

Healthcare for Menopause in Nepal

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A thesis submitted in partial fulfilment of the requirement for the degree of Master of Science in Public Health.

By:

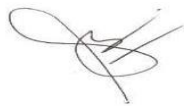
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Nepal

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Abstract

Menopause presents a critical yet often overlooked public health challenge in Nepal, significantly affecting women's physical, mental, and social well-being. This study investigates barriers to healthcare access for menopausal women across four key areas: service availability, policy frameworks, health-seeking behaviors, and provider competencies. Using the WHO Health Systems Framework and the Social Ecological Model, the study combines evidence from peer-reviewed literature, national health reports, and global comparative data. The findings highlight systemic gaps in menopausal healthcare. Although Nepal has a solid primary healthcare system, specialized menopause services are lacking in rural areas and scarce in urban areas. Policy documents, including the Nepal Health Sector Strategy (2023-2030), notably exclude menopause from national health priorities. Healthcare providers, largely male and concentrated in urban centers, display limited knowledge of menopause management, resulting in frequent misdiagnoses and inadequate treatments. These results highlight the critical necessity for thorough reforms. The recommended actions include: (1) incorporating menopause care into national health policies and insurance schemes, (2) implementing nationwide provider training programs, (3) launching community education initiatives with Female Community Health Volunteers, and (4) creating dedicated menopause clinics in regional hospitals. The study suggests a multi-level intervention framework that addresses individual, community, and systemic barriers to establish an equitable, culturally sensitive healthcare approach for Nepal's growing population of menopausal women.

Keywords: Menopause, healthcare access, health policy, gender equity, Nepal

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Chapter 1: Introduction

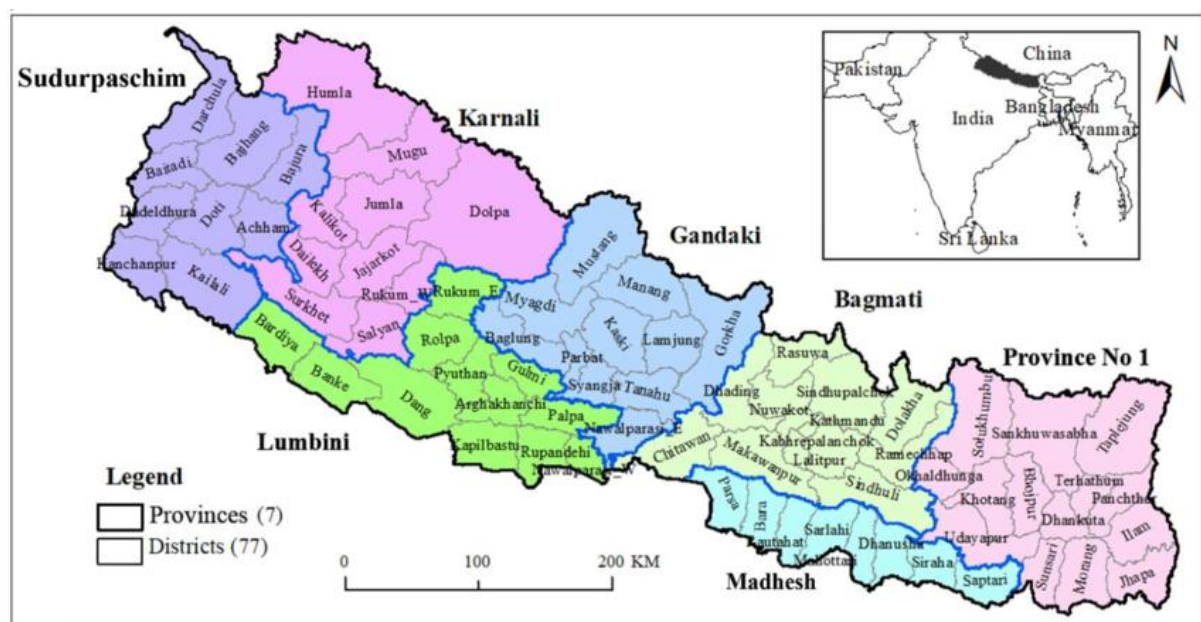
1.1 Country Profile

Nepal, home to Mount Everest, the highest peak in the world at 8,848 meters, is a landlocked country in South Asia with a lower-middle-income status. It is bordered by China to the north and India to the east, west, and south, and is known for its diverse geography and complex social and cultural landscape. The country's overall area is 147,516 square kilometers, and it is situated roughly between 28° north latitude and 84° east longitude. (NTB, 2025).

According to the 2021 census, the total population of Nepal is 29,164,578, with a sex ratio of 95.59 males per 100 females (48.87% male and 51.13% female). Out of the total population, 66.17% live in urban areas, whereas 33.83% live in rural regions. The average life expectancy is 71.1 years, with men averaging 69.2 years and women 73.0 years in Nepal (PHC, 2024).

Geographically, the country has three regions: the mountain region with 6.08% of the population, the mid-hill region with 40.31%, and the plain 'terai' region with 53.61% of the population (CBS, 2022). From a governance standpoint, the nation is organized into three levels of government: federal, provincial, and local. The nation is segmented into 7 provinces, 77 districts, and 753 local administrative units. In the local governance structure, there are 460 village municipalities, 276 municipalities, 11 sub-metropolitan, and 6 metropolitan cities.

Figure 1: Map of Nepal



Source: (Acharya et al., 2022)

It is a country characterized by diverse ethnicities, languages, religions, and cultures, where the residents live together peacefully across its three primary ecological zones: Mountain, Hills, and Terai. The Terai region, located in the tropical southern section of the country, has a warm and humid climate. Although winter mornings and nights are chilly, the midland areas are pleasant virtually all year round. The northern mountain region, which is located above 3,353 meters, has an alpine climate with much lower temperatures and thin air in the winter (CBS, 2014).

According to the 2021 census (Caste/ethnicity, language and religion), the population is composed of 81.2% Hindus, 8.2% Buddhists, 5.1% Muslims, 3.2% Kirats (an indigenous

religion with Hindu influence), and 1.8% Christians. Furthermore, the 2021 census (National report) reports that the literacy rate of the country's total population aged 5 years and above is 76.2%, with a male literacy rate of 83.6% and a female literacy rate of 69.4%. Female literacy, particularly in rural areas, remains low at around 65%, directly affecting health-seeking behaviour and awareness of available services. Nepal Demographic Health Survey (NDHS) 2022 reports educated women are more likely to access healthcare services, and significant disparities exist in health access and outcomes based on income levels too (ICF, 2022).

1.2 Health System setup in Nepal

The healthcare system in Nepal has undergone profound transformations over centuries, shaped by socio-political changes, modernisation efforts, and evolving public health priorities.

Nepal's healthcare system has deep roots in traditional medicine, primarily Ayurveda, which has been practised since ancient times (Acharya et al., 2022). Historical records suggest that early healthcare in Nepal was dominated by Ayurvedic principles, with influences from Tibetan and Indian medical traditions (Aryal et al., 2016). The Lichhavi and Malla dynasties (3rd to 18th centuries) institutionalised Ayurveda, establishing formal training systems and royal dispensaries (Kharel, 2023). Traditional healers, known as Dharmi-Jhankris, also played a crucial role, particularly in rural areas, where they provided spiritual and herbal treatments for various ailments. However, healthcare remained decentralised mainly, with limited infrastructure beyond village-based practitioners. This period laid the foundation for Nepal's dual healthcare system, where traditional and modern medicine would later coexist.

The Rana oligarchy (1847–1951) marked Nepal's first systematic efforts to modernise healthcare (Joshi, 2015). During this period, the ruling Rana family introduced allopathic (Western) medicine while simultaneously supporting Ayurveda. The founding of Bir Hospital in Kathmandu in 1889 marked a significant milestone, as it became Nepal's inaugural formal allopathic medical institution (Acharya et al., 2022). However, access to modern healthcare was restricted to the elite, including Rana family members, government officials, and military personnel.

Despite these advancements, traditional medicine remained the primary healthcare source for the general population, particularly in rural areas. The Rana regime also introduced public health measures, including quarantine systems and smallpox vaccination campaigns, though their reach was limited (Heydon, 2019). This era created a dual healthcare system; urban centres gradually adopted modern medicine, while rural Nepal continued relying on Ayurveda and folk healing.

Following the fall of the Rana regime in 1951, Nepal's healthcare system underwent significant reforms under King Mahendra's rule. The government collaborated with international organisations like the World Health Organisation (WHO) and UNICEF to expand medical infrastructure. The First Five-Year Plan (1956–1961) prioritised healthcare development, leading to the establishment of district hospitals and disease control programs, such as malaria eradication (Rokaya, 2024).

A significant milestone came in 1978, when Nepal adopted the Health-for-All initiative, aligning with the Alma-Ata Declaration on primary healthcare (MoHP, 2020). This strategy emphasised community-based healthcare, including immunisation, maternal and child health services, and sanitation programs. However, despite progress, healthcare access remained low, with less than 10% of the population utilising formal medical services by the 1990s (MoHP, 1992).

The democratic movement of 1990 brought sweeping changes to Nepal's healthcare governance. The first National Health Policy (1991) introduced decentralisation, establishing 75 District Health Offices and five Regional Health Directorates to improve oversight (DoHS, 2020). The government expanded community health units, including Health Posts (HPs) and Primary Health Care Centres (PHCCs), staffed by auxiliary health workers such as Auxiliary Nurse Midwives (ANMs) and Health Assistants (HAs).

