Sex-Selective Abortion in Nepal: It's Influencing Factors, A Literature Review

Dipti Acharya

Nepal

55th Master of Public Health/ International Course in Health Development

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Vrije Universiteit Amsterdam (VU)

Factors Influencing Sex-selective Abortion in Nepal

A thesis submitted in partial fulfillment of the requirement for the degree of Master of Public Health

by

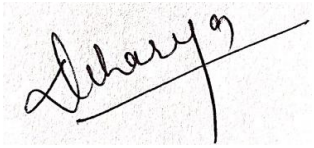
Dipti Acharya

Nepal

Declaration:

Where other people's work has been used (either from a printed source, internet or any other source) this has been carefully acknowledged and referenced in accordance with departmental requirements.

The thesis **"Sex-Selective Abortion in Nepal: It's Influencing Factors, A Literature Review"** is my own work.

Signature: 

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ABBREVIATIONS

SSA	Sex-Selective Abortion
SR	Sex-Ratio
SRB	Sex Ratio at Birth
PSS	Prenatal Sex Selection
USG	Ultrasonography
LIC	Low Income Country
HDI	Human Development Index
GDP	Gross Domestic Product
GNI	Gross National Income
TFR	Total Fertility Rate
CPR	Contraceptive Prevalence Rate
MOH	Ministry of Health
MOHP	Ministry of Health and Population
DOHS	Department of Health Survey
NMC	Nepal Medical Council
NNC	Nepal Nursing Council
NAMC	Nepal Ayurvedic Medical Council
NHPC	Nepal Health Professional Council
NPC	Nepal Pharmacy Council
NHRC	Nepal Health Research Council
WHO	World Health Organization
NDHS	National Demographic and Health Survey
CREHPA	Center for Research on Environment, Health, and Population Activities
UNFPA	United Nations Population Fund
FCHV	Female Community Health Volunteer

NPR	Nepalese Rupees
VDC	Village Development Committee
IDI	In-depth Interview
SRHR	Sexual and Reproductive Health and Rights
CHE	Current Health Expenditure
OOP	Out of Pocket
CVS	Chorionic Villi Sampling
ICPD	International Conference on Population and Development
VU	Vrije Universiteit
MSI	Marie Stopes International
CEDAW	Convention on the Elimination of all Forms of Discrimination Against Women
MDG	Millenium Development Goal
NGO	Non-Governmental Organizations

GLOSSARY

- **Sex-Selective Abortion** is the abortion done based on the predicted sex of the baby(1).
- **Sex Ratio at Birth (SRB)** is the number of male born per 100 females(2).
- **Son Preference** is an attitude and behavior where sons are valued more than daughters(3).
- **Unsafe Abortion** means the abortion done either by the unskilled provider or provided in an environment that lacks certain medical, or both(4).
- **Dowry** is the payment usually by cash or kind from the bride's family to the groom's family during marriage or post-marriage(5).
- **Amniocentesis** is the process of inserting a hollow needle into the amniotic sac through the abdomen to withdraw amniotic fluid samples that contain fetal cells(6).
- **Chorionic Villus Sampling (CVS)** is done to detect the genetic defects in the fetus by removing a small piece of chorionic villi (placental tissue) from the uterus(6).
- **Patrilocal Exogamy** where sons stay in their parent's home and support his family financially while daughters are supposed to shift to their in-laws home(7).
- **Clandestine** means a procedure done secretly by untrained or unregistered providers(8).

ABSTRACT

Introduction

Sex-selective abortion (SSA) is an existing public health issue in most of the Asian countries and emerging public health concern in Nepal. Increased SSA leads to an accelerated sex-ratio (SR) imbalance. This thesis aims to analyze factors influencing SSA in Nepal and explores the best possible practices in order to provide recommendations to MOH and policymakers.

Methodology

Literature review and desk study were conducted. A. I Mundigo's analytical framework was modified and used to identify and analyze the various factors.

Results

Women's education, the expectation of small family size, easy access and availability of sex-detection technology, legislation, and willingness of providers were identified to be the major factors that influenced SSA in Nepal. Along with that, social (gender preferences, norms and expectations, stigma), economic, religious and cultural factors were also found to be associated with son preference and sex selection.

Discussion and Conclusion

SSA is the outcome of son-preference practices which is in turn influenced by various factors. Son preferences are mostly seen in patriarchal societies where males have a greater socio-economic, cultural and religious value. It is essential to realize the consequences of imbalanced SR and to prioritize initiative action accordingly.

Recommendations

Strong law enforcement, policy development, and awareness activities are required to deal with the complex issue of SR imbalance. Further research-based evidence is needed to get to the heart of son-preference issue and explore any additional factors triggering SSA in Nepal.

Key Words

Sex-selective abortion, Son preference, Sex determination, sex-selection, South Asia, Nepal

Word Count: 13079

INTRODUCTION

[After a long hour of labour pain, a mother gives birth to a female child and when the nurse reveals the sex of the newborn to mother, her joy turned into sadness. The sadness of having a daughter was worse than her labour pain. She did not smile even once for her healthy born baby and her successful delivery. All of us in the delivery room figured out that her despair was the sign of anticipating a son. A few hours later, my friend shared with me that the mother offered to kill her own newborn child because she was a '**girl**'.]

I am Dipti Acharya from Nepal and this is a true story that I came across when I was working in Nepal as a Nurse. This experience provided me an insight into son preference that was deep-rooted in the Nepalese society. The woman was from Parsa district of Nepal near the border of India and she was a mother of five girls. Later, she was counseled by hospital staff, who prevented any misdeeds at that time. However, there are many other similar unheard/unseen stories. When a girl is born they are treated as an economic burden to the family but a boy, on the contrary, is regarded as a source of income and their security for old age. Sex-Selective abortion (SSA) is a serious public health issue seen in the Asian region where 1.7 million female births were missing in the year 2015 alone(9). It creates a serious form of gender imbalance in the society and country resulting in violation of human rights such as girls trafficking, abduction, forced marriage and domestic violence(10).

My interest in this topic grew stronger when I started working at Marie Stopes International/ Nepal (MSI) as a Quality Technical Assurance Officer. MSI provides abortion and family planning services through static clinics and outreach services. During my job, I had seen many couples who waited for three months so that they could identify the sex of the fetus and then, opt for abortion services if it was a girl. SSA along with prenatal sex-detection is prohibited in Nepal and MSI does not provide any SSA services either. However, clients go for unsafe abortion and being a girl, my heart wrenches when I see that girls are killed before they are born because of the only reason that they are a girl. Since Nepal is a patriarchal country and there are many socio-cultural and religious issues, in this study, my aim is to identify main factors that influence sex-selective abortion in Nepal so that I can strengthen my knowledge and collect some evidence to give the recommendation to the policymakers.

Organization of Thesis

In this study, there are a total of 6 Chapters. **Chapter 1** provides background information in the context of Nepal like geographic and demography information, socioeconomic situation, literacy, political and administrative structure, health situation and sexual and reproductive health profile and health system. **Chapter 2** describes the problem statement, justification, objectives, methodology and the analytical framework chosen. **Chapter 3** outlines the factors which influence sex-selective abortion in Nepal and **Chapter 4** will present best practices to reduce sex-selective abortion in other countries. Similarly, **Chapter 5** presents a discussion followed by conclusions and recommendations in **Chapter 6**.

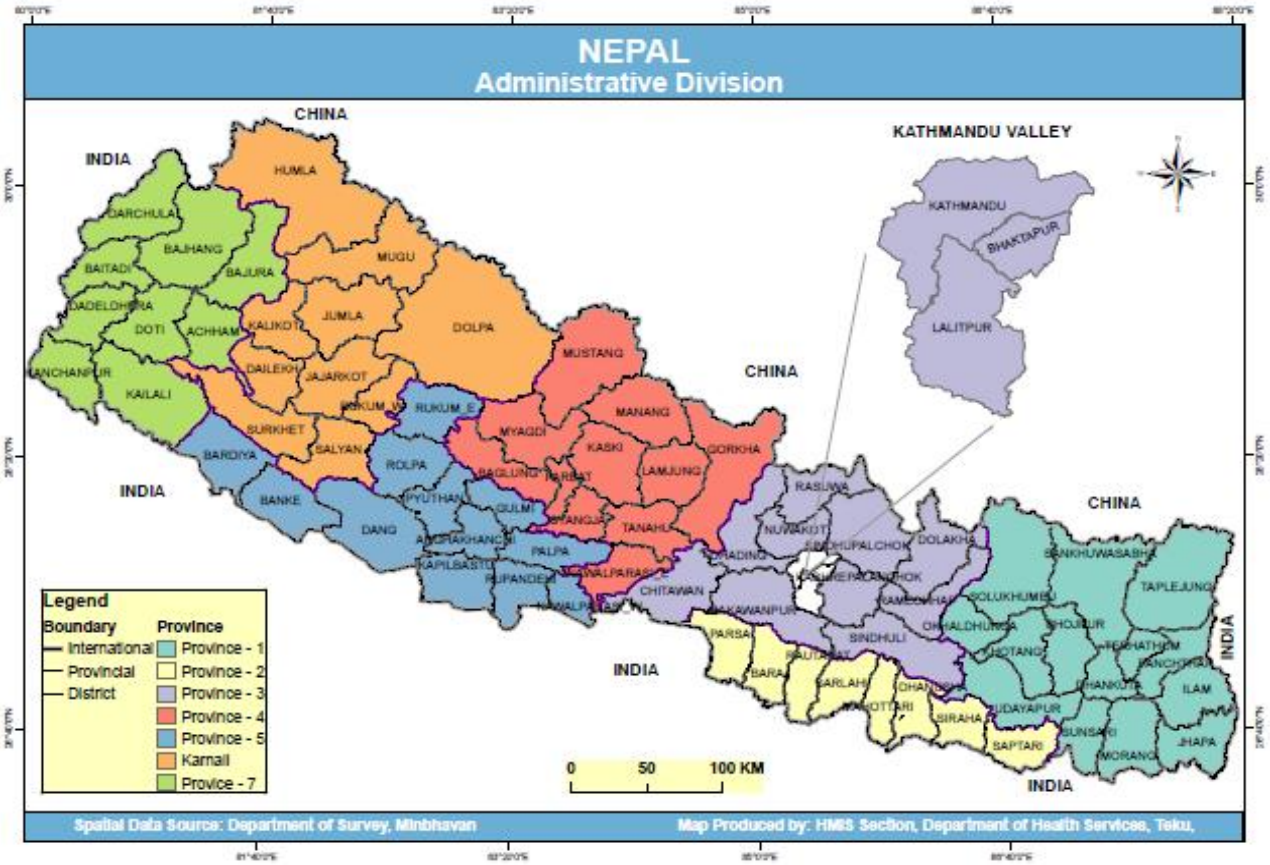
CHAPTER 1 BACKGROUND

This chapter includes background information about the demography, health system, socio-economic situation, and health problems, including the sexual and Reproductive health profile of Nepal.

1.1 GEOGRAPHIC AND DEMOGRAPHIC INFORMATION

Nepal is a small landlocked country with a total area of 147,181 square kilometers sandwiched between China and India(11). It is a low-income country (LIC) located in South East Asia and bordered by China from north and India from east, south, and west with an open border of 1,750 kilometers(12). It has a unique geographical distribution as in 3 agro-ecological zones: the mountains, the hills and the Terai (southern plains), each of which is expanded from east to west(12). It is extended from 60 meters above the sea level to the highest peak of the world Mt. Everest at 8848 meters. It is also called the land of Himalayas because eight among the top ten mountains lie in Nepal including 240 peaks above 6096 meters(13).

Figure 1: Map of Nepal

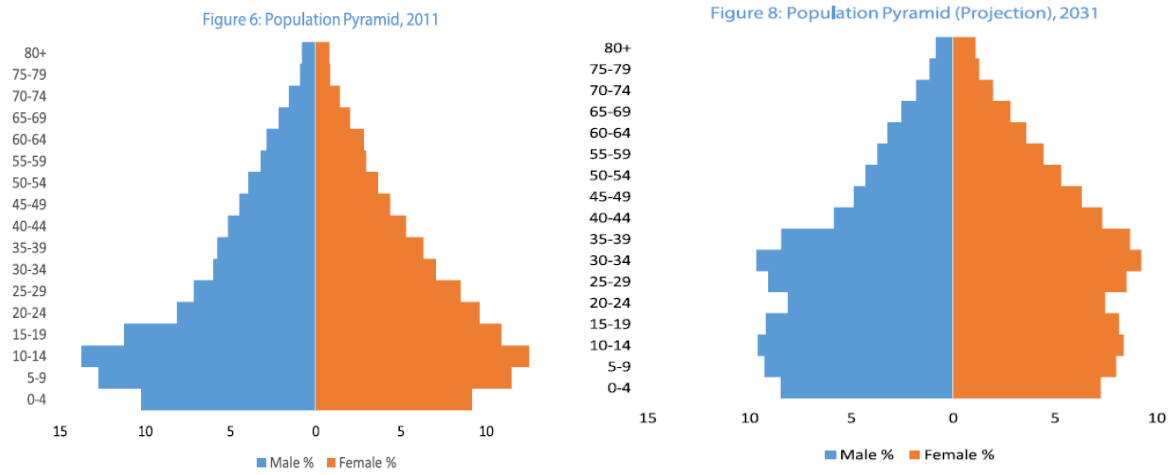


Source: Annual Report 2016/2017, Department of Health Services(14).

