correct time span in which ECP should be used was not known by any participants</p> <p>2. The source of availability of ECP was known to 1.4% of women who knew it was available at the chemist- despite ECP being accessible at government health institutions free of cost and over the counter without doctor's prescription</p>	Emergency contraception pill (ECP)
Women's Reproductive Health in Slum Populations in India: Evidence From NFHS-3	Indrajit Hazarika	2010	<p>1. Less than half of women from slum areas were currently using contraceptive methods</p> <p>2. One-fourth of women from slums considered sterilization as the preferred method of contraception and did not use pills, IUDs and condoms</p> <p>3. Discontinuation rate of contraceptive use was higher among women from slum areas compared to non-slum areas</p> <p>4. Use of modern contraception was significantly lower among slum residents compared to non-slum counterparts</p> <p>5. Use of contraceptives decreased with age of respondents</p> <p>6. women with lower level of education not as likely to use contraceptives</p> <p>7. Women in slums were dependent on reproductive health services from the public health system which have inadequate medical and non-medical manpower</p>	Contraceptive Use
Family planning use among urban poor women from six cities of Uttar Pradesh, India	Ilene S. Speizer, Priya Nanda, Pranita Achyut, Gita Pillai, David K Guilkey	2012	<p>1. Participants from slums are more likely to use sterilization or be non-users of contraception compared to non-slum participants</p> <p>2. Less educated women living in slums are significantly more likely to have an unmet need than more educated women living in slums in 3/6 cities</p> <p>3. Lack of variability in method use among slums dwellers means high unmet need and suggests reliance on free, public-sector sterilization once women complete childbearing</p>	Use of Modern contraceptives
Socio demographic determinants and knowledge, attitude, practice: survey of family planning	Vasundhara Sharma, Uday Mohan, Vinita Das, Shally Awasthi	2012	<p>1. Use of FP methods increased amongst with education levels and SES of women in the study as these women are more likely to be aware and take care of their health</p> <p>2. Muslim women in the study who did not use FP was due to religious beliefs and husband's decision for non-acceptance</p> <p>3. women of higher age and parity used FP methods more than lower aged women and parity due to couples only using FP methods once they have reached desired family size which usually corresponds to older ages and higher parities of women</p>	FP Methods
The silent epidemic of reproductive morbidity among ever married women (15-49 years) in an urban area of Delhi	Nidhi Bhatnagar, Jyoti Khandekar, Amarjeet Singh, Sonal Saxena	2012	<p>1. Contraceptive (modern and traditional methods) morbidity reported by 11.2% of ever users in the study where menstrual problems was the most common morbidity reported</p> <p>2. gynecological morbidity (menstrual disorders, RTI) seen in 31.3% of study subjects</p>	<p>1. Of the subjects who perceived contraceptive morbidity to interfere with their routine work, 87.7% sought treatment at a health centre and 65.1% of those complied with treatment</p> <p>2. z and 66.1% of those complied with treatment - socio-cultural factors put a taboo on women to seek treatment for gynecological conditions and gynecological morbidity is seen as chronic and part of womanhood which explains why women don't seek treatment and comply</p>
Assessment of knowledge of contraceptives and its practice among married women in urban slums of Lucknow District	Rizvi A. Mohan U, Singh SK, Singh VK	2013	<p>1. Common reason for contraception discontinuation cited by women was side effects and health concerns</p> <p>2. Common reasons for not using contraception was lack of knowledge about methods and husband's negative attitude towards contraception methods</p>	Use of contraceptives

<p>The effect of family sex composition on fertility desires and family planning behaviors in urban Uttar Pradesh, India.</p>	<p>Lisa M Calhoun, Pryia Nanda, Ilene S Speizer, Meenakshi Jain</p>	<p>2013</p>	<p>1. Family sex composition is associated with FP use; women without living children and those with no sons but one or more daughters are less likely to be modern users than nonusers of FP as compared to women that have both sons and daughters but more daughters than sons- once women have the number of sons they desire; they will rely on modern methods or any FP method 2. women who have more sons are more likely to use sterilization as a FP method compared to women with more daughters 3. Traditional method use, and condom use highest amongst women with no living children and women with 0 sons but one or more daughters</p>	<p>FP accessed included: modern FP (male/female sterilization, IUD, pills, condoms, injections, implants, lactational amenorrhea) traditional FP (rhythm, periodic abstinence, withdrawal)</p>