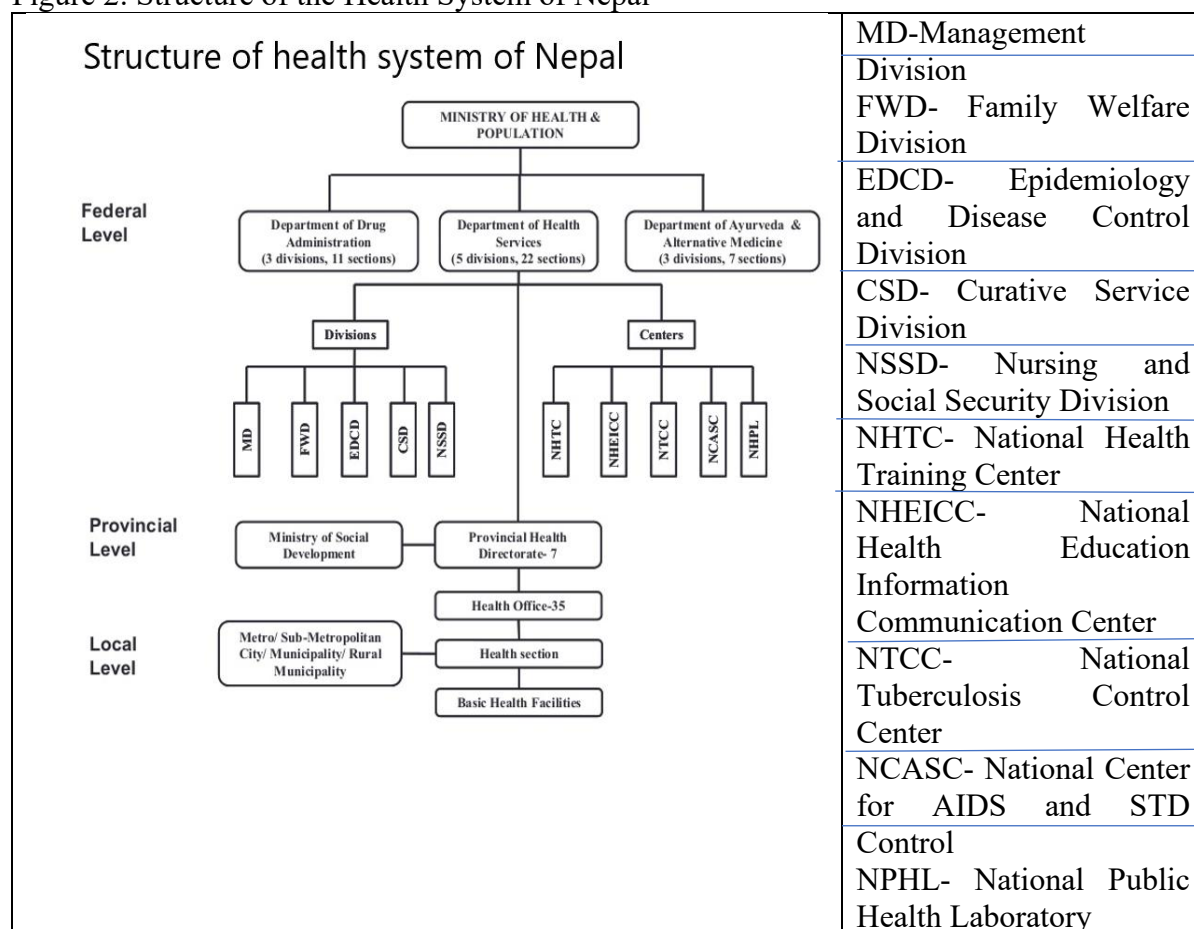
The Safe Motherhood Program (1997) was a significant success, significantly reducing maternal mortality through free delivery care and antenatal services (Rath et al., 2007). However, challenges persisted, including underfunding, staff shortages, and cultural resistance to modern medicine in rural areas. Healthcare remained urban-centric, with rural populations still dependent on traditional healers and under-resourced health posts.

The 2015 Constitution marked a transformative moment in Nepal's governance, establishing a federal republic structure that explicitly recognised health as a fundamental right for all citizens (CA Secretariat, 2015). This constitutional shift introduced a comprehensive three-tier healthcare governance system designed to decentralise health service delivery. At the federal level, the Ministry of Health and Population (MoHP) was empowered to set national health policies, allocate budgets, and implement strategic programs such as the Nepal Health Sector Strategic Plan (NHSSP 2023-2030). Provincial governments, through their Ministries of Social Development, were tasked with overseeing regional hospitals and health training centres, while local municipalities assumed responsibility for managing frontline health facilities, including Health Posts (HPs), Primary Health Care Centres (PHCCs), and the critical network of Female Community Health Volunteers (FCHVs).

Several key reforms emerged from this federal restructuring. The Health Insurance Program launched in 2015/16 represented a significant step toward financial risk protection, aiming to reduce out-of-pocket (OOP) expenses by covering basic health services (MoHP, 2019). However, this program notably excluded specialised care, including essential menopause treatments. Similarly, the Public Health Service Act of 2018/19 mandated free Basic Health Services (BHS) but maintained financial barriers for advanced treatments through substantial OOP payments. The current NHSSP (2023-2030), while aligning healthcare delivery with federal governance principles, continues to overlook menopause care as a recognised priority (MoHP, 2023), reflecting a persistent gap in addressing women's midlife health needs.

Despite these structural reforms, Nepal's healthcare system faces enduring challenges. A significant gap exists between urban and rural areas, with around 70% of medical specialists located in Kathmandu (DoHS, 2023), resulting in rural communities having restricted access to quality healthcare. Financial barriers remain substantial, as evidenced by the 55.8% of health expenditures borne directly by patients (World Bank, 2022), creating significant obstacles for low-income households. Gender disparities further compound these challenges, with patriarchal norms continuing to restrict women's autonomy in healthcare decision-making, particularly for sensitive issues like menopause-related care.

Figure 2: Structure of the Health System of Nepal



Source: (Adhikari, 2021)

At the national level, the Ministry of Health and Population (MoHP) is in charge of developing policies, planning, organizing, and coordinating the health sector across national, provincial, and local tiers (MoHP, 2022). Under MoHP, there are three departments (Health Services, Ayurvedic and Alternative Medicine, and Drug Administration), a central-level hospital, and the Institute of Health Sciences MoHP, 2020; Adhikari, 2021; MoHP, 2022).

At the provincial level, the health sector is within the Ministry of Social Development (MoSD), but in a few provinces, it is within the Ministry of Health and Population. Under MoSD, there are two divisions. One division is responsible for health-related institutional structural policy, law, criteria, plan, and public health. The other division is responsible for hospital development and medical services.

At the local level, for the information, coordination, implementation, and monitoring of health-related planning, there is a health division in the metropolitan, sub-metropolitan, municipality, and village municipality. Local hospitals, primary health care centres, health posts, community health units, urban health centres, and urban health promotion centres are functioning at the local level (MoHP, 2020).

Annual Health Report (2023/2024) published by the Department of Health Services (DoHS) reports from HMIS data that there are 234 public hospitals, 184 primary health care centres (PHCCs), 3769 health posts (HPs), and 2178 non-public facilities, and 7651 are Basic Health Service Centers in Nepal (DoHS, 2020).

Table 1: Number of Health facilities (2023/2024)

Public Hospitals	234
PHCCs	184
Health Posts	3769
Non-Public facilities	2178
Basic Health Service Center	7651
Basic Hospital (5-15 beds)	249
General Hospitals (25-50 beds)	305
General Hospitals (100-300 beds)	69
Specialized Hospitals (100 beds and above)	27
Super Speciality Hospitals (50+ beds)	24
Academy and Teaching Hospitals (300+ beds)	29
Other types of Health Facilities (Polyclinics, clinics, diagnostic centers, dialysis centers, eye centers, etc.)	1892

At the hospitals and PHCCs, doctors, staff nurses, and laboratory staff are available. From the HPs, health assistants (HA), auxiliary health workers (AHWs), and auxiliary nurse-midwifery (ANMs) deliver the services. For essential health services, HPs, which are the lowest-level health facilities, are the first institutional contact point. HPs are responsible for monitoring the activities of the Female Community Health Volunteers (FCHVs) and for organising the community-based activities of Primary Health Care Outreach Clinics (PHC-ORCs) and Expanded Program on Immunisation (EPI) clinics. HPs are the referral centres of FCHVs. HPs refer unmanageable cases to PHCCs and on to public hospitals (DoHS, 2020).

Nepal's health care system includes conventional public and private providers as well as traditional medical practitioners. Based on registration in the health-related professional council in Nepal, per ten-thousand population, there are 9.04 doctors, 21.08 nurses, 11.18 auxiliary nurse-midwifery, 5.96 health assistants, 10.27 medical science laboratory practitioners, and 0.005 renal dialysis, embryology, cardiology technicians, including forensic medicine (MoHP, 2020).

The essential medicines, supplies, and commodities for health facilities are provided through a central public supply chain under the MoHP. Block grants are provided to semiautonomous hospitals for their operation, salaries, and allowances for government employees. Tax and non-tax revenue, as well as financial aid from external development partners, are the primary financing sources. This is how the government of Nepal pools funds and pays to providers through the health sector budget managed by MoHP.