The country's total population was 28.08 million in 2018 with the population growth rate of 1.7 percent annually(11,15). Among the total population, 9.2 million were between the age group 15 to 64 years and more than half of the total population (51.4%) were females(15,16). The population density is 195.93 people per square km of land area(15). Nearly, half of the total population lives in the Terai region, also known as the breadbasket for the country and beside that 19.3 percent lives in urban areas and the rest live in rural areas(12,16).

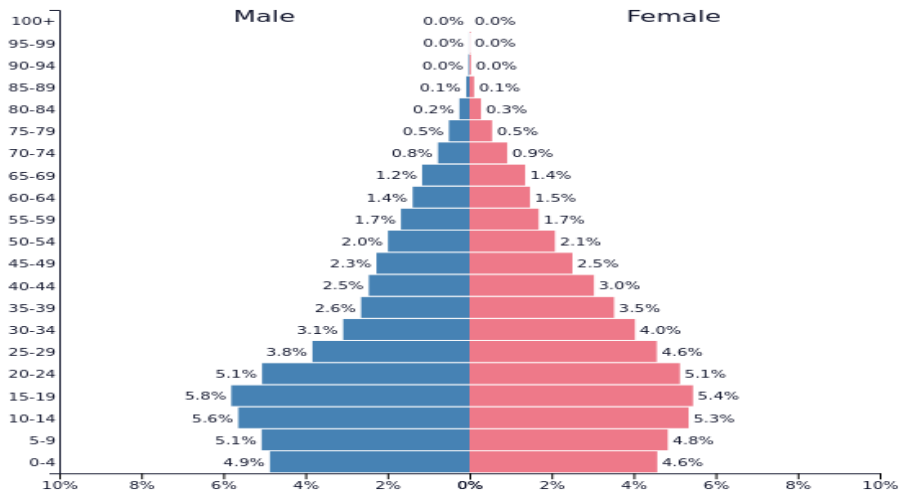
The average life expectancy at birth was estimated to be 70.6 in the year 2018, 69 years for males and 72 years for females(16,17). The Sex ratio at birth (SRB) was 107 in 2018(16). The figure 2 below shows the distribution of the population according to age range in the year 2011 and its projection for the year 2031 and figure 3 shows the population pyramid of 2018 which reflects the young population between 10-24 years at the most substantial proportion of the country's population.

Figure 2: Population Pyramid of 2011 and projection for 2031



Source: Population Situation Analysis of Nepal(18).

Figure 3: Population Pyramid of 2018



Source: Population Pyramid.net(19)

1.2 SOCIO-ECONOMIC SITUATION

Nepal is a Hindu country with the majority (81.3%) of the population following Hinduism. Nepal has an ethnically diverse population of 126 different castes who follow 10 different religion and speak 123 different languages(12,20). The Nepali language stands as an official language of the country which is used by 44.6% of the total population(20).

Nepal ranked 149th out of 189 countries with the Human Development Index (HDI) value of 0.574 according to 2018, UNDP report of HDI(16). The current Gross Domestic Product (GDP) was US$ 28.81 billion in 2018 with the GDP growth rate of 6.3 percent annually(11). Fifteen percent of the total population lives below the income poverty line of Purchasing Power Parity (PPP) $ 1.90 per day and the poverty headcount accounts for 35.3 percent(16). The Gross National Income (GNI) per capita (2011 PPP $) is 2,47(16). Most of the economic activities are centered towards the Terai region and also in the capital city, Kathmandu(12).

1.3 LITERACY RATE

The literacy rate increased in ten years period from 54.1 percent in 2001 to 65.9 percent in 2011 with the highest literacy (86.3 percent) in the capital district Kathmandu as compared to lowest (47.8 percent) in Humla district (one of the very remote districts in the country). Literacy rate for the male is 17.7 percent higher than that of the female (75.1% vs 57.4%)(20).

1.4 POLITICAL AND ADMINISTRATIVE STRUCTURE

In the year 2008, Nepal was declared as a Federal democratic republic country by newly established Constituent Assembly and assigned its first president after a long decade of civil war between government and Maoists(21). The new constitution was implemented in 2015, replacing the old constitution(22). Previously, it had five development regions with 75 districts but after the promulgation of the new constitution in 2015, it changed into seven administrative provinces with 77 districts and 744 municipalities (including urban and rural). It has a three-tier system as the Federal, Province and local level with each state divided into urban municipalities as (Nagarpalika) and rural municipalities as (Gaunpalika)(22,23).

1.5 HEALTH SITUATION AND SEXUAL AND REPRODUCTIVE HEALTH PROFILE

Within the period of 1990-2015, Nepal has shown remarkable progress in the improvement of the health status of people. Despite that progress, still, the country is facing the triple burden of disease. The communicable disease, on one hand still persists and cause disability and death in large proportion whereas; the non-communicable disease (NCD), on the other hand, is rising to be a major public health concern. Apart from that, the situation is even catastrophic due to natural disasters like earthquakes and climate change, and other situations like road traffic accidents and injuries(24,25). Some diseases such as smallpox and poliomyelitis have been eradicated, and diseases like leprosy and trachoma are in elimination state(14).

At present, the Nepal government is committed towards FP 2020, making family planning equitable and accessible across the population(25). The total fertility rate (TFR) is 2.1 births per woman in 2018 which is reduced from 4.6 in 1996 and the contraceptive prevalence rate (CPR) is 53 percent among the age group of 15 to 49 in 2018 which was raised from 26 percent in 1996(11,26). Some signs of progress made so far since the Cairo conference are: delivery attended by skilled birth attendants increased from 9% (1996) to 58% (2016); pregnancy-related death reduced to 258 in 2015 from 660 (1995), adolescent fertility rate reduced to 88 (2016) from 127(1996) and unmet need for family planning was slightly reduced in 10 years period from 24.6% in 2006 to 23.7% in 2016(23,26).

Besides some progress on sexual and reproductive health and rights (SRHR) of Nepalese women, still, some of the malpractice exists in Nepal which deteriorates women's rights and autonomy of her own body, her dignity, and health. Some of these are Chauppadi practice (a form of discrimination, where females are sent to cowsheds during their menstruation and postpartum days), deuki practice (an ancient culture where young girls are offered to Hindu temples to gain religious benefit, practiced mostly in far western region of the country), bokshi (females are discriminated for witch crafting which is seen mainly in low caste people), dowry practice (offering money or assets to marry a daughter in a good and

wealthy family), son preference, polygamy, early widowhood, public violence against women which are accepted socially which restricts women in many ways(27).

1.6 THE HEALTH SYSTEM

Health is regarded as the fundamental rights of every citizen, as clearly mentioned in the constitution of Nepal(22). The Ministry of Health (MOH) extends leadership for the overall process of planning and program development, policy and strategy formulation, and health care delivery. It further involves functions like financing, human resource, and monitoring and evaluation. Under the MOH, the Department of Health Services (DoHS) is accountable for delivering preventive, promotive, diagnostic, curative and palliative health services among the entire population(14,28).

The health system consists of both traditional and modern medical health care system and is divided into 3 tier as primary, secondary and tertiary as shown in Annex 1 and 2(28). Generally, the first point of contact is the primary level where essential health services like promotive, preventive and some level of curative services are provided. District hospitals provide secondary level services and are also the first point of contact of primary level facilities. The tertiary level is the first referral contact of secondary level facilities, and the services are provided by zonal, sub-regional, regional and central hospitals(14,24). Primary care services through health facilities had been made accessible to all populations(14). According to the National Demographic Health Survey (NDHS) 2016, nearly half (49%) of households were within 30 minutes reach of a public health service facility(23). Mostly all kind of human resource needed in the health care system is produced in the country(14).

There are six centers in the public health system of Nepal which have their own degree of autonomy mentioned in Annex 1. Additionally, there are six professional councils that look after accreditation and regulation of schools, training sites and quality of providers. They are "Nepal Medical Council (NMC), Nepal Nursing Council (NNC), Nepal Ayurvedic Medical Council (NAMC), Nepal Health Professional Council (NHPC), Nepal Pharmacy Council (NPC) and Nepal Health Research Council (NHRC)"(14).

The current health expenditure (CHE) per capita on health is US$ 45.45 in Nepal and CHE as a percentage of GDP is 6.29 in 2016 which has been increased by 0.14% from 6.15 in 2015 (11,29). Out of pocket, (OOP) expenditure as a percent of current health expenditure was decreased to 55.44 in 2016 from that of 63.53 in 2013 (the highest among the period of 2000-2016)(11). The health sector budget allocated for the provincial governments was Nepalese Rupees (NPR) 4.18 billion(30).

CHAPTER 2 PROBLEM STATEMENT, JUSTIFICATION, OBJECTIVES, AND METHODOLOGY

This chapter provides a brief statement of the problem regarding sex-selective abortion and its consequences followed by a justification for the study. Also, objectives and methodology are discussed.

2.1 PROBLEM STATEMENT

Globally, about 56 million abortions occurred annually between the period 2010-2014, and among them, 64 percent (35.8 million) of all abortions took place in Asia only(31). The average abortion rate in Asia for the period 2010-2014 was 36 per 1000 women, which decreased from that of 41 per 1000 women between the years 1990-1994(31). A study done by World Health Organizations (WHO) and Guttmacher shows that worldwide, 25 million unsafe abortion occurred annually in the same time frame between 2010 and 2014 with 24.3 million found to occur only in developing countries(32,33). In 2012 only 6.9 million women in low and middle-income countries except Eastern Asia were treated for a complication related to unsafe abortion(8,31).

Sex-selective abortion (SSA) is a form of abortion done after determining the sex of the fetus. Prenatal sex selection (PSS) is the common term used for sex detection which is usually done by ultrasonography (USG) but also by amniocentesis and chorionic villus sampling (CVS)(1,6,9). SSA is done usually when the sex of a fetus is identified as female(34). This is a severe form of gender inequality which affects adversely in many societies resulting in 'missing girls phenomenon' or 'endangered sex' and if it continues like this, it may result in the elimination of females before their birth(1,35).

Worldwide, an estimated 125 million women who were expected to be born were missing in 2010 alone among which 62 million were from China and 43 million were from India(36,37). In addition, it was estimated that more than 30 million female births were 'missing' in the Asian Region and in 2015 alone it was 1.7 million 'missing' female birth(9). As a consequence of fewer women, trafficking, abduction, forced marriage, and sharing of brides among brothers are alarming(5,10).

SSA is an emerging public health issue among South Asian countries which leads to induced unsafe abortion resulting in maternal mortality(1,38). It creates an ethical dilemma among individual and society because, on the one hand, it is the right of women to decide her family size and to have access to legal and safe abortion services is accepted, but on the other hand SSA creates gender bias and may result in to adverse gender imbalance in the society and nation and are prohibited(1).

Sex-ratio at Birth (SRB) is the main indicator to measure gender equality(39). The significant imbalance in SRB (SRB: the ratio of male births to female births) is seen in many Asian countries like China, South Korea, Vietnam, India including Bangladesh and Nepal which is the result of PSS against female and preference for son(9,40). The normal SRB

range is 104-107 male births for every 100 female births keeping 105 at central(39,41). SRB is seen to be skewed by various reasons for gender-biased sex selection(41). The SRB imbalance does not only shows the effects on gender imbalance but also adds further demographic problems like an unequaled population structure, maternal health, and marriage squeeze(42,43). According to Kim, there are three main factors which attribute to high SRB in Asia: sex-selective abortion, low registration of female births, and a surplus of infant mortality in female(44). Some Asian countries which have skewed SRB are China (117.8 male births per 100 female births in 2011), South Korea (106 in 2009), Vietnam (111.2 in 2010)(45) and some South Asian countries are Bangladesh (109 in 2013), India (110 in 2013) and Nepal (106 in 2012)(40). However, according to National demographic health survey report of 2016, the SRB was 110.5 in 2012 as shown in **Table 1**(23). Here, although it seems Nepal is within normal SRB at the national figure in 2018 but the survey of 2016 shows a sharp increase of SRB from 97.2 in 2013 to 121.5 in 2014. The SRB was still very high than the normal level in the year 2015 (112.6) and 2016 (113.2) though it was decreased from that of 2014 as shown in **Table 1**(23).