<p>Demand generation activities and modern contraceptive use in urban areas of four countries: a longitudinal evaluation</p>	<p>Ilene S Speizer, Meghan Corroon, Lisa Calhoun, Peter Lance, Livia Montana, Pryia Nanda, Davild Guilkey</p>	<p>2014</p>	<p>N/A</p>	<p>1. Initiatives to encourage modern contraceptive use (female/male sterilization, IUD, implants, injectables, oral contraceptive pills, emergency contraception, condoms, Lactational Amenorrhea Method, spermicides, diaphragms, dermal patch 2. Indian women who recalled exposure to a Community Health Worker and to any UHI television program were significantly more likely to be modern method users at midterm than women who did not recall such exposure</p>
<p>Understanding patterns of temporary method use among urban women from Uttar Pradesh, India</p>	<p>Janine Barden-O'Fallon, Ilene S Speizer, Lisa M Calhoun, Livia Montana, Pryia Nanda</p>	<p>2014</p>	<p>Most common reasons for discontinuation of temporary method (modern or traditional) = wanting a more effective method, non-use of any methods, and using multiple methods</p>	<p>Women using contraceptive methods = 1. modern methods (condoms, pills, IUD, injectables 2. traditional methods (periodic abstinence/rhythm or withdrawal method) 3. multiple methods (any combination of condoms, traditional, various modern methods)</p>
<p>Predictors to use of family planning methods among women of Allahabad District, Uttar Pradesh</p>	<p>Shama Shaikh, Shraddha Dwivedi</p>	<p>2014</p>	<p>1. women had a desire for more children 2. women wanted to have a son 3. Around 37.8% of women did not know about contraceptives 4. the husband or in-laws of women were opposed to contraceptive practices was the largest barrier to use of FP 5. women and husbands with no education used FP less than women with primary, middle and secondary or higher education 6. women who did not own a TV were not as likely to use FP than women who did</p>	<p>FP Services</p>
<p>Factors affecting unmet need for family planning in married women of reproductive age group in urban slums of Lucknow</p>	<p>Anjali Pal, Uday Mohan, M Z Idris, Jamal Masood</p>	<p>2014</p>	<p>Unmet need for FP due to: 1. unmet need for FP high among women in age group 15-19 years 2. women with fewer number of sons had high unmet need 3. high unmet need amongst women whose husbands discouraged them to use FP or women who thought their husband disapproved of FP 4. unmet need high amongst illiterate non-working women 5. unmet need high amongst women who never discussed FP with husband</p>	<p>Family Planning methods</p>
<p>Reproductive morbidity and health care seeking behaviour among females of urban slums in a city of Northern India</p>	<p>Kanchan Lata, Monika Agarwal, J.V Singh, Anish Khanna, V.K Singh</p>	<p>2015</p>	<p>1. Women who reported any gynecological problems, less than half of the women sought treatment- private hospitals (48.6%) were more preferred place of treatment, followed by government hospitals (28.9%) 2. Menstruation related problems, women who reported symptoms related to it, less than 60% of women sought treatment for their problems 3. Women who reported gynecological or menstrual problems cited lack of money, followed by lack of knowledge about the health facilities for not seeking treatment</p>	<p>Seeking treatment for reproductive morbidity</p>

			4. Women suffering from gynecological problems reported shame as another reason for not seeking treatment	
Exploring vaginal ring acceptability for contraception and sexually transmissible infection protection in India: a qualitative research study.	Udita Das, Mamta Sharma, Maggie Kilbourne-Brook, Patricia S Coffey	2015	1. Wear Patterns- unmarried women were less sure about continuous use and wanted to take ring out during menses or during sex if the man had a problem with it 2. Cleaning- women who use traditional methods said they had limited privacy if they chose to take the ring out and clean it during menses 3. Male Partner Acceptability- women said they need to discuss the product with the men who would need to be convinced about the product before allowing usage since the man is the head of the household and controlled the finances 4. Willingness to Pay- All women except those using traditional methods felt they couldn't pay more than US \$1.63 (exchange rate from Feb 2013)	Vaginal Ring