Nepal's healthcare system functions amid a complicated array of socioeconomic inequalities, cultural values, geographical obstacles, and a history of inadequate funding. This leads to challenges in providing equitable health care services to its whole population. There are huge urban-rural inequities due to several issues, including limited health care budget, lack of transportation, shortage of competent health personnel, insufficient physical infrastructure, and geographic constraints. These elements significantly influence the quality, availability, and fairness of healthcare services, especially in rural areas and underserved populations.

Furthermore, many communities still rely on traditional healers (Dhami-Jhankris), especially for mental health and women's health issues (Ranabhat et al., 2015). Marginalised groups

(Dalits, Janajatis, Madhesis) report higher levels of discrimination and lower utilisation of public health services because trust in government health services is lower among these groups due to historic marginalisation. Patriarchal norms often limit women's autonomy in seeking healthcare without male permission. Decision-making is male-dominated, which delays the healthcare of women (UNFPA, 2021).

The government of Nepal is dedicated to achieving Universal Health Coverage (UHC), with financial protection being an integral aspect of the Sustainable Development Goals (SDGs) (NPC, 2020). A primary goal of universal health coverage is to tackle disparities in the financial burdens of healthcare. The targeted SDG 3.8 includes two main indicators: 3.8.1, which refers to the coverage of essential health services, and 3.8.2, which pertains to financial protection for everyone.

One of the benchmarks for Universal Health Coverage is to reduce out-of-pocket health expenditure to below 20% of current health expenditure. Financial difficulties or poverty tend to be rare when out-of-pocket expenditures (OOPE) account for less than 15%–20% of total health spending (NHRC, 2022). In 2024, Nepal has a Human Development Index value of 0.601, placing it 146th out of 193 nations and territories; this positions the country in the medium human development category and highlights the issues of gender inequality, social exclusion, and regional disparities faced by its most vulnerable populations (UNDP, 2020).

In Nepal, as of 2022, health spending accounts for 6.66% of the gross domestic product, with out-of-pocket costs making up 55.79% of total health expenditure (World Bank, 2025). OOPE can result in financial strain for individuals, often leading to limited access to healthcare, exposing them to significant health risks, and ultimately causing them to fall into poverty. Nonetheless, it is 55.79%, which increases the risk of catastrophic health expenditures and family impoverishment. Domestic general government health expenditure was 8.01% of general government health expenditure and was 31.64% of health expenditure in 2022 (World Bank, 2025). In 2023, Nepal's per capita health expenditure was estimated at \$63.6 according to the Nepal Investment Board, while it was \$88.27 in 2022 as per the World Bank database.

Nepal has implemented various financial risk protection strategies, such as providing free basic health services, health insurance, and additional programs aimed at alleviating financial burdens. Nevertheless, out-of-pocket expenditures have remained high over the past two decades, contributing to financial difficulties in accessing healthcare (MoHP, 2019).

Chapter 2: Problem Statement, Justification, and Objectives

2.1. Menopause in Nepal

The aging of the global population represents one of the most significant demographic transformations of the 21st century. Recent United Nations data reveal that out of 4.01 billion women worldwide, approximately 32-33% are aged 45 years or older (UN, 2024). In Nepal, this demographic constitutes about 25% of the female population, reflecting similar aging trends. Notably, while men outnumber women in younger age groups, women surpass men in older cohorts due to their biological longevity advantage. Forecasts suggest that by the year 2030, women aged 50 and older will make up 54% of the global population of 2.3 billion older individuals (World Bank, 2025). This demographic shift underscores the urgent need for health systems to address the specific needs of aging women, particularly concerning menopausal health.

Menopause is medically defined as the permanent cessation of menstruation following 12 consecutive months of amenorrhea, occurring naturally due to the depletion of ovarian follicles (Pasokh et al., 2024). The World Health Organisation (WHO) identifies menopause as a critical life stage for women, typically occurring between ages 45 and 55, with the global average age being 51 years (WHO, 2022). This transition marks the end of a woman's reproductive capacity, driven by declining levels of estrogen and progesterone as ovarian function diminishes. While menopause is a natural biological process rather than a disease, its associated symptoms can profoundly impact physical, emotional, and social well-being, often severely diminishing quality of life (WHO, 2022).

Not all women experience menopause at the typical age. Some face premature menopause (before age 40) due to chromosomal abnormalities (e.g., Turner syndrome), autoimmune disorders, or idiopathic causes (WHO, 2022). Additionally, surgical menopause can occur following the removal of both ovaries (bilateral oophorectomy), while medical interventions such as chemotherapy or pelvic radiation can also induce menopause by damaging ovarian tissue. These cases often present more severe symptoms due to the abrupt hormonal decline, necessitating specialised medical attention.

The transition into menopause, medically termed perimenopause, typically begins with irregular menstrual cycles before culminating in the complete cessation of menstruation (Bacon, 2017). This phase is characterised by significant hormonal fluctuations, primarily the decline of estrogen and progesterone, which can trigger a wide spectrum of symptoms that vary in severity among women (WHO, 2022).

Vasomotor disturbances such as hot flashes and night sweats are among the most common symptoms, often significantly disrupting daily life and sleep patterns (Utian, 2005). Many women also experience genitourinary changes, including vaginal dryness, dyspareunia (painful intercourse), and urinary incontinence, which frequently lead to physical discomfort and reduced quality of life. The psychological effects of menopause can be equally challenging, with many women reporting mood swings, depression, and anxiety that stem from both hormonal shifts and sociocultural perceptions of ageing (Bagga et al., 2025).

Sleep disturbances like insomnia and chronic fatigue are particularly problematic, as they tend to exacerbate existing emotional and physical strain (Baker et al., 2018). Perhaps most concerning are the metabolic and skeletal changes associated with declining estrogen levels, which increase women's risk of developing cardiovascular disease, osteoporosis, and fractures (WHO, 2022). These physiological changes can have serious long-term health consequences if left unmanaged.

While some women experience only mild and transient symptoms during this transition, others endure debilitating effects that persist for years, severely impairing their daily functioning and overall well-being (Matthews & Bromberger, 2005). The potential long-term health complications of untreated menopause - including osteoporosis, cardiovascular disease, and pelvic floor disorders - not only affect individual women but also place an additional burden on already strained healthcare systems. This underscores the importance of proper medical attention and support during this critical life stage.

Nepal's healthcare system faces a critical gap in addressing the needs of its growing menopausal population. Despite having an extensive primary healthcare network, the country lacks dedicated menopause services, especially in rural areas where access to specialised care is already limited (Adhikari & Bhurtyal, 2021). This systemic neglect is reflected in national health policies, including the Nepal Health Sector Strategy (2023-2030), which fails to recognise menopause care as a priority area (MoHP, 2023).

Cultural taboos create a major obstacle to adequate menopause treatment in Nepal. The topic remains shrouded in silence, with many women considering it a natural phase that doesn't warrant medical attention. This perception, combined with societal taboos, discourages women from seeking help for their symptoms. Financial constraints further compound the problem, as 55.8% of healthcare costs are paid out-of-pocket (World Bank, 2022), making essential treatments like hormone replacement therapy and diagnostic tests unaffordable for most women. The healthcare system also suffers from a severe shortage of professionals trained in menopause management, leaving many women without access to proper diagnosis or treatment options (DoHS, 2023/24).

The pressing requirement for policy and systemic changes has never been more evident. Integrating menopause care into the Nepal Health Sector Strategic Plan (NHSSP) and aligning it with existing Non-Communicable Disease (NCD) programs would provide a framework for comprehensive care (Mishra et al., 2025). Expanding services through dedicated menopause clinics in regional hospitals and training Female Community Health Volunteers (FCHVs) in basic symptom management could significantly improve access at the community level. Financial protection measures, such as subsidising hormone replacement therapy and including menopause care in national health insurance, would help reduce the economic burden on women (Velentzis et al., 2017). Equally important are awareness campaigns that address cultural stigma, improve health literacy, and encourage women to seek appropriate medical support for their menopausal symptoms.

2.2 Problem Statement and Justification

Women experiencing menopause and those who are postmenopausal have distinct health requirements compared to younger women and men of the same age group. It is essential to consider these needs when planning and delivering health services. But in Nepal, this menopausal transition is often poorly understood and inadequately addressed, particularly in rural and marginalised communities. Cultural taboos, lack of education and/or awareness, social stigma, gender bias, poor access to healthcare, and limited health infrastructure further exacerbate the issue (Ghimire & Samuels, 2014; Bhandari et al., 2020). This neglect results in untreated physical and mental health issues, resulting in untreated symptoms and long-term health complications, including osteoporosis, cardiovascular diseases, urogenital problems, depression, and anxiety, which can severely affect quality of life (Puri & Tamang, 2007; Malla et al., 2019; UNFPA, 2020).

The nation's healthcare system does not emphasise the importance of menopausal health, and a limited number of healthcare providers are equipped to identify or address menopause-related

issues, mostly residing in cities, which limits access to healthcare, especially outside the cities (Sharma & Joshi, 2021; UNFPA, 2025).

The healthcare system of the country does not prioritise menopausal health, and few healthcare professionals are trained to recognise or manage menopause-related conditions. Women frequently remain silent due to stigma, leading to isolation and deterioration in quality of life.