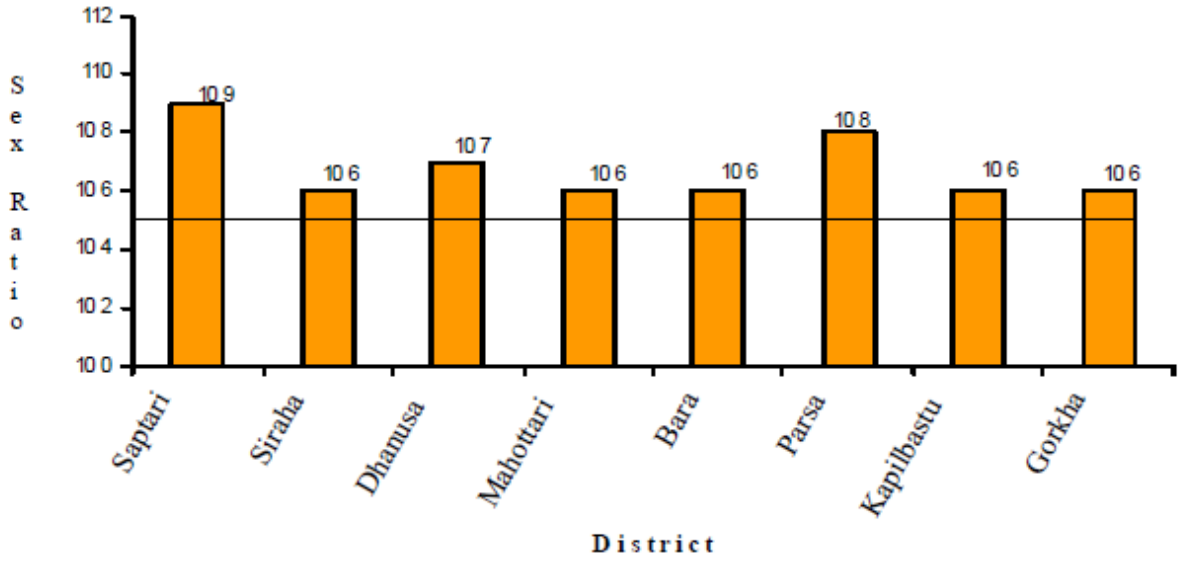
Table 1: Sex-ratio at Birth (SRB) in given calendar year

Calendar Year	Total SRB
2016	113.2
2015	112.6
2014	121.5
2013	97.2
2012	110.5

Source: National Demographic Health Survey report, 2016(23)

According to Census 2011, the number of female children was reduced by 2.2 percent than that of males among the children below the age of 10 years. It is seen that 1.7 percent of male than female children were reported in rural Nepal compared to 5.6 percent more male than female children in urban Nepal(20). In some areas of Nepal, the SSA practice appears to be progressively evident as of 12 out of Nepal's 77 districts, which constitute more than 25 percent of the total population, demonstrate SRB over 110 (per 100 females)(18). The figure below shows the seven Terai districts and one hilly district (Gorkha) of Nepal where SRB is more than the normal ratio of 105 (per 100 female) which was analyzed in 2001 Census of Nepal. This study was included because this was the only study found which discussed SRB imbalance in district level.

Figure 4: Districts where SRB was higher in Nepal's 2001 census.



Source: CREHPA, UNFPA(46)

Various studies conducted in different countries like India, Nepal, Bangladesh, Sri Lanka, and Pakistan shows that the wide presence of son preferences in South Asia does not only creates discrimination against female but also they are biased in different forms within households like nutrition, schooling and health care(47). These behaviors not only affect their health but also affect their well-being and may lead to higher mortality among females(48,49).

The determinants for SSA have been cited as: Sons have a special value in South Asian countries because they are considered as the bread-winner, sense of security, inheriting the property and carrying the family name(1). The cultural aspects are deeply rooted in sex preferences in Nepal(50). The funeral rituals which are only carried out by male members of the family especially by son; persisting dowry system; daughter as an economic burden because they don't get any return from them instead they will go to their husband's house; in contrast sons are the assets, they bring dowries along with the daughter-in-law who supports and care in their old age are some of the aspects people still consider(50). Gender inequality exists in all forms, including social, religious, economic, and cultural determinants(40).

SSA along with prenatal sex determination is strictly prohibited in Nepal and those who are found doing abortion based on sex selection are punished for 1 year of imprisonment and those who conduct early sex detection are punishable for 3-6 of months of imprisonments(34,46,50). According to the NDHS 2016, seven percent of the pregnant women who had abortion stated the reason for abortion as a sex preference(23).

2.2 JUSTIFICATION

There is an increase in the prevalence of sex-selective abortion mostly seen after the legalization of abortion in 2002 in Nepal. There are only a few numbers of studies conducted on SSA over the years in Nepal. SSA has received less attention in the field of research and policy context. Stigma, gender discrimination, fear of isolation, education, lack of awareness, cultural belief leading to sex-selective abortion forced pregnant women to opt for unsafe abortion. Though the national figure of SRB seems normal in comparison to neighboring countries as I mentioned earlier some districts have increased unnoticeably for which government concern is utmost. Despite Nepal being a co-signatory for the International Conference on Population and Development (ICPD), 1994 and making strict laws and policies, still something is lacking to control imbalanced sex ratios and unethical practices.

> *"…eliminate all forms of discrimination against the girl child and the root causes of son preference, which result in harmful and unethical practices regarding female infanticide and prenatal sex selection."*
>
> **United Nations (1994); paragraph 4.16**(6)

Regardless of knowing the effect of these practices, in the long run, the health providers are still facilitating early sex detection and conducting sex-selective abortion in private health facilities or underground being aware of the laws and policies. Lack of proper monitoring and supervision from higher authorities and the knowledge gap by the public for consequences of this act can lead to an imbalanced sex ratio in the near future. Therefore, my study aims to answer "What are the factors influencing sex-selective abortion in Nepal?" to give the recommendation to MOH and policymakers to reduce sex-selective abortion in the country.

Research Question

What are the factors influencing sex-selective abortion in Nepal?

2.3 OBJECTIVES

2.3.1 GENERAL OBJECTIVE:

To analyze factors influencing sex-selective abortion in Nepal as well as to explore the best practices from other countries so as to reduce sex-selective abortion practice in Nepal by providing recommendations to MOH and policymakers.

2.3.2 SPECIFIC OBJECTIVES:

- To explore perception and practices behind sex-selective abortion in Nepal.

- To identify socioeconomic, cultural and religious factors influencing sex-selective abortion.
- To identify health service and policy-related factors contributing to sex-selective abortion.
- To explore the best practices from other countries to reduce sex-selective abortion in Nepal.
- To make recommendations to MOH, policymakers and other stakeholders to reduce sex-selective abortion in the country.

2.4 METHODOLOGY

A comprehensive literature review was conducted to analyze and explore the aspects related to sex-selective abortion as mentioned in **Table 2**. The literature was accessed through various online databases and search engines such as Pubmed, Google Scholar, Google, Vrije University (VU) online library. Different national and international official websites were visited to retrieve the literatures and related information like Ministry of Health and Population (MOHP), DOHS, Center for Research on Environment, Health and Population Activities (CREHPA), WHO, United Nations Population Fund (UNFPA), World Bank, and Guttmacher Institute. In addition, publications from the different journal were also seen during the review such as the lancet, BMJ, BMC, Demography, Reproductive Health Matters, National Policy and Planning, and JSTOR. The keywords used were combined using the Boolean operator term 'AND' and 'OR' to limit the search. The snowballing approach was used to access the cited sources.

The inclusion criteria were published peer review articles, grey literature, online journals, books, case reports and research papers with comparative studies in the English language. The literatures were included from the period between 2000-2019 however, for some of the relevant information, literatures before 2000 years were also included. The articles from the Asian region were only included in the study because of its similar context. The exclusion criteria were unpublished articles, articles which were not available in full text and literatures that were not in the English language, except health policy which was in the Nepali language. The articles which do not meet the criteria were excluded from the study after the abstract review. Below are the keywords with different search terms used during the literature search:

Table 2: Literature Search Strategy

Sources	Keywords for search strategy		
	Background and Problem Statement	**Objective 1, 2 and 3**	**Objective 4**
Search Engine - Google - Google Scholar **Websites** - MOH Nepal - DOHS Nepal - CREPHA - WHO - UNFPA - World Bank - Guttmacher Institute **Databases** - Pubmed - VU Library **Journals** -The Lancet - BMJ - BMC - Demography - JSTOR - Reproductive Health Matters - National Policy and Planning - Demography	**Main Keywords** "Sex-Selective abortion" AND "Nepal" "Sex Preferences" AND "South Asia" **Sub Keywords** 'Sex-ratio', 'Sex-selection', 'abortion', 'sex preferences', 'factors', 'determinants', 'Influencing', 'unsafe', 'early detection', 'son preferences', 'gender', 'ultrasound', 'health system',	**Main Keywords** 'Sex-Selective abortion' OR 'Sex Preferences' AND/OR 'Nepal' AND /OR 'South Asia' **Sub Keywords** 'Sex-selection', 'education', 'decision', 'imbalance', 'abortion', Perception, 'discrimination', 'sex-ratio', 'determinants', 'Practices', 'gender', 'economic', 'religious', 'dowry', 'political', 'cultural', , 'influencing', 'social', 'factors', 'unwanted', 'contraceptives', 'poverty', 'health services', 'violence', 'missing girls', 'second-trimester abortion', 'willingness', 'caste', 'health care provider', 'family pressure', 'ultrasound', 'sex detection', 'marriage', 'legislation',	**Main Keywords** 'Best Practice' AND/OR 'Sex-Selective abortion' 'Intervention' AND/ OR 'Sex Preferences' AND/OR 'Nepal' AND /OR 'South Asia' **Sub Keywords** 'Policies' 'Legislation' Sex-selection', 'abortion', 'Awareness' Perception, 'discrimination', 'sex-ratio', 'determinants', 'Practices', 'gender', 'economic' 'Best practices', 'lesson learn', 'Intervention', 'achievements', 'country', 'progress', 'South Asia', 'Nepal', 'Social', 'Economic', 'Religious', 'cultural', 'Education'

2.5 CONCEPTUAL FRAMEWORK

This section provides brief information about the framework applied to analyze factors influencing sex-selective abortion.

There was no exact comprehensive analytical framework found that analyzes sex-selective abortion. However, Alex I. Mundigo, in "Determinants of unsafe induced abortion in

developing countries" has mentioned some reasons for unsafe abortion which are modified slightly to study for my purpose of analyzing factors influencing sex-selective abortion(51).

According to Mundigo, A.I there are two main determinants for induced abortion: **Proximate** and **Systemic determinants.** Proximate determinants include individual-level factors leading to unintended pregnancy and the decision to abort the unwanted pregnancy. It focuses on women's fertility behavior which is impacted by age, contraceptive factors and sexual violence including rape. The systemic determinants influence the process of decision making leading to termination of pregnancy in a safe or unsafe way. It includes mainly 5 factors such as Service, Social, Economic, Religious and Policy factors(51).