Prevalence of induced abortions and contraceptive use among married women in an urban slum of Delhi, India	Meenakshi Bhilwar, Panna Lal, Nandini Sharma, Preena Bhalla, Ashok Kumar	2015	1. High rates of self-reported induced abortion among women living in an urban slum 2. Low usage of contraception and low autonomy in contraceptive decision making - the decision to use contraceptives were governed by participants husbands and mothers-in-law most of the time	Spontaneous, induced, unsupervised medical termination through pills and medically terminated abortions and contraceptive usage
Contraceptive practices in Muslim-predominated slums of Aligarh, Uttar Pradesh	Arslan Neyaz, Malik S Ahmed, Priyanka C Sahu	2015	Underutilization of FP services in public sector when compared to the private sector, only 23.6% of couples utilized government facilities for procurement of contraceptives	Contraceptives used between couples: temporary methods= condoms, oral contraceptive pill, IUCD and permanent methods = female sterilization
Acceptability of home-assessment post medical abortion and medical abortion in a low-resource setting in Rajasthan, India. Secondary outcome analysis of a non-inferiority randomized controlled trial	Mandira Paul, Kirti Iyengar, Birgitta Essen, Kristina Gemzell-Danielsson, Sharad D. Iyengar, Johan Bring, Sunita Soni, Marie Lingberg-Allvin	2015	N/A	Medical Abortion (Mifepristone and Misoprostol)
Integration of family planning with maternal health services: an opportunity to increase postpartum modern contraceptive use in urban Uttar Pradesh, India	Pranita Achyut, Anurag Mishra, Livia Montana, Ranajit Sengupta, Lisa M Calhoun, Priya Nanda	2016	1. Lack of information provided to women from health provider about utilizing family planning methods postpartum women 2. women who did not receive FP information during third trimester ANC were less likely to use modern FP methods	Accessing modern contraceptive methods postpartum to space out future pregnancies
Impact evaluation of the Urban Health Initiative in urban Uttar Pradesh, India	Pranita Achyut, Aimee Benson, Lisa M Calhoun, Megan Corroon, David K Guilkey, Essete Kebede, Peter M. Lance, Anurag Mishra, Priya Nanda, Rick O'Hara Ranjit Sengupta, Ilene S. Speizer, John F. Stewart, Jennifer Winston	2016	N/A	1. Promotion of FP through the use of billboards, posters, wall hangings, brochures, television, training providers, providing 2. Information Education and Communication materials and thorough Community Health Workers- who visit every home in slums of target cities to offer information about FP methods, counsel on postpartum FP, accompany women to health facility, refer women to health facility, provide short-term methods (pills and condoms)
Determinants of non-use of family planning methods by young married women (15-24 years) living in urban slums of Uttar Pradesh	Kriti Yadav, Monika Agarwal, Jai Vir Singh, Vijay Kumar Singh	2017	1. Around 56.9% of women cited embarrassment, hesitancy, shyness for non-use of FP 2. Around 77.6% of women with primary level education or no education were found to be non-users 3. Around 71.6% of women who were unemployed were non-users of contraceptives 4. Around 83.9% of women whose husbands had unfavorable attitudes towards FP were non-users 5. Around 77.6% of women with primary level education or no education were non-users 6. In 95.9% of women who had no autonomy in their family were non-users of contraceptives	Use of contraceptives

			7. Around 64.4% of contraceptive non-users did not have knowledge of contraceptive methods	
Mobile technology for increasing postpartum family planning acceptability: the development of a mobile-based (mHealth) intervention through a dedicated counsellor - a pilot innovative study conducted in a tertiary teaching hospital of Agra, Uttar Pradesh	Nidhi Gupta, Akanksha Gupta, Sunita Bhagia, Saroj Singh	2018	1. Only 61.2% of couples had knowledge of the spacing methods available 2. Compared to women with 10th standard schooling or higher that practice of spacing methods was 2.74 times higher than among those women with illiterate or had schooling up to 5th standard	PPFP methods offered: Intrauterine contraceptive device, female sterilization, male sterilization, depot medroxyprogesterone acetate (DMPA), Condom, Lactational amenorrhea method (LAM), Progestin-only pill/ oral contraceptive pill