Research has highlighted that few healthcare professionals in Nepal are trained to recognise or manage menopause-related symptoms, leaving affected women with minimal support or guidance (Sharma & Joshi, 2021; Bhandari et al., 2020). This professional knowledge gap is further complicated by the sociocultural stigma that surrounds discussions about ageing and reproductive health. Many women internalise their struggles, choosing silence over seeking help, which results in emotional isolation and deterioration in their quality of life (Adhikari, 2010; Ghimire & Samuels, 2014). Studies show that even when women do experience significant menopausal symptoms, they often do not pursue treatment due to embarrassment or lack of awareness about available support (Malla et al., 2019). Altogether, these factors contribute to an urgent public health issue that continues to be overlooked in both policy and practice (Puri & Tamang, 2007; UNFPA, 2020).

Despite menopause being a natural biological transition, it is often overlooked in public health discourse, with minimal education and support provided at both community and policy levels. In Nepal, the population of women entering midlife is growing, but there is a lack of systematic attention to their specific health needs. Menopausal women are often excluded from targeted health programs, and there is limited awareness among both healthcare providers and the general public about the importance of managing menopausal health.

The national health policy of Nepal emphasises equity and inclusion and aims for universal health coverage. However, menopausal health remains a neglected area within the country's healthcare system, receiving negligible attention in national strategies and service delivery. The Nepal Health Sector Strategy (2023-2030) is one of the key policy documents in the country, in which direct consideration of menopause or midlife women's health is not found, which reflects a broader systemic disregard. The Safe Motherhood Program and Aama Program, even though quality of care and geographic equity remain challenges, have prioritised access for free delivery, family planning, and abortion services, but did not include post-reproductive health service needs. Service availability, health policies, and guidelines do not adequately address the midlife of women, and research on the topic remains sparse. There is a critical need for comprehensive, culturally sensitive, and affordable, accessible healthcare solutions that address the specific needs of menopausal women in Nepal.

Understanding the current state of healthcare for menopausal women in Nepal is crucial for addressing existing gaps and improving health outcomes. This review seeks to provide an evidence-based foundation for policymakers, practitioners, and researchers to inform future interventions.

2.3 Research Questions

This literature review addresses the following questions:

1. What health service options exist in the Nepalese healthcare system for women going through menopause?
2. What health policies and guidelines are in place in Nepal regarding menopause?

3. What is the health-seeking behaviour of Nepalese women in response to menopause-related symptoms?
4. What is the level of knowledge and attitude among healthcare providers in Nepal regarding menopause?

2.4 General Objective

To explore the healthcare needs and challenges faced by menopausal women in Nepal, and to recommend strategies for improved support and intervention.

Specific Objectives:

- To understand the level of awareness and knowledge about menopause among Nepali women.
- To identify common health problems experienced during and after menopause by Nepali women.
- To explore the availability and accessibility of menopause-related healthcare services.
- To understand cultural attitudes and social stigmas surrounding menopause.

Chapter 3: Methodology and Conceptual Framework

3.1 Methodology

This study is a narrative literature review aiming at analysing existing evidence on menopause-related healthcare in Nepal, focusing on services, policy, health-seeking behaviours, and provider attitudes.

Literature from Nepal, the Asia region, low- and middle-income countries, and globally is included, since there are limited studies in the Nepalese setting. Articles, peer-reviewed documents, publications in journals, national policy documents, demographic health surveys, health facility surveys, grey literature, government and technical reports from the WHO and the World Bank are retrieved. A systematic search was conducted and various databases were used, including but not limited to Web of Science, PubMed, Google, Google Scholar, and VU Library access to retrieve these documents using terms related to menopause, healthcare, and Nepal. Publications in English from 2000 to 2024 were considered.

Studies focused on menopause and post-menopausal health in Nepal and globally, articles addressing health-seeking behaviours, provider perspectives, or health service delivery, and National policies, guidelines, or government reports relevant to menopausal care were included. Studies not specific to menopause or midlife women, studies from outside Nepal unless regionally relevant, and articles lacking empirical data (e.g., opinion pieces without references) were excluded.

Relevant articles were screened by title and abstract. Full-text articles that met the inclusion criteria were reviewed and categorised according to the objectives of the study.

To examine the intricacies of healthcare delivery and usage among menopausal women, this review utilises the analytic framework by Walt and Gilson's Policy Triangle.

To assess the policy and systemic deficiencies related to menopausal healthcare in Nepal, this literature review employs Walt and Gilson's Policy Triangle Framework (1994). This widely recognized model conceptualizes health policy as a dynamic interplay of four essential components: context, content, process, and actors. The context includes the larger sociocultural, economic, and political settings in Nepal, patriarchal gender norms, cultural stigma surrounding menopause, disparities in health access between rural and urban areas, and significant out-of-pocket costs greatly influence women's access to healthcare. The content pertains to the specific elements of health policies. Current national health strategies, such as the NHSSP (2023–2030) and the National Health Policy (2019), largely overlook menopause, indicating a serious policy gap. The process refers to how policies are formulated, executed, and assessed. In Nepal's case, there has been limited policy involvement or institutional responsiveness regarding the incorporation of menopause-related health into existing programs, highlighting a weak and exclusive policy development process. Finally, the actors include stakeholders who impact or are impacted by health policies, including the Ministry of Health and Population (MoHP), Female Community Health Volunteers (FCHVs), healthcare professionals, NGOs, and the women themselves. However, the absence of proactive advocacy or institutional prioritization from these stakeholders has further marginalized menopausal women within the public health context. This framework facilitates a detailed examination of why menopause is still underrepresented in Nepal's health system and helps identify multi-level policy solutions.

Findings after thematic analysis using the Walt and Gilson's Policy Triangle were organised into four domains:

1. Service Availability
2. Policies and Guidelines
3. Health-Seeking Behaviour
4. Healthcare Provider Knowledge and Attitudes

Discrepancies in classification or interpretation were resolved through triangulation with policy documents or grey literature.

Table 2 outlines the systematic search strategy employed to identify relevant literature on menopause care in Nepal. The keywords were carefully selected to capture all pertinent aspects of the research topic and were combined using Boolean operators to refine the search results.

Table 2: Keywords used to search literature

Thematic Area	Keywords / Search Terms	Boolean Combination Examples
Menopause-related terms	Menopause, Perimenopause, Postmenopause, Climacteric, Midlife women	("menopause" OR "perimenopause" OR "postmenopause" OR "climacteric")
Health & care context	Healthcare access, Health services, Health-seeking behavior, Menopausal symptom management, HRT	("healthcare" OR "health services" OR "HRT" OR "symptom management" OR "health-seeking behavior")
Geographic focus	Nepal, Nepalese women, Rural Nepal, Urban Nepal	("Nepal" OR "Nepalese women")
Provider/system focus	Health policy, Health system, Health workforce, Provider knowledge, Attitude of health professionals	("health policy" OR "health workforce" OR "provider knowledge" OR "health system" OR "attitudes")
Cultural/behavioral focus	Cultural perceptions, Health beliefs, Awareness, Stigma, Traditional beliefs	("cultural perceptions" OR "health beliefs" OR "stigma" OR "awareness")
Combined search string		("menopause" AND "healthcare" AND "Nepal")("menopausal women" AND "health-seeking behavior" AND "Nepal")

The search terms were organised into five thematic areas, each addressing critical dimensions of the research topic. For menopause-related terminology, keywords included "menopause," "perimenopause," "post-menopause," "climacteric," and "midlife women," combined using Boolean operators to capture all stages of the menopausal transition. The health and care context were explored through terms such as "healthcare access," "health services," "health-seeking behaviour," "menopausal symptom management," and "HRT," ensuring both systemic and behavioural aspects were considered.

Geographic specificity was maintained through keywords such as "Nepal," "Nepalese women," "rural Nepal," and "urban Nepal," focusing the search on locally relevant studies. The provider and system perspectives were examined using terms like "health policy," "health system," "health workforce," "provider knowledge," and "attitude of health professionals" to identify gaps in healthcare delivery and workforce capacity. Cultural and behavioural factors were investigated through keywords including "cultural perceptions," "health beliefs," "awareness," "stigma," and "traditional beliefs" to understand sociocultural influences on menopause experiences.

To enhance search precision, targeted Boolean combinations were developed. For instance, the string ("menopause" AND "healthcare" AND "Nepal") retrieved general literature on menopause care in the country, while ("menopausal women" AND "health-seeking behaviour" AND "Nepal") yielded more specific results about care-seeking patterns. This structured approach was applied across multiple databases, including PubMed, Google Scholar, and institutional repositories, covering peer-reviewed articles, policy documents, and grey literature published between 2000 and 2024. The initial search results were further refined through manual screening of abstracts and full texts to ensure relevance and quality of the included studies.

Chapter 4: Findings

4.1. Service Availability

The healthcare system of Nepal shows significant gaps in addressing the health needs of menopausal and postmenopausal women, despite having a relatively well-developed primary healthcare infrastructure (Gyawali et al., 2016). The nation's system of 3,769 health posts (HPs) and 184 primary healthcare centres (PHCCs) focuses mainly on services related to maternal and child health, vaccination initiatives, and the management of communicable diseases, while care for menopausal women is significantly overlooked (Department of Health Services [DoHS], 2023/24). This systemic neglect is particularly evident in rural areas where dedicated menopause clinics are absent, while even in urban centres, such services remain scarce and poorly coordinated (Adhikari & Bhurtyal, 2021). The lack of specialised care infrastructure forces menopausal women to seek help through general gynaecological or internal medicine consultations, where providers frequently lack adequate training to recognise or manage menopause-specific symptoms (Virdi, 2024; Cowell et al., 2024).