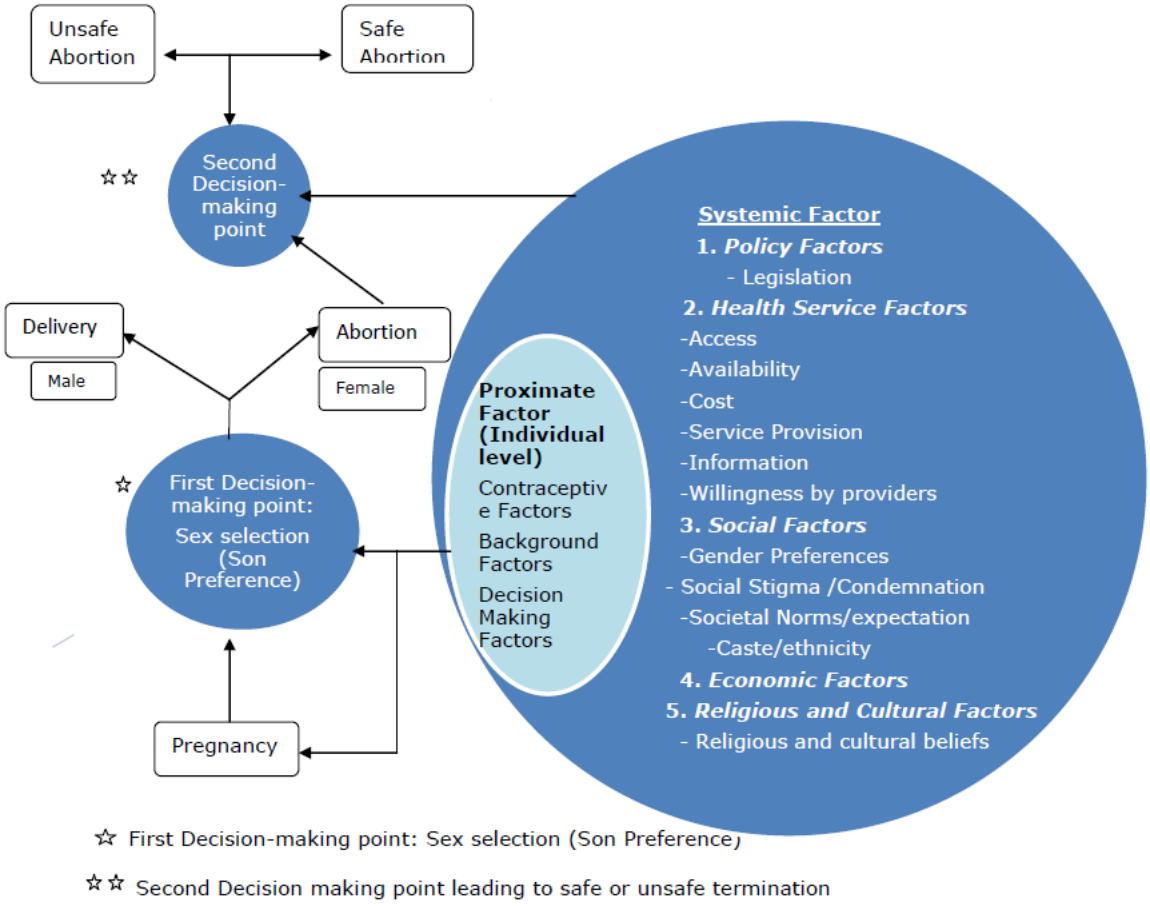
The modified framework for this study adds some of the factors according to the need of the study which is not clearly mentioned in the Mundigo's framework. Besides all the factors are analyzed which are included in Mundigo's framework. There are two main determinants as Mundigo explains in his study: Proximate and Systemic determinants. In my study, **Proximate** determinants include individual-level factors primarily leading in decision making for sex-selection which can be the result of intended or unintended pregnancy whereas **Systemic** determinants, on the other hand, influence sex selection as a secondary factor and focuses on the decision-making power of women to have a safe or unsafe abortion.

Proximate (Individual-level) determinants include **contraceptive factors** such as contraceptive non-use, misuse and failure **background factors** such as educational level, marital status and family size and composition; and **decision-making factors** which include decision made by women herself, her husband including in-laws/family members.

Systemic level determinants include policy, health service, social, economic, and religious factors. **Policy factor** focuses on the legislation, accessibility, availability, and provision of abortion services provided legally by law. **Health service factors** are directly related to the law and policy of a country. It includes the demand and supply factors based on accessibility, availability, cost, service provision, information, and willingness of service providers. **Social factors** include gender preferences, social stigma/condemnation, societal norms and expectations and, caste/ethnicity. **Economic factors** include employment status, income levels/ financial stability and lastly, **religious and cultural factors** include religious belief and culture of the society, community, and nation.

The framework also highlights two main decision-making points between a sex selection and decision for either a safe or an unsafe abortion. The first decision point is the stage at which the individual, based primarily on the proximate (individual-level) factors and secondarily on systemic factors opt for sex selection. This decision is greatly influenced by the degree of unintendedness or also intendedness for a desired pregnancy. The second decision-making point relates to the decision to opt for safe or unsafe termination of pregnancy. These are mainly dependent on the systemic factors that establish the conditions for safe or unsafe abortion and are also influenced by the first decision-making point.

Figure 5: A Modified conceptual framework for Factors influencing Sex-Selective Abortion.



Source: Adapted from Mundigo, A.I "Determinants of unsafe induced abortion in developing countries"(51).

For the selection of framework, Kim's conceptual framework was also taken into consideration. Kim hypothesized that the son-selective reproductive behavior is mostly influenced by four factors such as son preference, current fertility, desired family size and medical technology(44). However, some of the aspects like policy and health service factors which equally play a role were not mentioned. So, I choose Mundigo's framework and slightly modified it according to my purpose.

CHAPTER 3 FACTORS INFLUENCING SEX-SELECTIVE ABORTION

This chapter identifies and analyzes the factors which influence sex-selective abortion practices in two main determinants, Proximate and Systematic and also includes decision-making point for sex-selection and abortion.

3.1 DECISION MAKING

There are two main points where decisions are made. The first decision-making point is related to sex selection and second decision-making point is related to seeking abortion services which can be safe or unsafe.

3.1.1 FIRST DECISION-MAKING POINT: SEX SELECTION

Sex selection is a form of decision making which is usually done before pregnancy is expected, through early sex detection during pregnancy following sex-selective abortion and later after birth through infanticide. Usually, sex selection is done where culturally son preferences are high but it is also sometimes done in favor of balancing the family. Though the available technologies provide an opportunity for sex determination it is not always the root cause for sex-selective abortion(6,52). The first decisions for sex-selection are usually done by husband, mother-in-law, family members and even sometimes women herself. However but for women, the decision can be with the pressure of family members and no one can realize the depth of the circumstances under which a woman choose her decision to go for sex-selection and SSA(41,53,54). In my own experience, while working in Marie Stopes International/Nepal (MSI), I saw one woman crying after-abortion services and later she told us that she was forced to abort by her husband after knowing the sex of the fetus.

3.1.2 SECOND DECISION-MAKING POINT: SAFE/UNSAFE ABORTION

The decision for seeking abortion services in a safe or unsafe way along with sex selection also depends upon the individual as well as systematic factors such as policy, health services, socio-economic and cultural. As SSA's are restricted by law in Nepal, people choose to get services from unregistered private clinics, pharmacies or health providers without a license. However, in some cases like my own experience, people also come to a registered clinic like MSI hiding their main reason for abortion. Generally, the provider performs a bimanual examination before doing abortion and ultrasound is not recommended usually. Sometimes a provider cannot identify the actual week of gestation and can be in dilemma whereas sometimes the provider realizes after seeing the product of conception following the procedure.

3.2 PROXIMATE FACTORS (INDIVIDUAL LEVEL)

This section identifies and analyzes the proximate factors which are directly related to an individual level. This includes contraceptive factors, background factors (education, marital status, and family size/composition/expectations) and decision-making factors (decision by women, husband, and family members/in-laws).

3.2.1 CONTRACEPTIVE FACTORS

There has always been considerable doubt about how contraceptive factors lead to decision-making point for sex selection. Most abortions happen due to lack of effective contraceptive choice, its access, and information even where sex-selection is a significant problem(54). Contraceptive non-use, misuse, or failure can result in an unwanted pregnancy. The study done in India indicates that when a woman has unwanted pregnancy and wants to abort in the early phase, she is forced by her family members, her husband and sometimes even by service providers or doctors to wait until the second trimester to identify the sex of the fetus so that the male fetus cannot be wasted(41,53,54). However, there was no exact data found for this study, and there were no details found for this finding in the study done in Nepal.

Fertility behavior and contraceptive use are also influenced by previous pregnancy outcomes. A study done by Leone et.al in Nepal shows that among 5,902 women who had four children, the CPR was 25 percent when there was sex preference (because they were waiting for son), but if those women didn't have son preferences the CPR would be 33 percent, it means there was 8 percent reduction in CPR because of son preference. The study highlights son preference as an important factor to influence contraceptive use and fertility behavior in the country(10,55).

The study done by Jayaraman et.al in South Asia (Nepal, India, and Bangladesh) indicates that, at Parity 1[1] in case of Nepal, 31 percent of women use a modern method of contraceptive who had a son compared to 28 percent of women who had a daughter. In India, 29 percent of women having son use a modern method of contraceptive compared to 23 percent of women having a daughter. The same trend was seen in Bangladesh also, 54 percent of women use a modern method of contraception compared to 47 percent having a daughter. Likewise, at Parity 2[2] both the countries, Nepal and India show the increase in the proportion of the modern method of contraception according to the increase in the number of son however it was different in the case of Bangladesh. In Nepal, the percentage for use of modern method of contraception increased from 35% to 48% to 64% as the number of son increases from 0 to 1 to 2, in India the percentage increased from 47% to 65% to 72% whereas in Bangladesh the percentage was increased from 51% to 62% and then again decreased to 58%(48). This reflects that the desire for another child is reduced when there are a high number of sons seen in Nepal and India but in Bangladesh after having 2 sons the decrease in the percentage of modern contraceptive methods indicates that they still

[1] Parity 1: (0 sons,1 son)
[2] Parity 2: (0 sons, 1 son, 2 sons)

have a desire for more children. However, other possible reason could be measurement error as well.

The same study shows that in Parity 2, 51 percent of women want to have another child if the previous two pregnancies are daughter in comparison to just 6 percent whose two pregnancies are sons and want to have another child(48). It also depicts that as the number of sons increases, the percentage for the use of the permanent method (male/female sterilization) among Nepalese women at parity 3[3] increases for instance, women with no sons or one son, two sons and three sons, the percentage of using permanent method of contraception were 4%, 31%, 56%, and 59% respectively(48). The study shows that parents are more satisfied with sons and they do not feel the need for daughters anymore. Thus it shows a positive relationship between the increase in the number of sons and permanent method of contraception.

3.2.2 BACKGROUND FACTORS

- **Education**

In a study done in Duhabi municipality of Eastern region of Nepal, the mean desire for son among illiterate women was seen significantly high 1.44 in comparison to that of the mean desire of a daughter which is 1.06. A similar kind of trend was seen among the group of primary educated women whose mean desire for male children was also significantly high 1.13 than that of 1.05 in female children(56). This suggests that there was not much difference in son preference for both illiterate and literate women. In the in-depth interview (IDI's) conducted among health care workers in Nepal, some providers informed that SSA practices were seen common among those who are educated, who lived in urban areas and knew the benefits of early ultrasound(34).

> *"Educated people come. Poor, illiterate people are generally ignorant about all this. Obviously, educated people are the ones who know that through video x-ray sex of the fetus can be differentiated. They are the people who come for such service. People from urban area are more conscious about it…Rural women are unaware of all this, maybe there are rare cases but majority of them are from educated family."* ***(Obstetrician/gynecologist, Government Zonal Hospital)***(34)

The study done by Chang and Gupta in South Korea found that the odds of son preference reduced with increasing level of woman's education. The odd ratio of 'more than Junior high school' in 2003 was 0.62 with p <0.05 and for 'Sr. high school completion or more' it was 0.49 with p-value <0.05(57). It was reported in the same study that between 1991 and 2003 where son preference was seen to be declined, 19 percent of the total decline in son preference was contributed by the increase in the educational level of women(57).

[3] Parity 3: (0 sons, 1 son, 2 sons, 3 sons)

Similarly, Yoo's review in South Korea indicates that the increase and decrease in SRB level were seen first among educated women. It also reflects that educated women have more accessibility and awareness about the modern sex selection technology (ultrasound) however the need for a son is mitigated among them because the educated women are potential enough to make their earning and they do not have to depend upon their sons as security for income or old age(43). The review also indicates that the decrease in SRB level was seen quickly among educated women first, then others in the context where SRB level was seen to have declined. Government efforts on reducing SSA by legislation were effectively seen first among educated women than others(43). However, the exact data for the increase and decrease in the SRB level was not presented in the study.

Likewise, in a survey by Jayachandran in India reflects that when women are educated, they have less sex preference, however, sex-ratio is seen to be skewed towards male which means although sex preference is diminished, still, the problems of missing girls do exist(52).

- **Marital Status**

There are a limited number of studies that have examined the association between marital status and SSA in Nepal. In Nepal, married women are pressurized from their husbands and in-laws to bear son which influences her decision and thus the issue of SSA is common among the married women as compared to the unmarried one. Though Nepalese law prohibits SSA, the traditional value given to son preference is embedded deeply in culture(58). As being born and raised in a similar context, I have witnessed these issues myself.

The study done in South Korea shows that the traditional values of son preference were mostly seen among married women who had an arranged marriage. In addition, a lower value of son preference was seen among women who were married at an older age although the study did not reflect on the exact cut-off of the older age(57).

Source of information also found differed between married and unmarried women. Married women often sought reproductive information from Female community health volunteers (FCHVs) and health care providers whereas unmarried women utilized radio and television as the main source of information for abortion and contraception(58).

- **Family size and composition**

The desire for small family size is usually concerned with son preference practices which impact the fertility behavior(52,59). The couples having a daughter would wait until a son is born in the family before stopping childbearing which results in high SRB. The country like India, also possesses a dual desire, for example, expectations of small family norms including male offspring only, create urgency on those parents having a daughter only to have sons(9). Also, some policies which favour small family norm like **"One Child Policy"** in China often influence fertility behavior and it creates imbalanced sex ratio due to high male sex preference(60).