Knowledge, source and practice of spacing methods of contraception among eligible women of Varanasi slums	Payal Singh, Akash Mishra, Ravindra Nath Mishra	2019	1. Only 61.2% of couples had knowledge of the spacing methods available 2. One-third of couples did not practice spacing methods due to desire for child or lack of motivation 3. Compared to women with 10th standard schooling or higher that practice of spacing methods was 2.74 times higher than among those women with illiterate or had schooling up to 5th standard	Contraceptive Use
Unmet need for family planning services among young married women (15-24years) living in urban slums of India (BMC women's health (2020) 20 1 (187))	Kriti Yadav, Monika Agarwal, Mukesh Shukla, Jai Vir Singh, Vijay Kumar Singh	2020	1. In 69.2% of women embarrassment, hesitancy, shyness, were reasons for unmet need for contraception 2. In 45.6% women faced opposition to contraceptive use, due to expectation of early childbearing by husband and family members 3. In 87.6% of women of scheduled caste/ scheduled tribe category had an unmet need for FP services 4. Unmet need for FP significantly higher among illiterate women 5. Unmet need high among unemployed women and women from lower and upper lower SES	Use of contraceptives and FP
Revisiting Post-Sterilization Regret in India	Gargi Pal, Himanshu Chaurasia	2020	Post-sterilization regret in 7% of women and factors associated with regret: sex composition of children- women who only had daughters had higher regret than those with only sons	Female Sterilization
Dynamics of utilization of modern contraception by the females of slums of Noida	Nidhi Pundhir, Arindam Das	2021	1. Women with lower education levels were less likely to use modern contraceptives 2. women practicing religions besides Hinduism are less likely to use modern contraception 3. women from Scheduled Caste less likely to use modern contraceptives compared to Other Backward Castes 4. Women with 3-4 children or more, were less likely to use modern contraception	Modern contraception

Appendix C: Data Extraction Table: Methodologies

The data extraction table is divided by methodology for each article

Articles	Author(s)	Methodology	Barriers faced by Women in Study	Reproductive Services Accessed by Women
Perceived reproductive morbidity and health care seeking behaviour among women in an urban slum	Suneela Garg, Meenakshi, M.M.C. Singh, Malti Mehra	Qualitative: interview	<ol style="list-style-type: none"> 1. History of abortions was found to be a significant predictor of occurrence of vaginitis and Pelvic Inflammatory Disease (PID) 2. Women who did not maintain perineal hygiene were more likely to report lower reproductive tract infections 3. Use of intrauterine device and sterilization was found to be significant predictors of symptoms of RTI/STI 4. Only 27.8% of those experiencing a reproductive health problem sought treatment 	N/A
Do women really have a voice? Reproductive behavior and practices of two religious' communities	Sabiha Hussain	Qualitative: interviews, case studies	<ol style="list-style-type: none"> 1. Due to socio-economic and cultural reasons it was considered essential to give birth to a son, even if the mother did not want any more children 2. Women felt the government services at the health centers for FP were inadequate and the visits by healthcare workers were irregular 3. Men disapproved of their wives use of contraceptives and threatened them with physical violence if women chose to use FP 4. Women were pressured by their husbands and family members to have sons and were blamed if they gave birth to a girl 	Use of contraceptives and FP
Knowledge, awareness and extent of male participation in key areas of reproductive and child health in an urban slum of Delhi	M Dutta, M.C. Kapilasharmi, V.K. Tiwari	Qualitative: interviews	<ol style="list-style-type: none"> 1. More than half of men interviewed did not think it was necessary to disclose symptoms of sexually transmitted diseases to their wives 2. In 63 % of husbands wanted sons even when their wives were not interested due to, family lineage, economic support, or performance of last rites 3. Decision on time to have first child, number of children, choice of contraceptive methods, adopting a contraceptive, time of contraceptive adoption and length of its use, unwanted pregnancy and abortion were decisions taken by husband and women had little right to take independent decisions on these matters 4. In 94% of husbands were aware abortion is legal, 62% of them did not approve of abortion due to moral and religious grounds, only 10% of men cited concern for women's health for not approving abortion 5. Hardly any awareness amongst male and female respondents about use of condoms to prevent STIs 	Contraceptive and abortion use