The clinical management of menopause-related health issues suffers from multiple deficiencies in Nepal's healthcare system (Gyawali et al., 2016). Healthcare providers often demonstrate limited knowledge about diagnosing and treating characteristic menopausal symptoms such as vasomotor disturbances (including hot flashes and night sweats), osteoporosis, urogenital atrophy, and associated mood disorders (Davis et al., 2021). This knowledge gap frequently leads to underdiagnosis, inappropriate treatment approaches, or dismissal of symptoms as normal ageing processes, resulting in many women receiving inadequate care or no treatment at all. The situation reflects a broader pattern of healthcare system failure to address women's health needs beyond their reproductive years, with serious consequences for quality of life and long-term health outcomes.

A landmark development occurred in 2020 with the establishment of Nepal's first specialised menopause clinic at Dhulikhel Hospital, marking a belated recognition of this critical health need (Dongol et al., 2021; UNFPA, 2025). However, this initiative remains an isolated example rather than part of a systemic reform. The vast majority of government hospitals across the country still lack any dedicated menopause services, and rural areas have no access whatsoever to specialised care. This uneven distribution of services creates significant health disparities, making comprehensive menopause care accessible only to urban, educated, and economically advantaged women who can navigate the fragmented healthcare system.

Private healthcare providers in major urban centres have begun offering some menopause-related services, including hormone replacement therapy (HRT) and osteoporosis screening. However, these services remain financially out of reach for most Nepalese women due to the country's exceptionally high out-of-pocket (OOP) healthcare expenditure rate, which stands at 55.79% of current health expenditures (World Bank, 2022). The financial strain is especially significant for women going through menopause, many of whom experience economic reliance and restricted independence in making healthcare choices (Murtagh & Hepworth, 2023; Idris et al., 2023). This financial barrier not only prevents access to existing services but also discourages women from seeking preventive care or early intervention for menopausal symptoms.

In the absence of formal healthcare options, many Nepalese women resort to traditional and informal healthcare practices to manage menopausal symptoms. Traditional healers (Dhami-Jhankris), Ayurvedic practitioners, and home-based herbal remedies remain popular choices, especially in rural and indigenous communities where these approaches are culturally entrenched and locally trusted (Ranabhat et al., 2015). While these traditional practices provide culturally familiar alternatives, they often delay access to evidence-based medical treatments.

Findings from the Kavre district demonstrate this trend, indicating that 62% of women undergoing menopause only sought professional medical assistance when their symptoms became greatly incapacitating, emphasizing both the shortcomings of conventional methods and the failure of the formal healthcare system.

The systemic neglect of menopausal women's health needs is reinforced by national health policies and programs that overwhelmingly focus on reproductive-aged women. Flagship initiatives like the Aama Program and Safe Motherhood Initiative, while successful in improving maternal health outcomes, have inadvertently contributed to the marginalisation of post-reproductive health needs (MoHP, 2023). The Nepal Health Sector Strategy (2023-2030) highlights this organizational oversight by not explicitly focusing on menopause or the health issues related to midlife women. This policy gap is compounded by the absence of menopause care from national clinical guidelines, screening programs, and community health outreach initiatives, including those delivered by Female Community Health Volunteers (FCHVs). The resulting disparities in healthcare access and quality perpetuate a cycle of unmet needs for Nepal's growing population of menopausal women, with significant implications for their health, well-being, and social participation.

4.2. Policies and Guidelines

The absence of menopause from Nepal's key health policy documents represents a fundamental failure to address women's health across the life course. The Nepal Health Sector Strategic Plan (NHSSP) 2023-2030 and the National Health Policy from 2019 (Ministry of Health and Population [MoHP], 2023) highlight a continued emphasis on reproductive, maternal, and infectious disease issues, while neglecting the unique health requirements of menopausal women. This policy gap exists despite clear evidence linking menopause to increased risks of chronic conditions, including cardiovascular disease, osteoporosis, and urogenital atrophy (World Health Organisation [WHO], 2022). The exclusion is particularly striking given that women spend approximately one-third of their lives in postmenopausal stages, facing unique health challenges that require systematic attention within healthcare systems.

The Safe Motherhood Program highlights this oversight in Nepal's healthcare policy. While this flagship initiative has successfully expanded access to free maternity care, its design exclusively targets reproductive-age women, creating an artificial cutoff that ignores the continuum of women's health needs (MoHP, 2019). This reproductive-centric approach reinforces the harmful perception of menopause as merely a "natural" life event rather than a significant health transition requiring clinical attention and support (Korikian, 2024). The policy silence surrounding menopause perpetuates a system where women's health concerns are valued primarily for their childbearing potential, neglecting their well-being during and after the reproductive years.

Nepal's healthcare system lacks the fundamental building blocks necessary for delivering quality menopause care at scale. Unlike more developed health systems, Nepal has failed to establish national clinical guidelines for managing menopausal symptoms, including evidence-based protocols for hormone replacement therapy (HRT), standardised symptom screening tools, or clear referral pathways (Chaudhary et al., 2025; Adhikari & Bhurtyal, 2022). This absence of institutional guidance creates a clinical vacuum where healthcare providers must rely on personal experience or fragmented knowledge when encountering menopausal patients. The contrast with neighbouring India is particularly stark, where established menopause societies and comprehensive clinical protocols demonstrate what adequate national-level attention to this issue could look like (Basheer & Singh, 2025).

The consequences of this policy and clinical guidance vacuum are severe and multifaceted. Without standardised protocols, there exists tremendous variability in the quality of care provided to menopausal women across different healthcare facilities and regions. Some

providers may offer evidence-based interventions while others dismiss symptoms as inevitable aspects of ageing. This inconsistency leads to underdiagnosis of treatable conditions, inappropriate management strategies, and ultimately, preventable suffering for countless Nepalese women. The lack of proactive screening protocols means many women only seek care when symptoms become debilitating, missing opportunities for early intervention that could prevent long-term complications.

Nepal's healthcare workforce configuration presents additional barriers to quality menopause care. Specialist providers such as gynaecologists and endocrinologists - who might possess more comprehensive knowledge of menopausal health - are overwhelmingly concentrated in urban centres, particularly Kathmandu (MoHP, 2020). This maldistribution creates severe geographic disparities in access to knowledgeable providers. Rural areas, where the majority of Nepalese women reside, must rely on general practitioners and paramedical staff who typically receive no formal training in menopausal health management. Even when women overcome geographic barriers to reach urban specialists, they often encounter providers whose training emphasised obstetrics and reproductive health over menopausal care, reflecting the broader systemic neglect of this life stage in medical education.

The financial barriers to accessing menopause care in Nepal are equally daunting. Menopause-related services are conspicuously absent from Nepal's Basic Health Services (BHS) package, forcing women to bear the full cost of consultations, diagnostic tests (including essential bone density scans), and treatments out of pocket. In a country where 55.79% of healthcare expenditures are paid directly by patients - among the highest rates in South Asia - this creates an insurmountable barrier for many women, particularly in low-income and rural settings (World Bank, 2022). The situation represents a profound policy failure, as Nepal's Social Health Insurance Program (2016) could have served as a mechanism to reduce financial hardship for menopausal women, but instead continues to exclude their specific health needs. This stands in stark contrast to countries like Thailand that have successfully integrated menopause services within their Universal Health Coverage (UHC) frameworks, demonstrating how policy choices can either alleviate or exacerbate health inequities (Tangcharoensathien et al., 2018).

The neglect of menopause within Nepal's health system reflects broader patterns of underinvestment in women's health beyond reproductive years. In 2022, only 8.01% of the government's total budget was allocated to the health sector - far below the 15% target recommended by the WHO (World Bank, 2022). Within this already constrained health budget, there exists no dedicated funding stream for menopause-specific services, while programs focused on adolescents, maternal health, and elderly care receive at least some degree of institutional support. This funding disparity perpetuates a system where women's health needs are prioritised only during certain life stages, creating a policy-imposed discontinuity in care that fails to recognise the interconnected nature of women's health across the lifespan.

The consequences of this underfunding are particularly acute for menopausal women from marginalised communities. Without targeted funding mechanisms, there is little incentive for health facilities to develop specialised services or for providers to pursue training in menopause management. The resulting service gaps hit hardest in rural areas and among low-income populations, exacerbating existing health inequities. The lack of investment also means Nepal has failed to develop the kind of multidisciplinary menopause care models that have proven effective elsewhere, incorporating gynaecological, endocrinological, mental health, and primary care perspectives into comprehensive treatment approaches.

The policy gaps in Nepal's approach to menopause care manifest across all levels of the health system's governance structure (Table 3). At the national level, the exclusion of menopause from the NHSSP 2023-2030 represents a fundamental failure to recognise this issue as a legitimate health priority. This national-level neglect trickles down to provincial authorities, where the

absence of clear guidelines or mandates means no regional menopause protocols have been developed. The policy vacuum continues at local levels, where Female Community Health Volunteers (FCHVs) - who could serve as crucial frontline resources - receive no training on menopause-related issues. Finally, at the facility level, the lack of standardised screening protocols means even well-intentioned providers lack the tools to identify and address menopausal women's health needs systematically.