Guilmoto in his comparative study in Asia states that, where there is the small family norm with the cultural value of son and the easy availability of sex-detection technology, the SRB is seen to be increased in that context(61). A study done in India shows that the respondents who choose sex-selective abortions were significantly from extended families with better economic background compared to those who abort for other reasons, however, the women were unable to raise their voice for decision making in families and lack autonomy though they were economically sound(53). It means that though the women belong to a family with better economic status their autonomy for decision making is often limited. They are not able to make a decision about their own family as well. A 20-year-old woman with two daughters had this to say:

> *"You know how it is. Once you have decided that you don't want to increase your family size, then there is no alternative other than going for it (sex determination test and abortion)".* ***(20-year-old woman with two daughters, educated to ninth standard)***(53)

3.2.3 DECISION-MAKING FACTORS

Sometimes women feel pressured by her own self if she is not able to give birth to a boy child. She sees herself as guilt in society because she feels that she was unable to produce an heir for the family(46). Ganatra in her studies states that it is necessary to realize why women go for early sex detection or sex-selective abortion and under what circumstances she is making her "decision". Her decision can be influenced by her husband's pressure or threat to bring a new wife if she is unable to produce a son or fear of violence from in-laws(41,53,54). Being born and raised in Nepalese society often I have seen that the decision for PSS and SSA are usually done by husband and in-laws and even natal families supporting because of the socio-cultural issues. A 21-year-old woman with two daughters had this to say:

> *"My mother-in-law used to say: 'I won't say anything, but tomorrow if my son starts feeling that he should have a son and if he thinks about remarrying[4], then don't blame me at that time. You manage with that'. After all such things, I am having fear in my mind, so I thought let's try and go for checking (the sex)".* ***(21-year-old woman with two daughters, educated to third standard)***(53)

3.3 SYSTEMIC FACTORS

This section identifies and analyzes the systemic factors which are less directly related to the cause of sex-selective abortion but influences the two decision-making points such as sex-selection and abortion services (safe and unsafe). It includes policy factors, health

[4] Remarrying: Marrying a second wife in addition to existing wife.

service factors (access, availability, cost, service provision, information, and willingness by service providers), social factors (gender preferences, social stigma/condemnation, societal norms and expectations, caste/ethnicity), religious and cultural factors.

3.3.1 POLICY FACTORS

- **Legislation**

Abortion until 12 weeks was legalized in Nepal in September 2002 and came in to practice after 2 years(8,23,62). Before 2002, the law was against the abortion and women who were found doing it was punished or imprisoned which resulted in an increased number of unsafe abortion and infanticides. According to existing law, any abortion conducted within 12 weeks of gestation with the consent of the client and within 18 weeks of pregnancy in case of rape or incest is legal(23,62). The law also allowed to abort at any gestational ages if the physical and mental health of the mother is deteriorated or abnormal fetal conditions declared by a medical doctor(23,62). The consent from the guardians is a must for those below 16 years of age and for those who are mentally ill(23,62).

Although abortion was legalized in 2002 in Nepal, the practice of early sex determination and SSA are strongly prohibited(34,63). Due to the prohibitory law, it can affect the access for second-trimester abortion in legal conditions as well for those who really need it which can increase the numbers of unsafe or illegal abortions(34,41). Lamichhane et.al in his study in Nepal states that it creates ethical dilemmas on providers sometimes to provide second-trimester abortion services because they do not have the evidence whether the client has done sex-selection and it is the provider's responsibility to respect client's choice for abortion(34). There are certain legal indications for second-trimester abortion according to the law like in case of rape and incest abortion up to 18 weeks are allowed and abortion can be done at any stage if the health of mother and fetus are in risk verified by medical doctors. Because of this, sometimes client registration is underreported and even if they are reported, the actual week of gestation is not mentioned clearly in the registration (personal observation; may be subject to bias). A nurse from Central government hospital has this to say:

> *"There are many of them; some come saying it is family planning failure and many other excuses….Most clients are coming for sex determination…they will make excuses like family planning failure…they will come up with reason but they won't tell us [it is for sex selection]."* ***(Nurse, Central Government Hospital)***(34)

According to anecdotal information received, it's difficult to find out the cases who have undergone SSA following prenatal sex detection to strictly enforce the law and because of the lack of complaints filed against the cases(40). According to Ebenstein, China's one-child policy was able to discourage fertility behavior with high fines regimes but it also resulted in skewed sex ratio toward male(60). In contrast, prohibitory law which was vigorously implemented in South Korea was able to decrease SRB in the country(64). However, not only law but education and urbanization also played a significant role to address imbalance sex-ratio.

Although being the signatory of various conventions like Convention on the Elimination of all Forms of Discrimination Against Women (CEDAW-1991), ICPD (1994), Beijing Platform for Action (1995) and Millennium Development Goals (MDGs-2000) committing for gender equality, social justice and nondiscrimination, still gender imbalance in Nepal is a question.

3.3.2 HEALTH SERVICE FACTORS

Health service factors consist of access, availability, cost, service provision, information, and willingness by providers.

- **Access**

Due to open geographical border with India and similar kinds of socio-economic practices among the inhabitants of Terai belt of Nepal, created access to seek health services along with abortion services in the border area of India(10,46). It was reported that 11 percent of Nepalese women living close to the border of India had done sex-selective abortion in 2010(10).

Geographically, urban people had more access to abortion services than rural people because of the availability of the infrastructures and the providers who perform it against the law(34). Rural people have limited access to ultrasound and abortion clinics but still, they travel far to seek services. In context to Nepal, as per my work experience, people from rural mountainous areas wait until the time to detect the sex of the fetus and when they come for abortion services it is already late for legal abortions so they go to unsafe places like unauthorized clinics and pharmacies.

- **Availability**

The increase in the availability of prenatal sex-determination technology has enabled the possibility of sex-selective abortion(52). The most common method for determining the sex of the fetus is from the ultrasound and it is a frequently used method since the 1990s(65). In Nepal also, the early sex determination is possible due to the easy availability of ultrasound among government hospitals, private providers and unauthorized private clinics though the law restricts sex determination before the delivery(34). Some other techniques like amniocentesis, chorionic villus sampling, and sperm sorting are also available to Nepali citizens who can afford the services and who live closer to the border of India(34,46,66).

Qualitative research done in Nepal indicates that many people travel to India for early sex detection but for abortion, they return back to the country as they know it is legal, cheap and available everywhere in the country despite strict law in sex-selective abortion(34). A gynecologist of Government district hospital has this to say:

> *"Practice of sex selection was there before legalization as well. Now, they have become more reluctant and say, 'Why should we go elsewhere [India]? We can do ultrasound and then decide on what should be done as abortion service is available here as well'".*
>
> ***Obstetrician/gynecologist, Government District Hospital***(34)

However, in contrast, it has been reported that the availability of ultrasound techniques for prenatal sex determination is not always the root cause of sex-selective abortion: in some places where the value of son preference doesn't exist, the outcome of sex selection is not seen(6,41).

- **Cost**

A qualitative study done in Nepal reported that many people go to the government hospital to seek abortion care as it is cheaper in comparison to private but when the clients are asked further questions by health care providers about their pregnancy they deny to say the actual reason, and they say they will continue their pregnancy and later on they will choose another option which may be private(34). The average cost for abortion services ranges from NPR 800 to 3000 which is around 6.5 to 24 in Euros(67). An obstetrician of Government district hospital has this to say:

> *"Women go to Gorakhpur for sex determination, and only some of them do abortion there as it is expensive. So women come back here [Nepal] for abortion."* ***Obstetrician/gynecologist, Government District Hospital***(34)

- **Service Provision**

The same study done by Lamichhane states that abortion services are cheaper in public facilities in comparison to private facilities and also abortion which is done clandestinely for sex-selective purpose is expensive as it is prohibited by the law and public facilities cannot provide the services if they know the reason for abortion(34). However, the study does not provide the exact evidence for the cheap and expensive abortion services fee. It also emphasizes that when the abortion services are illegal based on sex preference in public facilities, the clients are left to choose options for unsafe abortion. In an IDI's, a gynecologist of Government zonal hospital has this to say:

> *"We have not been able to restrict sex-selective abortion and so it is still in practice, which ultimately has impact on unsafe abortion cases. In listed [government certified] sites we do not do sex selection as it is against the law. Hence, women will automatically go to unsafe places for abortion as she will face pressure from her husband, mother-in-law, family, and society to have male child. So, in my personal opinion it is one of the major reasons for non decline of unsafe abortion cases."*
>
> ***(Obstetrician/ gynecologist, Government Zonal Hospital)***(34)

- **Information**

Educated people have easy accessibility to the information via social media, friends circle, an information leaflet and are more conscious about the ultrasound but for uneducated people, they are mostly limited to their household works and do not have those circles(34). Mass media publicity, urbanization along with education helped in raising awareness among the population in reducing son preferences in South Korea(48,68). In India, some advertisement like **"Invest Rs. 500 now, save Rs. 50,000 later"** have been seen as promoting parents to go for SSA to get rid of dowry in the near future(1).

- **Willingness by Providers**

Lamichhane et.al's study indicates that the providers often face an ethical dilemma while providing the abortion services which was also supported by the study done by Moller et.al in Nepal. On one hand, they feel empathy towards clients whereas, on the other hand, they are abiding by the law(34,67). In an IDI's done by Lamichhane et.al's study, the obstetrician of Government district hospital had this to say:

> *"Earlier I used to feel that I should help them on humanitarian ground. . . . But it encouraged them. So, that is also why I do not do sex selection at all. . . .We cannot continue to keep blind eye."*
>
> ***Obstetrician/gynecologist, Government District Hospital***(34)

Similarly, the IDI's conducted by Moller et.al in their study, the nurse (Respondent 11) had this to say:

> *"I feel very bad when I see them (…) they say; No I know it's very risky for me but my husband will kill me, my family, my mother in law has told me don't come back like that, (…)When they say that, what to do what not to do?"*
>
> ***Respondent 11, Nurse***(67)

The study done in India reveals that medical doctors or health care providers promote early sex detection and SSA for their own personal profit. Some of them defend their decision by saying they are helping families to balance equal sex among the children and some of them say, they are helping the families who have daughter, to get relief from the social and economic burden which may arise in future(54). However, the exact data in numbers or percentage were not available.

Likewise, another study done in India indicates that 97% of SSA is seen to be done in the private sector among which 95% are identified through ultrasound. It was found that the health providers do support sex-selection but do not provide written diagnosis after sex-selection because it might create a problem for them for the offense of sex-detection practices(53).

While monitoring in the public sector has been simpler, bad wages for physicians in public sector, inadequate funding of government hospitals and reliance on user fees (like in Vietnam and China) may hinder some public health care providers and clinics to deliver these facilities(69).

3.3.3 SOCIAL FACTORS

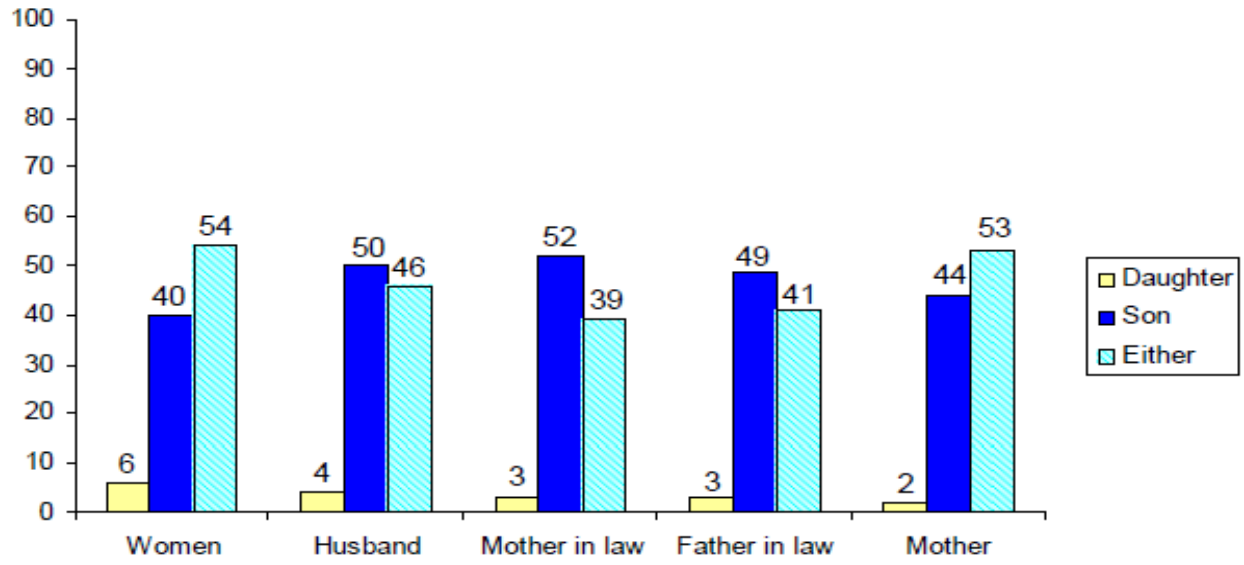
Social factors consist of gender preferences, social stigma/condemnation, social norms/expectations, and caste/ethnicity.