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Attitude of women towards family planning methods and its use - study from a slum of Delhi.	Kumar S, Priyadarshni A, Anand K, Yadav BK	Qualitative: semi-structured questionnaire	<ol style="list-style-type: none"> 1. More than 90% subjects said that weakness is the main side effect from OCP followed by irregular menstruation (55.5%) and headache 2. In 85 % of cases women narrated weakness after tubectomy 3. In 88.8% of cases after CuT women had backache, cramps, and weakness 4. Two-thirds of women did not use FP because they wanted more kids or a son 5. Many did not prefer FP due to side effects and other health problems 6. In 15% of cases the husband did not allow use of FP 7. In 5% of cases women were unaware of FP methods 	Contraceptive use = OCP, CuT, Tubectomy
Emergency contraception in women of slums in Northern India	Sonia Puri, N.K Goe, Alka Seghal, Dinesh Walia, Chetna Mangat	Mixed methods: cross-sectional, semi-structured questionnaire	<ol style="list-style-type: none"> 1. The correct time span in which ECP should be used was not known by any participants 2. The source of availability of ECP was known to 1.4% of women who knew it was available at the chemist- despite ECP being accessible at government health institutions free of cost and over the counter without doctor's prescription 	Emergency contraception pill (ECP)
Women's Reproductive Health in Slum Populations in India: Evidence From NFHS-3	Indrajit Hazarika	Quantitative: cross-sectional survey, structured questionnaire	<ol style="list-style-type: none"> 1. Less than half of women from slum areas were currently using contraceptive methods 2. One-fourth of women from slums considered sterilization as the preferred method of contraception and did not use pills, IUDs and condoms 3. Discontinuation rate of contraceptive use was higher among women from slum areas compared to non-slum areas 4. Use of modern contraception was significantly lower among slum residents compared to non-slum counterparts 5. Use of contraceptives decreased with age of respondents 6. women with lower level of education not as likely to use contraceptives 7. Women in slums were dependent on reproductive health services from the public health system which have inadequate medical and non-medical manpower 	Contraceptive Use
Family planning use among urban poor women from six cities of Uttar Pradesh, India	Ilene S. Speizer, Priya Nanda, Pranita Achyut, Gita Pillai, David K Guilkey	Qualitative: interview	<ol style="list-style-type: none"> 1. Participants from slums are more likely to use sterilization or be non-users of contraception compared to non-slum participants 2. Less educated women living in slums are significantly more likely to have an unmet need than more educated women living in slums in 3/6 cities 3. Lack of variability in method use among slums dwellers means high unmet need and suggests reliance on free, public-sector sterilization once women complete childbearing 	Use of Modern contraceptives
Socio demographic determinants and knowledge, attitude, practice: survey of family planning	Vasundhara Sharma, Uday Mohan, Vinita Das, Shally Awasthi	Quantitative: cross-sectional	<ol style="list-style-type: none"> 1. Use of FP methods increased amongst with education levels and SES of women in the study as these women are more likely to be aware and take care of their health 2. Muslim women in the study who did not use FP was due to religious beliefs and husband's decision for non-acceptance 3. women of higher age and parity used FP methods more than lower aged women and parity due to couples only using FP methods once they have reached desired family size 	FP Methods

			which usually corresponds to older ages and higher parities of women	