Addressing these systemic failures requires fundamental shifts in how Nepal's health system conceptualises and prioritises women's health. The most immediate opportunity lies in integrating menopause care into the Non-Communicable Disease (NCD) strategy, given the well-established links between menopause and conditions like osteoporosis and cardiovascular disease. Such integration would provide an existing policy framework through which to channel resources and attention, while acknowledging the biological connections between menopausal changes and chronic disease risks. This approach would also align with global best practices that recognise menopause as a critical window for preventive health interventions that can reduce long-term disease burden.

At the provincial level, developing regional menopause protocols could help adapt evidence-based practices to Nepal's diverse cultural and geographic contexts. These protocols should address not just clinical management but also community-based approaches to education and support. Local governments could play a transformative role by incorporating menopause awareness into FCHV training programs, leveraging these trusted community health workers to bridge gaps in knowledge and access. Facility-level improvements should focus on implementing basic symptom screening tools and referral pathways, ensuring that even generalist providers can identify women needing specialised care.

Meaningful progress will require addressing the financial barriers that currently make menopause care inaccessible for most Nepalese women. Expanding the Basic Health Services package to include essential menopause-related services would represent an important first step. Similarly, revising the Social Health Insurance Program to cover menopause diagnostics and treatments could dramatically reduce out-of-pocket burdens. These financial reforms should be accompanied by targeted investments in provider training and service infrastructure, particularly in rural and underserved areas.

The chronic underfunding of women's health must also be addressed through dedicated budget allocations for menopause services (Perez, 2025). Even modest investments could yield significant returns by preventing costly complications like osteoporotic fractures or cardiovascular events. Funding should support not just clinical services but also research to better understand Nepalese women's menopausal experiences and evaluate intervention models in local contexts.

Ultimately, Nepal needs to transition from its current reproductive-centric model of women's health to a comprehensive life-course approach that values and supports women's wellbeing at all ages. This paradigm shift requires recognising menopause not as an endpoint of women's healthcare needs, but as a critical transition period with unique requirements and opportunities for preventive care. The policy reforms outlined here could help build a healthcare system that truly serves all Nepalese women, regardless of age or reproductive status, while aligning with global commitments to Universal Health Coverage and gender equity in health. By addressing these policy gaps (Table 3), Nepal has the opportunity to transform menopause from a neglected health issue into a model of responsive, equitable healthcare for women in midlife and beyond.

Table 3: Policy Gap Analysis Framework

Policy Level	Current Status	Recommended Action	Policy Level
National	Excluded from NHSSP 2023-2030	Include in the next NCD strategy update	National
Provincial	No provincial guidelines	Develop regional menopause protocols	Provincial
Local	FCHVs are untrained on menopause	Add to the community health worker curriculum	Local
Facility	No screening protocols	Implement basic symptom checklists	Facility

Sources: NHSSP (2023), MoHP (2019)

Provincial health authorities currently lack standardised guidelines for menopause care, resulting in inconsistent service delivery across regions. To bridge this gap, regional menopause protocols should be developed, focused on local demographic and cultural contexts. These protocols could outline symptom management pathways, referral systems, and training requirements for healthcare providers, ensuring equitable access to care across all seven provinces.

At the local level, Female Community Health Volunteers (FCHVs) receive no training on menopause. This oversight limits their ability to support women in rural areas. Integrating menopause education into the FCHV training curriculum would empower these frontline workers to provide basic counselling, symptom recognition, and referrals, leveraging their trusted community role to reduce stigma and improve health-seeking behaviour.

Healthcare facilities, particularly in rural areas, lack standardised tools for menopause symptom screening (Chuni & Sreeramareddy, 2011). Implementing fundamental symptom checklists at health posts and primary healthcare centres would improve early identification and management of common issues like hot flashes, mood changes, and urogenital atrophy. Such protocols would guide general practitioners and nurses in providing evidence-based care, even in resource-constrained settings.

These recommendations collectively address Nepal's fragmented approach to menopause care. By embedding menopause into national NCD strategies, provincial guidelines, local FCHV programs, and facility-level protocols, Nepal can create a coherent, multi-tiered framework that bridges policy gaps and ensures equitable service delivery for menopausal women. This aligns with global best practices and Nepal's commitments to Universal Health Coverage (UHC) and gender-responsive healthcare.

4.3. Health-Seeking Behaviour

Menopausal women in Nepal face considerable challenges in accessing appropriate healthcare, shaped by a complex web of cultural beliefs, social stigma, gender roles, financial limitations, and structural weaknesses within the health system (Ravindran et al., 2025; Gurung, 2023). Despite a growing population of midlife women and increasing awareness in global health discourse, menopause remains a largely neglected issue in Nepal's healthcare landscape.

One of the most prominent barriers is the perception of menopause as a natural and inevitable life transition that does not warrant medical attention. Women in rural Nepal experience longer delays in seeking formal health services, often visiting traditional healers first, and this behaviour contributes to a significant total delay in diagnosis, with 35% of women consulting traditional healers compared to 18% of men (Bhattarai et al., 2015). Common complaints such as hot flashes, insomnia, mood disturbances, and vaginal dryness are often endured in silence,

rarely communicated to healthcare providers unless they reach a debilitating stage (Adhikari, 2010).

In rural and marginalised communities, traditional beliefs continue to shape treatment-seeking behaviours. Rather than approaching formal medical facilities, women frequently turn first to traditional healers, such as Dhimi-Jhankris, or rely on home-based herbal remedies to manage menopausal discomforts (Ranabhat et al., 2015). These culturally embedded practices are locally accessible and trusted but can delay appropriate medical interventions, often resulting in untreated or mismanaged symptoms and deteriorating quality of life.

Patriarchal norms further complicate access to healthcare. Within many households, decision-making authority rests with male family members, and 62% of women reportedly require permission from a husband or other male relative before visiting a health facility (Ghimire & Samuels, 2014). Younger women experiencing premature menopause face additional layers of stigma, fearing that disclosure of symptoms may lead to perceptions of infertility or accelerated ageing, both of which can carry social consequences and marginalisation within the community.

Financial barriers also play a significant role in limiting access to menopause-related care. In Nepal, 55.79% of overall health expenses are covered by out-of-pocket payments (World Bank, 2022), making it difficult for many, especially those from low-income families, to afford services like bone density tests, hormone level screenings, and hormone replacement therapy (HRT). As menopause management is not part of the government's Basic Health Services package or included in national health insurance programs, it is frequently viewed as a non-essential or "luxury" service, accessible only to those with economic advantages.

Geographical barriers compound the issue. Nepal's rugged terrain and inadequate transport infrastructure make reaching health facilities physically challenging, especially for women in mountainous and remote regions. Even when services are technically accessible, quality remains a concern. Only 12% of health posts in remote areas are staffed by personnel trained to recognise or manage menopausal health issues (DoHS, 2023/24). In addition, a lack of privacy, short consultation times, and limited women-friendly spaces discourage women from discussing sensitive symptoms such as urogenital discomfort, sexual health, or emotional distress.

Cultural stigma associated with menopause intensifies the psychological burden. It is commonly associated with getting older, difficulties in conceiving, and a perceived decline in femininity, resulting in emotions of shame, loneliness, and decreased self-worth. Many women feel deeply uncomfortable discussing their concerns, particularly with male doctors, who constitute roughly 78% of medical specialists in Nepal (MoHP, 2020). This gender mismatch further hinders open communication about menopause-related health concerns, especially those related to intimacy and psychological well-being.

Ultimately, limited health literacy poses a significant barrier. Only 30% of rural women are aware of long-term health risks linked to menopause, such as cardiovascular disease or osteoporosis (NDHS, 2022). Even among educated urban women, misinformation persists, particularly fears about hormone therapy, including misconceptions that it universally increases cancer risk. Such misconceptions, combined with poor access and stigma, significantly reduce treatment uptake and worsen health outcomes.

4.4. Healthcare Provider Knowledge and Attitudes

The current healthcare system in Nepal demonstrates significant shortcomings in addressing menopause-related health concerns, primarily due to structural and systemic limitations in service delivery. Menopausal care remains largely subsumed within general gynaecological or internal medicine consultations, where healthcare providers frequently lack specialised training to correctly identify and manage the complex array of symptoms associated with this life stage (Davis et al., 2021). The clinical manifestations of menopause - including vasomotor disturbances (hot flashes and night sweats), osteoporosis, urogenital atrophy, and mood disorders - require specific diagnostic and therapeutic approaches that extend beyond basic medical training. However, the absence of standardised protocols and specialised education for healthcare professionals results in widespread underdiagnosis, inappropriate management strategies, or outright dismissal of symptoms as normal ageing processes. This systemic failure leaves a substantial proportion of Nepalese women without access to appropriate treatment, leading to preventable deterioration in quality of life and long-term health outcomes.

Severe workforce shortages and maldistribution of healthcare resources across Nepal cause challenges in menopause care provision. Specialist providers such as gynaecologists and endocrinologists, who might possess more comprehensive knowledge of menopausal health, are overwhelmingly concentrated in urban centres, particularly Kathmandu (MoHP, 2020). This urban-centric distribution creates significant barriers for women in rural areas, who must rely on general practitioners and paramedical staff with no formal training in menopausal health management. The situation is further complicated by gender dynamics in healthcare provision, as approximately 78% of medical specialists in Nepal are male (MoHP, 2020). This gender imbalance creates additional obstacles to adequate care, as many women report discomfort discussing intimate menopausal symptoms - particularly those related to sexual health, urogenital changes, and psychological wellbeing - with male providers. The resulting communication barriers contribute to inadequate symptom reporting and suboptimal treatment outcomes.