- **Gender Preferences**

Sex preference is often influenced by partner and parents (in-laws and natal) choice and sometimes by women herself. One study was done by Nanda et al. in Nepal shows that among the total male respondents, 22 percent of them reported that it is the women's duty to produce a son for her husband's family(10).

The figure below shows the household survey of 2007 where the family members of the four districts (Kapilvastu, Parsa, Dhanusa, and Gorkha) were interviewed to know the preferred sex for the first pregnancy. Son preferences were seen high (52%) among mother-in-law, half (50%) among husbands, less than half (49%) in father-in-law followed by 40% by women herself. The sex preferences as a daughter for the first pregnancy was seen very low (2%) among the mother of women as shown in **Figure 6**.

Figure 6: Preferred Sex composition for the 1st pregnancy



Source: CREHPA, UNFPA(46)

The study was done by Jayachandran also reflects that children's fertility behavior and sex preference are influenced by their parent's preferences(52).

A 21-year-old housewife with the history of two sex-selective abortions had this to say:

> *"This time my mother-in-law wanted a boy. So she decided we should check it (the sex of the foetus). My husband did not say anything. What can I say? I do whatever elderly people in the family say".*
>
> ***(21-year-old housewife, who had two sex-selective abortions)***(53)

- **Social Stigma/ Condemnation**

The perceptions of clients seeking sex-selective abortion in a study show that only being the parents of a girl child and not having any boy is the matter of social stigma(34). An obstetrician of Government Zonal Hospital in IDI's had this to say:

> *"If one has daughter then there can be stigma for being son-less."*
>
> ***Obstetrician/Gynecologist, Government Zonal Hospital***(34)

- **Societal norms/expectations**

The study done by Nanda et.al reflects that among the total male respondents interviewed, about half (48%) responded that the women's duty is to perform household chores including cooking food for the family, majority (84%) agree that women should obey their husband, 99% believes that once a woman is married she entirely belongs to her in-law's family and 43% agreed that men should be the one who should have power for a final say in all family matters(10).

Some societal norms like taking care of the parents in their old age are only expected from sons which creates a sense of security to the parents, continuing family lineages, inheriting the family property, lighting funeral pyre, organizing death rituals (pindadaan) in Hindu culture are some of the examples of societal expectations and traditions which are followed by generation to generation. These norms are deeply rooted in the culture which creates strong son preferences among the family and society(10,34,41,70). In an interview of husbands group in the Yadav community of Dhanusha in 2007, the participants had this to say:

> "*…Everywhere they introduce themselves as our sons, grandsons, etc., but daughters and grand-daughters don't. Even if sons are langada [disabled], they keep our name*."
>
> **Husbands' group, Yadav, Dhanusha**(46).

The household survey done by CREPHA in 2007 shows that 93% of married women perceived value for having a daughter in the family is to support them on household chores. Around 25% think that daughter is valued for power, prestige and a sense of security in old age and about 15% of the respondent thinks the daughter helps them financially. There was no evidence found supporting funeral rites for daughter because in Hindu culture funeral rites are only supposed to carry out by sons in the family. However, the debate is ongoing on the national level and some daughters are breaking the social norms by conducting funeral rites of their parents. The same study reveals the perceived value of sons as security for an old-age (79%), financial support (67%), carrying family lineage (60%) and for funeral rituals (59%)(46). Some women in the interview in Parsa districts (districts close to the border of India) also states that they have the fear that if the girls are not married early they will elope with someone which creates shame in the family. Some Muslim women also argue that women are given low value in family and society, their presence is not privileged, and they are not appropriately treated in their own houses as well(46).

Actually, the study shows dowry as the main reason for neglecting girls by their own family members and relatives. In Brahmin and Chettri communities residing in the hilly region, the term daijo[5] is persistent which is similar to dowry but here monetary transactions are not done per demand. Dowry is prevalent in the Terai region of Nepal close to the border of India. One study done in Nepal and Vietnam indicates that among the sampled population of a married man in Nepal, 53 % responded that they had not asked for dowry or bride price and 45% responded receiving as dowry from bride side. Also, among that 45% who received dowries, 85% said they received it as a gift whereas 15% reported as a demand. In contrast, in Vietnam majority (90%) said they had paid for bride amount in their wedding to bride family and of that 97% confirms they gave as a gift without the demand from bride's family and very few 3% reported they paid as per demand from the bride side(10).

- **Caste/Ethnicity**

Certain communities like high and middle caste/ethnic group living in the Terai region of the country show strong son preferences resulting in a limited number of a girl child to be born(10,71). In India also, particular class and caste have seen positive co-relation with son preference. Female infanticide was seen practiced by those who belong to upper caste and were economically sound. The female child was generally not preferred among them because of the risk of dishonor and to maintain the status in the society whereas in the middle caste the sex ratio was found to be better than the upper and lower caste(39).

3.3.4 ECONOMIC FACTORS

Those families having a girl child think them as a liability. By the time the daughter is born they are considered as the in-law's property because they leave their home after marriage and also the family members have to go through economic burden due to dowry system (10). The amount of dowry varies according to socio-economic status, culture, and places.

[5] Daijo: ornaments and items given from bride side to the in-laws along with daughter

In a qualitative study done in Nepal, a male participant responded in an in-depth interview that it was a very difficult time for him when the bridegroom's family demanded an amount of NRS 20,000 (Euro 160) as a dowry to marry his daughter(46).

> *"It was very difficult for us to marry our daughter off because they asked for 20,000 rupees. This amount corresponds to my lifetime's earnings. I had no other choice but to borrow the money from a mukhiya [money lender]."*
>
> **Husbands' group, Dalits, Birgunj**(46)

On the other hand, sons are supposed to bring resources into the family in terms of dowry and a wife, so they are resourceful in the family as a sense of economic gain. Also, the male member is the breadwinner of the family and they support financially, so they are more powerful in the family and society(1,10,34).

The norms of patrilocal exogamy (where sons stay in their parent's home and support their family financially while daughters are supposed to shift to their in-laws home) in most of the South Asian countries creates a strong bias to invest in sons which results in sex selection towards sons in many cases (7). The economy dependent on farming requires male workers(41) and the country like Nepal whose primary occupation is agriculture can be biased towards male because of their economic contribution. Most of the male workers also migrate to India for occupation and nowadays to Qatar, Dubai and South Korea as well.

One study suggests that it would be easy for wealthy educated women living in urban areas to choose their sex preferences though they have low son preferences in comparison to those living in rural areas with low socioeconomic status(39). This is also supported by Dubuc et. al's studies. It is seen that wealthier educated women living in urban areas have lower son preference whereas they have high access to modern technology however high son preference was seen among those living in rural areas with low socioeconomic status(9).

3.3.5 RELIGIOUS AND CULTURAL FACTORS

Religious and Cultural beliefs

The patriarchal culture of Hindu religion promotes the value of son and they are given high importance by society as well. The rituals like lighting the funeral pyre by the son or male heir of the family, carrying family lineage, highlights their significance(10,34,46). The funeral rites are only expected to be carried out by sons and only sons so they assume that having a son means the pathway to heaven after their death(46). The study also shows that some women do fasting specific day in the week, visit traditional healer, religious healer of Hindu religion to bring the birth of a son(46). However, the study does not reflect any other religion practicing this like Muslim and Buddhist.

Generally, in Hindu culture, the birth of a female child is believed as the form of the goddess Laxmi (goddess of wealth). There is also a cultural belief that girls are wanted to earn

punya[6] for their parents by doing kanyadaan[7] of their daughter(46). A women respondent from Kathmandu in the IDI's had this to say:

> *"Seven months into my marriage, I conceived for the first time. My mother-in-law told me that it would be a blessing if my first child was a daughter, as there was only one daughter in the family. As wished by my mother-in-law, I gave birth to a daughter on the day of Laxmi Pooja [a Hindu festival]. The family members were very happy, and regarded my daughter as an incarnation of the goddess Laxmi…"*
>
> **Women, Kathmandu**(46)

Similarly, a study done by Arnold et. al shows that in India also being a Hindu country follows the same rituals like lighting funeral pyre by a son, continuing family lineage and arranging death anniversary ceremony(52,70). Both India and Nepal being a Hindu country, and also being a neighboring one follows the same cultures and religious beliefs. Moreover, in China also, a son has an essential role under Confucianism, where there is a ritual for worshipping ancestors. Therefore, for all of these reasons, a son, at least one, is highly preferred(52). A study done in India also shows that the proportion of Muslim women for sex-selective abortion was seen significantly less (3.4%) in comparison to other abortions (9.3%)(53). A qualitative study done by CREHPA in Nepal identifies that some folklore is specially made to cherish sons presence(46). In my own experience also, I have seen pregnant women getting blessing like (**"Putrawati Bhawa"** in Sanskrit meaning **"Be blessed with son"**).

[6] Punya: Emancipation from sin after demise
[7] Kanyadaan: A rituals where daughter are offered during their marriage.

CHAPTER 4 BEST PRACTICES AMONG OTHER COUNTRIES

In this section, some of the best practices seen among the Asian countries are presented according to the framework. It includes policy and health service factors, social and economic factors and, cultural and religious factors. The countries were chosen from the Asian region for having similar context and which were able to demonstrate positive outcomes in reducing imbalanced SRB's.

4.1 POLICY AND HEALTH SERVICE FACTORS

Prenatal sex-determination and abortion along with sex-selective abortion are prohibited in many Asian countries like Nepal, India, China, South Korea, and Vietnam as shown in **Table 3**. South Korea was the first Asian country to ban prenatal sex detection in 1987 and the only country which was able to strictly enforce the law and reverse the trend of increasing SRB(57)(54). China banned in 1989 followed by India in 1994(54). Later, Nepal banned since 2002 followed by Vietnam in 2003(41). These countries have their own liberal laws on abortion(Table 3)(41,54).

Table 3: Laws and policies relating to sex selection and abortion in selected Asian countries

Country	Prenatal sex determination	Abortion
Nepal	Banned since 2002 Penalties: 3-6 months imprisonment	Legalized in 2002 up to 12 weeks. Can be done up to 18 weeks in case of rape or incest and at any time during pregnancy if the mother and child health is not good identified by a medical doctor. **Sex-selective abortion:** Banned Penalties: 1-year imprisonment
India	Banned since 1994 but came into practice in 1996. Prohibition of Pre and peri-conception techniques since 2002. Penalties: Fines, imprisonment, revocation of license, seizure from the machine.	Legalized in 1971 for up to 20 weeks with various indications like Contraceptive failure, rape, the risk to women's physical and mental health and fetal anomaly.
China	Banned since 1989. Prohibition of Pre-implantation sex selection. Penalties: Fines, revocation of license.	Legalized in 1953 and was widely available and accessible. Sex-selective abortion: Prohibited since 1994. No criminal penalties
South Korea	Prohibited since 1987 Penalties: Fines up to US$ 12000, Imprisonment and revocation of the license	Legalized in 1973. Indicated in case of risk to women's life, rape, incest, medical conditions and for congenital disabilities.
Vietnam	Prohibited since 2003. Penalties: Fine for the violation act.	Legalized since 1960. **Sex-selective abortion:** Banned in 2003. Penalties: Fines

Source: (41,54)

To avoid early sex-determination and SSA in South Korea, strong legal policy measures were implemented through medical guidelines, codes, and norms(44). Early in 1991, in the capital city Seoul, the physician's medical license was suspended in the act of early sex-determination, which results in a quick decline of SRB from 117 to 113 in the next year(64). However, Kim in his study mentioned that since 1992, heavy penalties and regulations have been placed on offenses(44). There was a high reduction of SRB from 118 in 1990 to 109 in 2004 with the strong enforcement of law along with awareness campaigns(64). Though, it was still beyond the normal SRB.

Vietnam has also released a range of sex-selection strategies and legislation since 2000. The use of ultrasound and abortion for sex-selection reasons is illegal under Government Decree No. 104/203/ND-CP published in 2003. Also, in 2006, Decree No. 114/2006/ND-CP also enforce economic penalties on those who use ultrasound and abortion for sex-detection and revoke permits and certificates for 1-3 months from any person or organization that violates the above guidelines. However, implementation of these orders was not seen efficient in Vietnam: there was no monitoring for service providers and no penalties for prohibition offenses recorded(10). Along with that, publicizing information regarding sex-selection may result in being fined(41).