The silent epidemic of reproductive morbidity among ever married women (15-49 years) in an urban area of Delhi	Nidhi Bhatnagar, Jyoti Khandekar, Amarjeet Singh, Sonal Saxena	Mixed methods: cross-sectional study, semi-structured interview, biological sample collection	<ol style="list-style-type: none"> 1. Contraceptive (modern and traditional methods) morbidity reported by 11.2% of ever users in the study where menstrual problems was the most common morbidity reported 2. gynecological morbidity (menstrual disorders, RTI) seen in 31.3% of study subjects 	<ol style="list-style-type: none"> 1. Of the subjects who perceived contraceptive morbidity to interfere with their routine work, 87.7% sought treatment at a health centre and 65.1% of those complied with treatment 2. z and 66.1% of those complied with treatment - socio-cultural factors put a taboo on women to seek treatment for gynecological conditions and gynecological morbidity is seen as chronic and part of womanhood which explains why women don't seek treatment and comply
Assessment of knowledge of contraceptives and its practice among married women in urban slums of Lucknow District	Rizvi A. Mohan U, Singh SK, Singh VK	Qualitative: descriptive cross-sectional study, interviews	<ol style="list-style-type: none"> 1. Common reason for contraception discontinuation cited by women was side effects and health concerns 2. Common reasons for not using contraception was lack of knowledge about methods and husband's negative attitude towards contraception methods 	Use of contraceptives
The effect of family sex composition on fertility desires and family planning behaviors in urban Uttar Pradesh, India.	Lisa M Calhoun, Pryia Nanda, Ilene S Speizer, Meenakshi Jain	Qualitative: interviews	<ol style="list-style-type: none"> 1. Family sex composition is associated with FP use; women without living children and those with no sons but one or more daughters are less likely to be modern users than nonusers of FP as compared to women that have both sons and daughters but more daughters than sons- once women have the number of sons they desire; they will rely on modern methods or any FP method 2. women who have more sons are more likely to use sterilization as a FP method compared to women with more daughters 3. Traditional method use, and condom use highest amongst women with no living children and women with 0 sons but one or more daughters 	FP accessed included: modern FP (male/female sterilization, IUD, pills, condoms, injections, implants, lactational amenorrhea) traditional FP (rhythm, periodic abstinence, withdrawal)
Demand generation activities and modern contraceptive use in urban areas of four countries: a longitudinal evaluation	Ilene S Speizer, Meghan Corroon, Lisa Calhoun, Peter Lance, Livia Montana, Pryia Nanda, Davild Guilkey	Quantitative: longitudinal data collection surveys	N/A	<ol style="list-style-type: none"> 1. Initiatives to encourage modern contraceptive use (female/male sterilization, IUD, implants, injectables, oral contraceptive pills, emergency contraception, condoms, Lactational Amenorrhea Method, spermicides, diaphragms, dermal patch 2. Indian women who recalled exposure to a Community Health Worker and to any UHI television program were significantly more likely to be modern method users at midterm than women who did not recall such exposure
Understanding patterns of temporary method use among urban women from Uttar Pradesh, India	Janine Barden-O'Fallon, Ilene S Speizer, Lisa M Calhoun, Livia Montana, Pryia Nanda	Mixed Methods: questionnaire, interview	Most common reasons for discontinuation of temporary method (modern or traditional) = wanting a more effective method, non-use of any methods, and using multiple methods	<p>Women using contraceptive methods =</p> <ol style="list-style-type: none"> 1. modern methods (condoms, pills, IUD, injectables) 2. traditional methods (periodic abstinence/rhythm or withdrawal method) 3. multiple methods (any combination of condoms, traditional, various modern methods)
Predictors to use of family planning methods among women of Allahabad District, Uttar Pradesh	Shama Shaikh, Shraddha Dwivedi	Quantitative: cross-sectional study, questionnaire	<ol style="list-style-type: none"> 1. women had a desire for more children 2. women wanted to have a son 3. Around 37.8% of women did not know about contraceptives 4. the husband or in-laws of women were opposed to contraceptive practices was the largest barrier to use of FP 5. women and husbands with no education used FP less than women with primary, middle and secondary or higher education 	FP Services

			6. women who did not own a TV were not as likely to use FP than women who did	