The deficiencies in menopausal healthcare are most acute at the primary care level, where only 12% of health posts in remote areas have staff trained to recognise or manage menopausal health issues (DoHS, 2023/24). This alarming statistic highlights the ongoing disregard for the health requirements of midlife women in Nepal's healthcare system. The absence of national clinical guidelines or standardised protocols for menopause management (Adhikari & Bhurtyal, 2022) creates wide variability in care quality across different healthcare facilities. Without clear institutional guidance, frontline health providers lack the framework to implement evidence-based interventions, resulting in inconsistent and often inadequate approaches to symptom management (Rockette, 2021). The lack of proactive screening protocols means that many women's menopausal health concerns go unaddressed until symptoms become severe or debilitating, representing a missed opportunity for early intervention and preventive care.

The cumulative impact of these systemic failures manifests in several concerning outcomes. First, the lack of specialised knowledge among healthcare providers contributes to the medicalisation of normal ageing processes while simultaneously failing to diagnose and treat pathological manifestations of menopause properly. Second, the urban-rural divide in specialist availability creates significant health disparities, disproportionately affecting women in remote areas who already face multiple barriers to healthcare access. Third, the gender dynamics in provider-patient interactions may discourage women from seeking care or fully disclosing their symptoms, particularly for culturally sensitive issues. Finally, the absence of standardised protocols and training programs perpetuates a cycle of inadequate care, as each generation of healthcare providers enters the workforce without proper preparation to address this critical aspect of women's health. These interconnected challenges show the urgent need for

comprehensive reforms in medical education, clinical guidelines, and healthcare service delivery to better meet the needs of Nepal's growing population of menopausal women.

Chapter 5: Discussion

The state of menopausal healthcare in Nepal presents a complex public health challenge characterised by systemic neglect, cultural barriers, and significant health disparities. This review synthesises existing literature to critically analyse the multifaceted issues surrounding menopause care in Nepal, revealing substantial gaps in awareness, service provision, and sociocultural acceptance.

The literature consistently demonstrates a lack of awareness about menopause among Nepali women across various socioeconomic groups (Adhikari & Bhurtyal, 2021; Chalise et al., 2022). This knowledge deficit stems from multiple interrelated factors that create barriers to proper health education and information dissemination. Unlike reproductive health issues that receive attention through maternal health programs, menopause remains shrouded in silence, often normalized as an inevitable biological process rather than recognized as a health transition requiring medical attention. Studies reveal widespread misconceptions that significantly impact health-seeking behaviours, including the erroneous belief that menopausal symptoms are untreatable or must be endured as part of the ageing process (Gyawali et al., 2016). Particularly concerning is the prevalent misunderstanding about hormone therapy, with many women and even healthcare providers believing it universally causes cancer, despite evidence-based guidelines suggesting its appropriate use for certain patients (WHO, 2022).

The absence of structured health education programs specifically addressing menopause creates an information vacuum that gets filled with myths and misinformation. This situation mirrors patterns observed in other low-income countries where menopause remains a neglected aspect of women's health (WHO, 2022). However, Nepal's successful maternal health education initiatives, such as those implemented through the Safe Motherhood Program, provide a potential model for how community-based interventions could improve menopause awareness. The integration of menopause education into existing health platforms, particularly those utilizing Female Community Health Volunteers (FCHVs), could leverage established networks to disseminate accurate information and challenge prevailing misconceptions. The effectiveness of such an approach would depend on careful cultural adaptation and sustained implementation to overcome deep-seated beliefs about aging and women's health.

The near-absence of menopause-specific services within Nepal's healthcare system represents a critical failing in addressing women's health across the lifespan (DoHS, 2023/24; MoHP, 2023). While maternal and child health programs receive substantial policy attention and resource allocation, menopause care remains conspicuously absent from national health strategies and clinical guidelines. This exclusion reflects a broader pattern of health system priorities that focus predominantly on women's reproductive years while neglecting their health needs during and beyond the menopausal transition. The comparison with nearby nations such as India, which has a menopause society and established clinical protocols/guidelines (Basheer & Singh, 2025), underscores Nepal's delay in acknowledging menopause as a valid health issue that needs organized focus.

The barriers to adequate menopause care within Nepal's health system are multifaceted and mutually reinforcing. Urban-centric specialist services create geographic disparities in access, with the majority of qualified providers concentrated in Kathmandu and other major urban centers (World Bank, 2022). Rural areas, where most Nepali women reside, rely on general practitioners and paramedical staff who typically lack training in menopausal health management. This urban-rural divide is exacerbated by the exclusion of menopause care from national health insurance schemes, placing the financial burden squarely on individuals in a country where out-of-pocket health expenditures already pose significant barriers to care (World Bank, 2022). The resulting situation leaves menopausal women with limited options:

either seek expensive private care in urban centres (for those who can afford it), rely on inadequately trained general providers, or forego professional care altogether.

The reviewed studies consistently demonstrate how deeply entrenched cultural stigma and patriarchal norms obstruct appropriate care-seeking behaviors during menopause (Ghimire & Samuels, 2014; Ranabhat et al., 2015). Menopause in Nepal is frequently associated with loss of femininity, sexual attractiveness, and social value, leading many women to conceal symptoms and avoid medical attention. These cultural perceptions create a climate of silence and shame around menopause, discouraging open discussion even within families and healthcare settings. Traditional health beliefs further complicate the picture, with many women initially turning to faith healers, Ayurvedic practitioners, or home remedies rather than evidence-based medical treatments (Ranabhat et al., 2015). Such practices often delay appropriate care until symptoms become severe or debilitating.

These findings reflect broader patterns of gender inequity common across South Asian healthcare systems (Ravindran et al., 2025), but Nepal's unique geographic and caste dynamics introduce additional layers of complexity. The health decisions of Nepali women are frequently mediated by male family members, creating structural barriers to autonomous care-seeking (Karkee et al., 2023). This dynamic is particularly pronounced for menopause-related concerns, which may be viewed as private matters not warranting medical attention. Addressing these deep-rooted sociocultural barriers requires nuanced, culturally sensitive interventions that simultaneously engage communities, challenge harmful stereotypes, and provide accessible pathways to appropriate care. Potential strategies could include community dialogue sessions, media campaigns featuring respected local figures, and the development of women's support groups to create safe spaces for discussion and information sharing.

The literature documents severe physical and psychosocial consequences resulting from untreated menopausal symptoms in Nepal (Shakya et al., 2022; Chalise et al., 2022). The high prevalence of depression among menopausal women points to the significant mental health impacts of inadequate care and support systems. Many women report decreased work productivity and social participation due to unmanaged symptoms, with ripple effects on household economies and community engagement (ILO Nepal, 2021). The financial burden of seeking care for severe symptoms contributes to catastrophic health expenditures for many families, exacerbating existing economic vulnerabilities (World Bank, 2023). These interconnected health and financial consequences underscore menopause as both a medical and developmental issue with implications beyond individual well-being.

The physical manifestations of untreated menopause represent preventable contributors to non-communicable disease burden in Nepal. The long-term healthcare costs associated with these conditions likely far exceed what would be required for comprehensive menopause care and prevention programs. Despite this, menopause remains absent mainly from NCD strategies and health system planning, representing a missed opportunity for cost-effective preventive healthcare. The case for better menopause care grows stronger when we take into account the valuable contributions of middle-aged women in Nepalese society, whether through formal jobs or the unpaid caregiving that supports families and communities.

While this review provides a comprehensive synthesis of available evidence, several critical limitations in the existing literature base emerged. Most studies on menopause in Nepal are small-scale, geographically limited, and reliant on convenience samples, with few nationally representative datasets available. This limits the ability to generalize findings and hinders the development of policies based on evidence. A particularly notable gap is the near-absence of research on menopause experiences among marginalized groups, including women with disabilities, LGBTQ+ communities, and ethnic minorities facing intersectional disadvantages. These populations likely face additional barriers to care but remain invisible in current research and policy discussions.

The literature also lacks longitudinal studies tracking menopause experiences and evaluating interventions over time. Such research would provide valuable insights into the long-term impacts of menopausal health status and the effectiveness of various care approaches in the Nepalese context. Additionally, there is a paucity of implementation research exploring how menopause care could be practically integrated into existing health platforms at different levels of the health system.

Future research should prioritize these neglected areas while employing mixed-methods approaches that can capture both quantitative health outcomes and the rich sociocultural dynamics shaping menopause experiences. Nationally representative surveys incorporating standardized menopause assessment tools would strengthen the evidence base for policy formulation. Qualitative studies exploring intersectional experiences could inform more inclusive service design. Implementation research should examine feasible models for delivering menopause care across Nepal's diverse geographic and cultural contexts, from urban hospitals to remote health posts.

The findings of this review point to several urgent policy actions needed to address the gaps in menopausal healthcare in Nepal. To begin with, menopause needs to be explicitly integrated into national health plans, especially the Nepal Health Sector Strategic Plan and frameworks for non-communicable diseases. This institutional recognition is essential for mobilizing resources and guiding systemic reforms. Concurrently, clinical guidelines for menopause management should be developed and disseminated to standardize care across different levels of the health system.