Hesketh et.al in his studies mentioned that due to the legalization of abortion in some countries, underground abortion is not practiced that much so it is challenging to differentiate whether abortion is sex-selective or not in the private clinics and hospitals(64). Oomman et.al in her studies also indicates that the women who are going for abortion after sex-detection will obviously not share her real reason for abortion as sex- selection which was possible due to ultrasound. She adds further that banning on abortion can create a pathway to unsafe abortion(54).

In India, there was a regulation like all diagnostic centers should have a clear indication or mark like "no exams for sex identification" and those health centers which are registered are only allowed to buy USG machine(72).

4.2 SOCIAL AND ECONOMIC FACTORS

Various legal measures have been taken in support of girls and women in many countries recently. China has started a campaign named **"Care for Girls"** piloted in 2003 to encourage recognition of the importance of girls. This includes delivering a positive message about girls, encouragement of matrilineal marriages, providing incentives to parents having a daughter and also offering them housing and pension payments for those rural parents with daughters who reach sixty(6,41).

Similarly, in India, the Hindu Amendment Act which was passed in 2004 states clearly that daughter are equally eligible to inherit the property as equally as a son. In addition, Maintenance and Welfare of Parents and Senior Citizens Act which passed in 2007 state that daughter and son both are responsible for taking care of their parents in order to inherit the same share of the property. This kind of law highlights a clear message that legal rights are recognized as equal for both men and women(6). Bela Ganatra, in her study also mentioned

that India has also some of the incentive schemes for those parents who enroll their daughter in school and who do not marry their daughter till the age of 18. Also, some of the schemes which are controversial like **"cradle baby scheme"** where parents can abandon their daughter in an orphanage home to evade sex-selective abortion. However, the author argues that this kind of scheme may trigger the concept of girls being as an economic burden for the family(41).

South Korea experienced the outstanding economic growth in the past two decades which led to basic changes in the society with a change back from a farm-based society, increased desire for small family norms, increased urbanization, and increased women's involvement in the workplace with stronger job prospects and older retirement savings for parents all being factors contributing to reduce SRB gradually(5,41). Besides law and policies, the above-mentioned factors also help in returning its imbalanced SRB to normal(41). Long term policies were designed to reduce gender discrimination among women focusing on education and employment to bring about changes in attitudes, values and, norms(44,73). Various laws adopted seem to be effective like one the recognition of women-headed households and another as granting women rights and duties even after marriage within their origin families.

In addition, the media campaign **"Love your Daughter"** in South Korea was also fruitful(6,41). These all variables helped to boost women's position and importance along with their autonomy(57). Even the Constitutional Court in the latest judgment states that those parents who have an equal desire for both boys and girls have the rights to know about the sex of the fetus(6).

4.3 CULTURAL AND RELIGIOUS FACTORS

Advocacy, community sensitization, and awareness-raising program supported by government and nongovernmental organizations (NGOs) are vital elements to lessen sex-ratio imbalance in the country(6). In South Korea, the policy for women empowerment was only possible when the military rule supporting autocratic Confucian tradition ended after three decades of the military regime(57). In India, a various channel of communication like radio, TV drama and press were used by government and civil society organization to engage youths, religious leaders, medical professionals, political leaders and communities (urban and rural) for awareness and gender empowerment activities(6). Kim reported in his study that massive media campaigns which were initiated since 1991 in South Korea, was able to change the mindset of youth couples regarding the impact of sex-selective abortion in a very limited time(44). Even South Korea in comparison to China and India was more effective to regulate prenatal sex screening test according to the law(44). Media campaigns like **"Care for Girls"** in China and **"Love your Daughter"** in South Korea turned out to be successful for reducing sex ratio imbalance in the countries(41).

CHAPTER 5 DISCUSSION

In this section, the key findings of the thesis objectives are discussed and possible recommendations are explored to reduce sex-selective abortion in the country. The discussions are organized in line with the objectives and it also provides a reflection on the relevance of the framework and limitations of the study.

5.1 KEY FINDINGS

This thesis set out to find the significant factors which persuade SSA in Nepal and some of the best practices which can be adopted to prevent SSA in the near future.

Objective 1: Perception and practices behind sex-selective abortion

The study reveals that SSA is the outcome of son preference attitude which is deeply rooted in a patriarchal society. The perceptions and practices behind SSA are seen to be associated with proximate factors like contraceptive, decision-making and background factors like education, marital status, and family size/composition and expectations. Usually, when a woman gets pregnant, either a desired one or due to contraceptive failure, the **decision** to continue pregnancy or abortion based upon sex-selection is usually done by husband, family members and in some case women herself. In some context, where the birth of girls is considered as the presence of the goddess, they rejoice the birth of a female child and there is no sex-selection done by the husband or family members as shown in the findings. However, in cases where sons are valued more than daughter, the decision for sex-selection is forced by family members (mother-in-law) and husband. The pregnant women have to wait till the 12 weeks to reveal the sex of the fetus (in any case if they want a child regardless of sex) before going for abortion so that they would not waste a male child as mentioned by Ganatra in her study in India(41).

The perception towards SSA was also seen as for balancing the **family size and the expectations** of small family norms of having two children especially one boy and one girl. Moreover, due to the socio-cultural and religious importance of son, at least one son is preferred in each family. The study found that the expectation of small family size is generally biased towards son preference which was also supported by a study done by Jayachandran and Dubuc in India(9,52). The review found that fertility behavior and **contraceptive use** are influenced by son preference behavior in Nepal which was also supported by Jayaraman et. al's study in South Asia(48).

The study shows contradictory results for **women's education**. It is because educated women are more aware of modern prenatal sex detection technology which was also supported by a statement given by an obstetrician from a government hospital in a qualitative study in Nepal(34). However, evidence in South Korea also reflects that the SRB level was quickly seen to be decreased first among educated mother than others because the women were self-dependent and they do not expect old age security from their son(57). Although women's education is seen as an important factor it does not work alone,

implementation of law along with urbanization and economic improvement are equally important.

Married women are seen to get more pressure for son preference than unmarried which was also supported by the study done by Chang et. al in his study in South Korea(57). The perception and practices behind sex-selective abortion are also influenced by socioeconomic, cultural and religious factors.

Objective 2: Socioeconomic, cultural and religious factors influencing sex-selective abortion

The literatures, in general, reflects that social factors like gender preferences, social stigma, and societal norms and expectations are associated with son preferences leading to sex-selective abortion. Very limited study indicates some clue towards the caste/ethnicity. The study done by CREHPA and UNFPA in 4 districts of Nepal shows that **son preference** was mostly seen among mother-in-law followed by husband and father-in-law and comparatively less by women herself which was also supported by the study done by Jayachandran in India(46,52). In the study done by Nanda et. al, the interviewed male participants state that giving birth to a male child is the women's only responsibility(10). Likewise, couples who do not have a male child are often socially stigmatized.

There are different **norms and expectations** for male and female in society. The study portrays similar kind of social norms and expectations for male and female in both countries India and Nepal such as male are expected to carry family lineage, inheriting the property, looking after parents in their old age, performing all funeral rites including death anniversary whereas females are expected to perform household chores likes cooking food, obeying in-laws and husband, and once they are married they belongs to the in-laws family. Male members are considered as the breadwinner of the family hence **economically** strong and powerful in family and society but females are considered as a liability since they are born because of dowry which creates an economic burden to the family during their wedding, as a result, they are supposed to be in-laws property since the day they are born. As Nepal and India share the same patrilocal exogamy culture, the same issues are prevalent in both countries which are identified in the study done by Koolwal and Nanda(7,10).

Some **religious and cultural belief** in Hindu religion like lighting the funeral pyre by son after death creates a pathway to heaven for the departed soul and it should only be performed by a son, in exception other male members of the family. Women keep fasting and visit religious and traditional healer to deviate the birth of a son. Similarly, the study shows that in China, under Confucianism, the sons are highly valued to perform ancestor worshipping rituals. Some particular **caste or ethnic** group of Terai region shows strong son preference which was also supported by Kaur in her study done in India(39). It was seen that due to the risk of dishonor and shame of having a daughter, female infanticide was practiced in some upper caste family of India. The sociocultural, economic and religious factors are together influenced by the policy (legislation) and health service factors.

Objective 3: Health service and policy-related factors contributing to sex-selective abortion

As shown in the findings, the liberal abortion **law** of the country creates an ethical dilemma in the clients seeking abortion services as well as health care providers providing second-trimester abortion services. People are aware of the law and since not a single case regarding violation of the act is registered, second-trimester abortion is being done by people without any legal barrier. However, in the case of South Korea, the law was implemented strictly and was able to show its result in the following year(64). The findings also show that some policy adopted at a national level encourage people to go for SSA as an example of China's one-child policy.

Apart from that, **access** and **availability** of modern technology create opportunities for many people to go for prenatal sex-selection. Hesketh et. al in his study mentions that it is difficult to identify in the private clinics and hospitals whether the abortion is sex-selective or not(64). Because all the illegal abortions are not practiced clandestinely these days, and service providers underreport for their personal profit as found in the results. However, the health providers argue that they are helping the couples to balance the family equally. It supports the evidence that though the provider is a medical professional and educated still the socio-cultural and religious values are embedded with them that creates biases.

Easy accessibility of **health service facility** in neighboring country India shows positive association for sex-selective abortion among those Nepalese who live close to the border area. Also, the qualitative study done by Lamichhane et.al in Nepal shows that people who live in urban areas have more options for early sex-detection and SSA compare to rural people(34). The study shows that SSA was possible in Nepal due to the easy availability of early sex detection technology which was also supported by the study done in India(34,52). In contrast, a WHO and UNFPA study in Nepal, reflect that the availability of PSS is not only the root cause for sex-selective abortion when there is no sex preference in society(6). The same findings were also supported by Ganatra in her study(41). It also points out that due to the easy availability of abortion services and its cheaper **cost** often people return back to their home countries if they had gone for PSS in India.

The qualitative study done in Nepal reveals that abortion services are readily available in the countries and are cheaper in government facilities but as it is not legal, people choose to abort clandestinely which can lead to unsafe abortion(34). The information has been seen as factors to influence PSS among educated people because of advertisement through social media and friends circle however Arnold and Bhat et. al. in their study also reflects that education and awareness among people with lower son preferences(68,70).

Objective 4: Best practices from other countries to reduce sex-selective abortion in Nepal

Despite the strong law for prenatal sex detection in the above-mentioned countries and also for SSA in some of the countries only South Korea was the country to implement this law very effectively(54,57). However, laws and policies were not only the thing which helped to curb SSA in South Korea but also quick improvements in the economy level along with urbanization are also seen as an essential factor. Even though Nepal has developed a legal

policy against prenatal sex-selection and sex-selective abortion since 2002, its enforcement and regulation have been always a significant challenge in the country. As with the example of South Korea, it is evident that, if there is strong law followed by constant monitoring and proper regulation, the expected outcome can be achieved. It is not like that Nepal does not have strong law but its implementation is always a concern. Till date, no prosecutions have been reported for the act of violation of the law. Also, the monitoring in such cases is often difficult because the abortion is usually conducted clandestinely by the mutual understanding of both parties, clients, and provider(40). Though the government realizes the terrible effect of imbalance in sex-ratio, they are facing many challenges to take action. The review found that despite strong prohibitory law against prenatal sex-selection and sex-selective abortion in Nepal, the implementation and supervision is still a challenge.

Various legal measures have been adopted to support women and girls in many countries like women-headed households, women's rights and responsibilities in their natal families even after marriage, equal job opportunities, acceptance of matrilineal marriage, pensions for older parents having daughter, incentives for the parents with daughter residing in rural areas and inheritance of the property equally. These kinds of measures should also be established in Nepal along with the prohibitory law however, some of them are already been initiated and are in the process. Very few NGO's and media in Nepal have initiated awareness-raising campaigns among the general public against sex selection(74). Media campaigns such as **"Care for Girls"** and **"Love your Daughter"** shows a positive impact on the society and country especially in women empowerment, so these kinds of efforts should also be adopted in Nepal(41).

5.2 RELEVANCE OF THE ANALYTICAL FRAMEWORK

The analytical framework adapted from Alex I. Mundigo was relevant for organizing and presenting the findings for the study on sex-selective abortion in Nepal. It helps to analyze different factors which are responsible for sex-selective abortion in Nepal and other Asian countries and also to explore best practices among other countries to learn and apply in the context of Nepal. It helps to guide me logically through findings to the discussion and helped to interlink and understand the connection among different determinants. The framework has enough room to adapt according to the need of the study. Both determinants Proximate and Systemic were analyzed however some of the factors were modified in proximate determinants as per the demand of the study like background factors (education, marital status, and family size and expectation) and decision-making factors where the decision is made by women herself, her husband and in-laws. In the case of systemic determinants all five factors which were mentioned in the framework were analyzed (policy, service, social, economic and religious). However, the framework did not provide clear insight into cultural issues which I had adjusted during my study.