Factors affecting unmet need for family planning in married women of reproductive age group in urban slums of Lucknow	Anjali Pal, Uday Mohan, M Z Idris, Jamal Masood	Quantitative: cross-sectional study, interview survey	Unmet need for FP due to: 1. unmet need for FP high among women in age group 15-19 years 2. women with fewer number of sons had high unmet need 3. high unmet need amongst women whose husbands discouraged them to use FP or women who thought their husband disapproved of FP 4. unmet need high amongst illiterate non-working women 5. unmet need high amongst women who never discussed FP with husband	Family Planning methods
Reproductive morbidity and health care seeking behaviour among females of urban slums in a city of Northern India	Kanchan Lata, Monika Agarwal, J.V Singh, Anish Khanna, V.K Singh	Qualitative: descriptive cross-sectional study, interviews	1. Women who reported any gynecological problems, less than half of the women sought treatment- private hospitals (48.6%) were more preferred place of treatment, followed by government hospitals (28.9%) 2. Menstruation related problems, women who reported symptoms related to it, less than 60% of women sought treatment for their problems 3. Women who reported gynecological or menstrual problems cited lack of money, followed by lack of knowledge about the health facilities for not seeking treatment 4. Women suffering from gynecological problems reported shame as another reason for not seeking treatment	Seeking treatment for reproductive morbidity
Exploring vaginal ring acceptability for contraception and sexually transmissible infection protection in India: a qualitative research study.	Udita Das, Mamta Sharma, Maggie Kilbourne-Brook, Patricia S Coffey	Qualitative: focus groups	1. Wear Patterns- unmarried women were less sure about continuous use and wanted to take ring out during menses or during sex if the man had a problem with it 2. Male Partner Acceptability- women said they need to discuss the product with the men who would need to be convinced about the product before allowing usage since the man is the head of the household and controlled the finances 3. Willingness to Pay- All women except those using traditional methods felt they couldn't pay more than US \$1.63 (exchange rate from Feb 2013)	Vaginal Ring
Prevalence of induced abortions and contraceptive use among married women in an urban slum of Delhi, India	Meenakshi Bhilwar, Panna Lal, Nandini Sharma, Preena Bhalla, Ashok Kumar	Mixed methods: cross-sectional study, semi-structured questionnaire	1. High rates of self-reported induced abortion among women living in an urban slum 2. Low usage of contraception and low autonomy in contraceptive decision making - the decision to use contraceptives were governed by participants husbands and mothers-in-law most of the time	Spontaneous, induced, unsupervised medical termination through pills and medically terminated abortions and contraceptive usage
Contraceptive practices in Muslim-predominated slums of Aligarh, Uttar Pradesh	Arslan Neyaz, Malik S Ahmed, Priyanka C Sahu	Mixed methods: cross-sectional study, semi-structured questionnaire	Underutilization of FP services in public sector when compared to the private sector, only 23.6% of couples utilized government facilities for procurement of contraceptives	Contraceptives used between couples: temporary methods= condoms, oral contraceptive pill, IUCD and permanent methods = female sterilization
Acceptability of home-assessment post medical abortion and medical abortion in a low-resource setting in Rajasthan, India. Secondary outcome analysis of a non-inferiority randomized controlled trial	Mandira Paul, Kirti Iyengar, Birgitta Essen, Kristina Gemzell-Danielsson, Sharad D. Iyengar, Johan Bring, Sunita Soni, Marie Lingberg-Allvin	Quantitative: randomized-controlled non-inferiority trial	N/A	Medical Abortion (Mifepristone and Misoprostol)
Integration of family planning with maternal health services: an opportunity to increase	Pranita Achyut, Anurag Mishra, Livia	Mixed Methods: interviews, survey	1. Lack of information provided to women from health provider about utilizing family planning methods postpartum women	Accessing modern contraceptive methods postpartum to space out future pregnancies

postpartum modern contraceptive use in urban Uttar Pradesh, India	Montana, Ranajit Sengupta, Lisa M Calhoun, Priya Nanda		2. women who did not receive FP information during third trimester ANC were less likely to use modern FP methods	
Impact evaluation of the Urban Health Initiative in urban Uttar Pradesh, India	Pranita Achyut, Aimee Benson, Lisa M Calhoun, Megan Corroon, David K Guilkey, Essete Kebede, Peter M. Lance, Anurag Mishra, Priya Nanda, Rick O'Hara Ranjit Sengupta, Ilene S. Speizer, John F. Stewart, Jennifer Winston	Qualitative: longitudinal design, interviews	N/A	1. Promotion of FP through the use of billboards, posters, wall hangings, brochures, television, training providers, providing 2. Information Education and Communication materials and thorough Community Health Workers- who visit every home in slums of target cities to offer information about FP methods, counsel on postpartum FP, accompany women to health facility, refer women to health facility, provide short-term methods (pills and condoms)
Determinants of non-use of family planning methods by young married women (15-24 years) living in urban slums of Uttar Pradesh	Kriti Yadav, Monika Agarwal, Jai Vir Singh, Vijay Kumar Singh	Quantitative: cross sectional study, questionnaire	1. Around 56.9% of women cited embarrassment, hesitancy, shyness for non-use of FP 2. Around 77.6% of women with primary level education or no education were found to be non-users 3. Around 71.6% of women who were unemployed were non-users of contraceptives 4. Around 83.9% of women whose husbands had unfavorable attitudes towards FP were non-users 5. Around 77.6% of women with primary level education or no education were non-users 6. In 95.9% of women who had no autonomy in their family were non-users of contraceptives 7. Around 64.4% of contraceptive non-users did not have knowledge of contraceptive methods	Use of contraceptives
Mobile technology for increasing postpartum family planning acceptability: the development of a mobile-based (mHealth) intervention through a dedicated counsellor - a pilot innovative study conducted in a tertiary teaching hospital of Agra, Uttar Pradesh	Nidhi Gupta, Akanksha Gupta, Sunita Bhagia, Saroj Singh	N/A	1. Many clients did not have mobile phones as they were unable to afford one 2. Most mobile numbers given to the counselor who was to follow up with the woman, belonged to the husbands who were at work during the daytime and were not able to communicate with their wives 3. Some husbands did not allow their wives to talk directly on the phone with the counselor	PPFP methods offered: Intrauterine contraceptive device, female sterilization, male sterilization, depot medroxyprogesterone acetate (DMPA), Condom, Lactational amenorrhea method (LAM), Progestin-only pill/ oral contraceptive pill
Knowledge, source and practice of spacing methods of contraception among eligible women of Varanasi slums	Payal Singh, Akash Mishra, Ravindra Nath Mishra	Quantitative: cross-sectional study	1. Only 61.2% of couples had knowledge of the spacing methods available 2. Compared to women with 10th standard schooling or higher that practice of spacing methods was 2.74 times higher than among those women with illiterate or had schooling up to 5th standard	Contraceptive Use
Unmet need for family planning services among young married women (15-24years) living in urban slums of India (BMC women's health (2020) 20 1 (187))	Kriti Yadav, Monika Agarwal, Mukesh Shukla, Jai Vir Singh, Vijay Kumar Singh	Quantitative: cross-sectional, questionnaire	1. In 69.2% of women embarrassment, hesitancy, shyness, were reasons for unmet need for contraception 2. In 45.6% women faced opposition to contraceptive use, due to expectation of early childbearing by husband and family members 3. In 87.6% of women of scheduled caste/ scheduled tribe category had an unmet need for FP services 4. Unmet need for FP significantly higher among illiterate women	Use of contraceptives and FP

			5. Unmet need high among unemployed women and women from lower and upper lower SES	
Revisiting Post-Sterilization Regret in India	Gargi Pal, Himanshu Chaurasia	Quantitative: cross-sectional	Post-sterilization regret in 7% of women and factors associated with regret: sex composition of children- women who only had daughters had higher regret than those with only sons	Female Sterilization
Dynamics of utilization of modern contraception by the females of slums of Noida	Nidhi Pundhir, Arindam Das	Qualitative: interview	<ol style="list-style-type: none"> 1. Women with lower education levels were less likely to use modern contraceptives 2. women practicing religions besides Hinduism are less likely to use modern contraception 3. women from Scheduled Caste less likely to use modern contraceptives compared to Other Backward Castes 4. Women with 3-4 children or more, were less likely to use modern contraception 	Modern contraception