5.3 STUDY LIMITATIONS

The literature related to this topic was found very scanty in Nepal, maybe because SRB is found normal in the country or maybe due to less concern of government and researchers. Only a few studies provide some useful information in the context of Nepal and rest were supported by the literatures found in neighboring countries India and China and other Asian countries like South Korea and Vietnam. Most of the studies were based on the literatures from India because of having a similar socio-cultural and religious perspective. There was very little empirical evidence found on education, culture and religion, and socioeconomic status related to the reason for sex preference in Nepal. Some grey literatures were also used to bring evidence. There was a very limited study found on service factors like access, cost, service provision, and social stigma/ condemnation. There was not enough reasoning in the findings in many studies with a limited data source. Recent literatures for this topic were very limited, particularly in my context. The objectives for perception and practices were lightly addressed in the study because literatures for this section were found very limited.

CHAPTER 6 CONCLUSIONS AND RECOMMENDATIONS

In this chapter, conclusions and recommendations are presented based on the findings of the review.

6.1 CONCLUSIONS

Sex-selective abortion is an emerging public health concern in the Asian region which needs particular attention. SSA, low female birth registration along with female infant mortality is considered as the main factors for high SRB in Asia. The national figure of SRB reflects imbalanced SRB in some border districts of Nepal and evidence of SSA has started to become available. Legalization of abortion in 2002 in Nepal opened the door for prenatal sex selection and sex-selective abortion despite their strong prohibitory law. This thesis analyzed the determinants of SSA and reflected some of the best practices adopted to reduce imbalanced SRB in a similar Asian context.

Son preferences are mostly evident in the countries where cultural, traditional and religious beliefs are deeply rooted. The findings of the study also reveal that social factors like gender preferences, social expectations and norms are essential factors which creates gender imbalance in the societies however the study could not find much evidence on social stigma and caste/ethnicity. Access and availability of modern technologies for PSS along with health care provider's willingness and certain geographical issues (border) makes it possible for sex-selection.

Son preference also influences contraceptive and fertility behavior. Such preference is very difficult to shrink and needs substantial shifts in women's status in the family and society which involves a vast change in pre-existing social norms and expectations of people. To reduce the impact of imbalanced SRB, the prohibition of early sex detection along with its implementation and elimination of socio-cultural issues for sex preferences should go hand in hand to achieve the desired outcomes in the future.

Until the son-preference is dealt with, the efforts to reduce SSA will not be effective. Women may be penalized by the law for SSA and deeply rooted patriarchal society may penalize the woman if she gives birth to a girl. It is essential for the government to realize the consequences of the sex-ratio imbalance in the near future and take initiative actions. This complex issue requires a multi-sectoral effort that includes long term attitudinal change and awareness programs, trained abortion service providers, enforcement of current laws, advocacy campaigns, along with women empowerment and education.

6.2 RECOMMENDATIONS

Following the matter discussed in the previous section of this thesis, these recommendations are suggested to MOH, policymakers and other stakeholders. The recommendations here are proposed on policy, intervention and research level.

Policy Level

- Policymakers need to develop policies which address the root cause of son preference and SSA which includes policies on inheriting the property, retirement funding, dowry practice, and family lineal system.
- Policymakers should introduce policies and programs which promote gender equity, reduce socio-cultural and religious barriers that discriminate women and safeguard the reproductive rights of all women in Nepal.

Intervention Level

- MOH should firmly implement the prohibitory law for sex-selection countrywide with huge attention on those districts where SRB is high and prioritize intervention, especially on these districts for cost-effectiveness and feasibility.
- MOH should focus on advocacy, mass media, and awareness-raising campaign primarily to those individual districts which need urgent attention and gradually to others as a priority.
- Need to engage community members, religious leaders, youths, men's group, women's group, and NGOs to create awareness among the population for the impacts of SSA in the future.
- Need to initiate advocacy campaign and public dialogue to amend current discriminatory legislation and to highlight on the ethics of gender-selection.
- Some strategies such as incentives during the birth of a girl, financial subsidies for the poor economic position, fellowships, and gender-based education quotas should be adopted to support the female child and those families having an only female child. This will help to achieve short term goal but for long term goal continue monitoring and supervision should be done to ensure equal access to schooling and health services for the girl child.
- Medical and Diagnostic technology along with private sectors should be regulated appropriately and timely.

Research

- There is a need for research in those particular districts near the Indian border where SRB is high. The few existing research in Nepal does not give enough information on education, accessibility, socio-economic status, culture, and religion.
- There is a need for facility-based research to identify the possible reason behind sex-selection and second-trimester abortion.
- More research is needed to explore the evidence for factors triggering son preference and SSA such as gender discrimination, family pressure, existing dowry practice, and other social factors.

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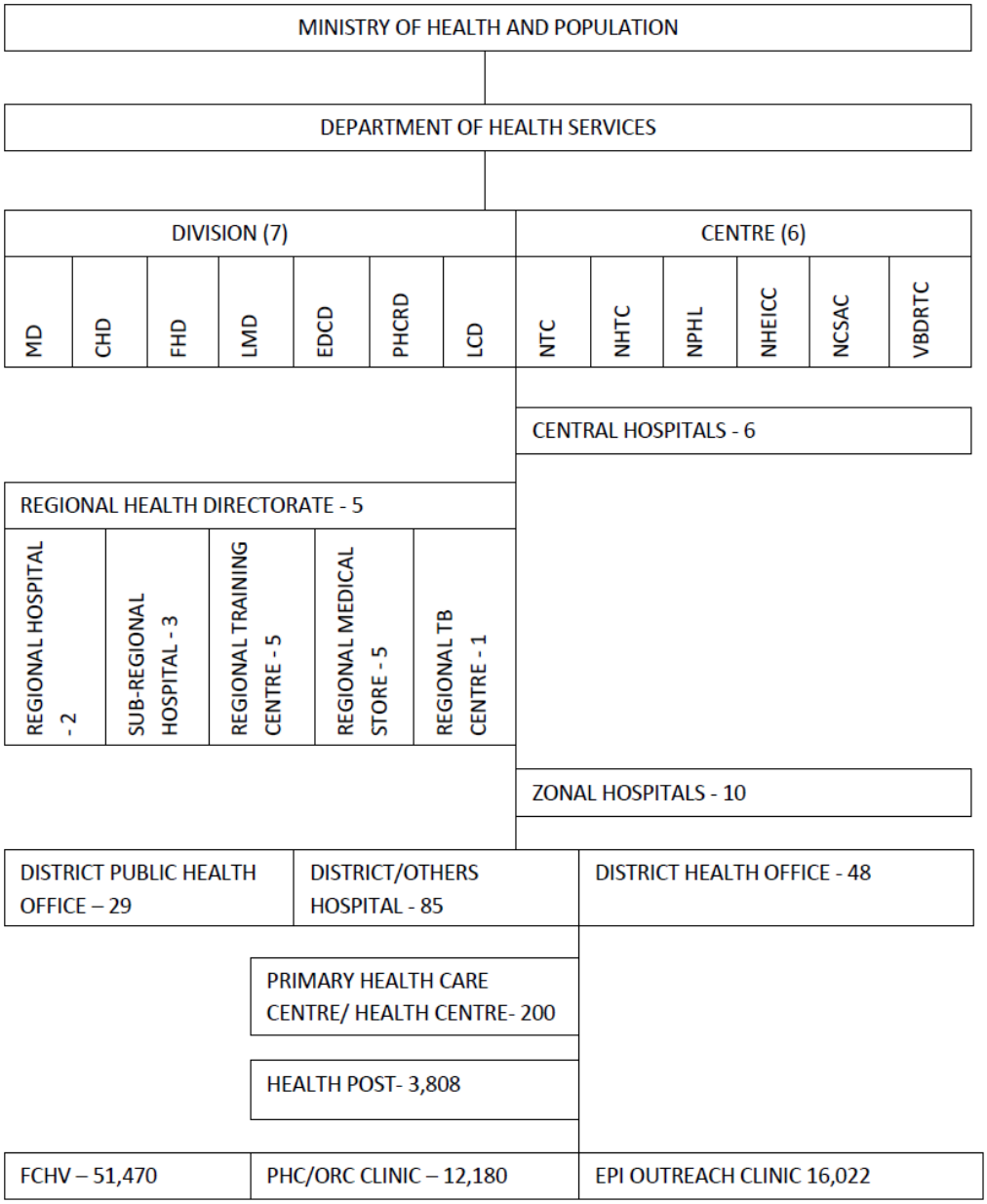
Appendix 1

Organogram of the Department of Health Services (DOHS)

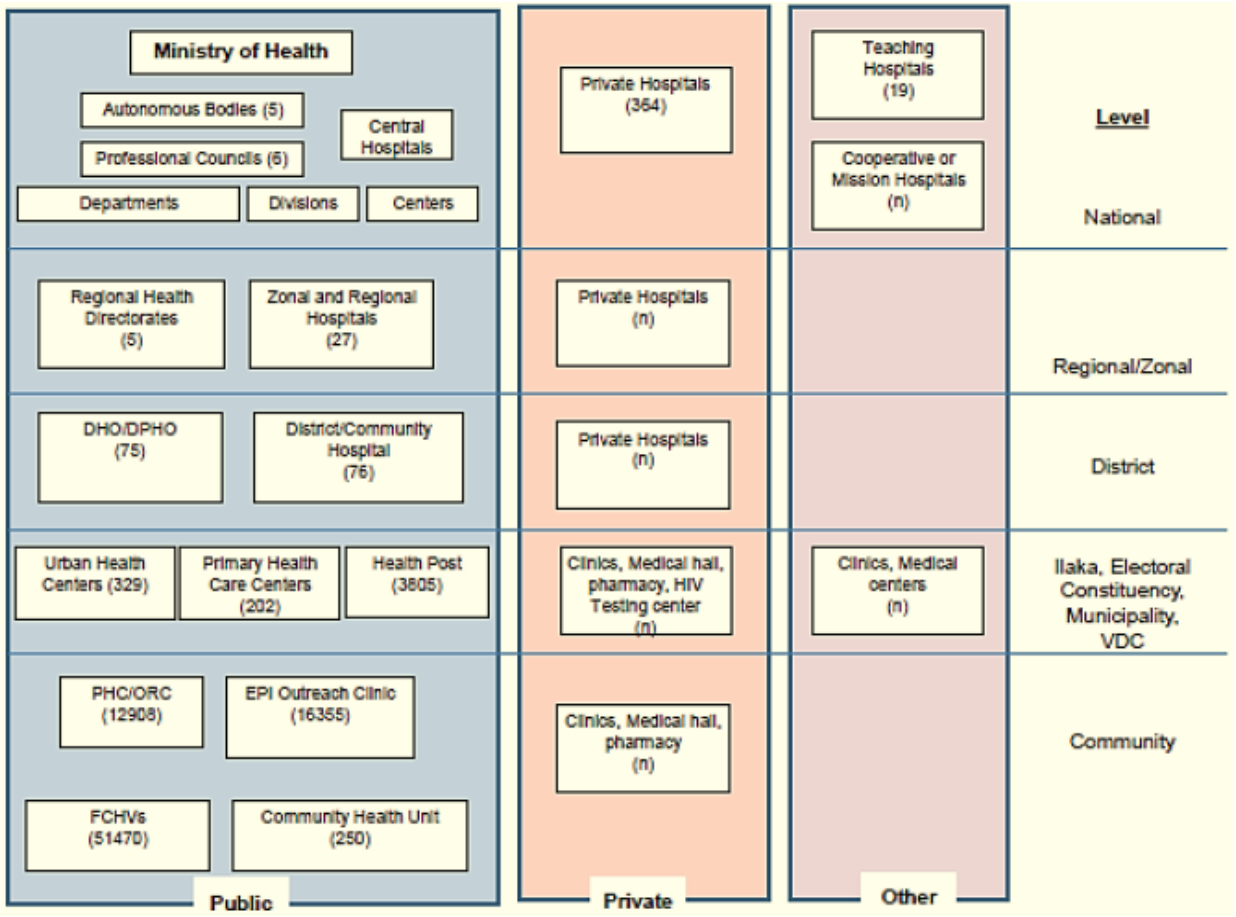


Source: DoHS, Annual Report 2073/74 (2016/2017)

Source:(14)

Appendix 2

Health Service structure of Nepal



Source: Nepal health facility survey: Final Report, 2015(24)