At the level of service delivery, creative solutions are required to address geographic and financial obstacles. This could include training programs for general practitioners and mid-level providers in rural areas, integration of menopause screening into existing primary care services, and the development of referral pathways for complex cases. The potential of telemedicine to expand specialist access should be explored, building on lessons from other health areas. Financial protection measures must extend to menopause-related care, whether through insurance scheme expansion or targeted subsidies for vulnerable groups.

Community-based awareness campaigns should leverage successful models from maternal health programs while adapting messages to local cultural contexts. Engaging male family members and community leaders will be crucial for shifting social norms and reducing stigma. School health curricula should incorporate aging and women's health topics to foster more informed future generations.

Finally, the establishment of a national menopause research agenda would help fill critical evidence gaps and guide ongoing policy refinement. This should include support for longitudinal studies, intervention trials, and research focusing on marginalized populations. By addressing these multiple dimensions simultaneously, Nepal can develop a comprehensive, culturally appropriate approach to menopausal healthcare that meets the needs of its diverse population of women.

Chapter 6: Conclusion and recommendations

The findings of this study reveal a profound and systemic neglect of menopausal healthcare in Nepal, characterized by three interlinked challenges: widespread lack of awareness, inadequate healthcare services, and deeply entrenched cultural stigmas. Together, these factors create a healthcare gap that disproportionately affects Nepali women, particularly those in rural and low-income communities, leaving them vulnerable to untreated symptoms and preventable long-term health complications.

A critical barrier to effective menopause care in Nepal is the lack of accurate knowledge among women about what menopause entails and how it should be managed. Many women, especially in rural areas, perceive menopause as a natural and inevitable phase of life rather than a health transition that may require medical intervention. This misconception leads to underreporting of symptoms, with women enduring physical discomfort—such as hot flashes, joint pain, and vaginal dryness—and psychological distress—including mood disorders and depression—without seeking professional help. The normalization of these symptoms as "just part of aging" prevents women from accessing treatments that could significantly improve their quality of life.

Compounding this issue is the absence of structured health education programs on menopause. Unlike maternal and child health, which receive substantial public health attention, menopause remains a silent and overlooked topic in community health discussions. Without proper education, myths persist—such as the belief that hormone therapy is universally dangerous or that menopausal symptoms are untreatable—further discouraging women from seeking care. Nepal's healthcare infrastructure is ill-equipped to meet the needs of menopausal women. Menopause clinics that specialize in this area are almost non-existent in rural regions, and even in cities, the availability of services is limited and frequently too costly. The country's primary healthcare network, which excels in maternal health and infectious disease control, fails to address menopause as a distinct health concern. Instead, menopause-related care is lumped into general gynaecology or internal medicine consultations, where providers may lack specialised training to diagnose and manage symptoms effectively.

The exclusion of menopause care from national health policies, such as the Nepal Health Sector Strategy (2023–2030), reflects an institutional blind spot. Nepal has no standardised protocols for menopause management. Furthermore, the high costs of out-of-pocket healthcare render specialized treatments inaccessible to many women. As a result, many turn to traditional healers (Dhami-Jhankris) or home remedies, delaying evidence-based medical care until symptoms become debilitating.

Cultural perceptions in Nepal exacerbate the marginalization of women undergoing menopause, presenting this life stage as a decline in femininity and societal worth. Societal norms discourage open discussion about menopause, labelling it a private or shameful issue rather than a legitimate health concern. Patriarchal structures exacerbate this problem, as women often require male family members' permission to seek healthcare, creating additional hurdles for those experiencing symptoms.

Traditional beliefs also play a role, with many communities viewing menopause as a spiritual or karmic transition rather than a medical one. This leads women to prioritise Ayurvedic or faith-based treatments over clinical care, even when symptoms severely impact their daily lives. The resulting silence and isolation prevent women from receiving the support they need, both medically and socially.

Nepal has a unique opportunity to transform menopause care by learning from successful maternal health programs and adapting them to midlife women's needs. By prioritising menopause in health policies, improving service accessibility, and challenging cultural taboos, Nepal can ensure that its ageing female population receives dignified, equitable healthcare.

This shift is not just a medical necessity but a social and economic imperative. Healthy, supported menopausal women contribute more effectively to their families, workplaces, and communities, reducing long-term healthcare costs associated with untreated symptoms. Addressing menopause care is a critical step toward achieving Universal Health Coverage (UHC) and gender equity in the healthcare system of Nepal.

References

- Acharya BK, Adhikari SK, Pandit S, Neupane BK, Paudel BK, and Khanal L (2022), An initial spatiotemporal assessment of COVID-19 clusters in Nepal, *Journal of Institute of Science and Technology*, 27(1), pp.37-49.
- Adhikari B (2021), The structure of the health system in Nepal exists at the federal level, provincial level, and local level, Report. Online at: <https://publichealthglobe.com/structure-of-health-system-in-federal-context-of-nepalhealth-system-in-nepal/>
- Adhikari R (2010), Are Nepali women silent sufferers? Women's voice and experiences of reproductive health problems, *Asia-Pacific Population Journal*, 25(1), pp.27-45.
- Aryal, K. K., Dhimal, M., Pandey, A., Pandey, A. R., Dhungana, R., Khaniya, B. N., ... & Karki, K. B. (2016). Knowledge diversity and healing practices of traditional medicine in Nepal. Nepal Health Research Council.
- Bagga, S. S., Tayade, S., Lohiya, N., Tyagi, A., & Chauhan, A. (2025). Menopause dynamics: From symptoms to quality of life, unraveling the complexities of the hormonal shift. *Multidisciplinary Reviews*, 8(2), 2025057-2025057.
- Baker, F. C., De Zambotti, M., Colrain, I. M., & Bei, B. (2018). Sleep problems during the menopausal transition: prevalence, impact, and management challenges. *Nature and science of sleep*, 73-95.
- Bhandari L, Dhakal P, and Subedi R (2020), Access to health care services in rural Nepal: Barriers and solutions, *Journal of Health Policy and Management*, 5(2), pp.87-93.
- CA Secretariat and S Durbar (2015), The Constitution of Nepal 2015 (Unofficial translation), *Nepal Gazette*, February 2015, Article 58. Online at: <http://extwprlegs1.fao.org/docs/pdf/nep155698b.pdf>
- CBS/NPCS (2012), National Population and Housing Census 2011, National Report, Vol 1, p.4.
- Central Bureau of Statistics Nepal (2014), Population Atlas of Nepal, Report. Online at: https://cbs.gov.np/catalog/atlas/general.html?page=geography_of_nepal
- CBS (2022), Nepal Census 2021, Report, pp.1-96. Online at: <https://censusnepal.cbs.gov.np/Home/Details?tpid=5&dcid=3479c092-7749-4ba6-9369-45486cd67f30&tfsid=17>
- Chuni, N., & Sreeramareddy, C. T. (2011). Frequency of symptoms, determinants of severe symptoms, validity of, and cut-off score for Menopause Rating Scale (MRS) as a screening tool: a cross-sectional survey among midlife Nepalese women. *BMC women's health*, 11(1), 30.
- Cowell, A. C., Gilmour, A., & Atkinson, D. (2024). Support mechanisms for women during menopause: perspectives from social and professional structures. *Women*, 4(1), 53-72.

- Department of Survey (2021), Map of Nepal, Ministry of Land Management, Cooperative and Poverty Alleviation. Online at: https://dos.gov.np/uploads/branch_1/gallery/gallery-20210414004923-H4Luy-first.jpg
- DoHS (2020), Annual Report DoHS 2019/2020.
- Ghimire R and Samuels F (2014), Understanding gender norms, nutrition, and reproductive health in Nepal, Overseas Development Institute Report.
- Gyawali, S., Subedi, S. N., Yasmin, N., & Pandey, S. (2016). Health care seeking practice for menopausal problems among women in Syangja District, Nepal. *International Journal of Health Sciences and Research*, 6(8), 247-53.
- Heydon, S. (2019). Death of the King: The Introduction of Vaccination into Nepal in 1816. *Medical History*, 63(1), 24-43.
- ICF (2022), Nepal Demographic and Health Survey 2022, Report.
- Idris, I. B., Hamis, A. A., Bukhori, A. B. M., Hoong, D. C. C., Yusop, H., Shaharuddin, M. A. A., ... & Kandayah, T. (2023). Women's autonomy in healthcare decision making: a systematic review. *BMC Women's Health*, 23(1), 643.
- Joshi, N. (2015). Contesting globalisation experiences of women in urban spaces of Nepal (Doctoral dissertation, Birkbeck, University of London).
- Kharel, L. P. (2023). Role of the king in ancient & medieval culture and society of Nepal (Doctoral dissertation, Department of Nepalese History, Culture and Archaeology).
- Malla CS, Shrestha R, and Maharjan R (2019), Menopausal symptoms among middle-aged women in a teaching hospital in Kathmandu, Nepal, *Journal of Nepal Medical Association*, 57(218), pp.112-117.
- Matthews, K. A., & Bromberger, J. T. (2005). Does the menopausal transition affect health-related quality of life?. *The American Journal of Medicine*, 118(12), 25-36.
- Ministry of Health, New ERA, NHSSP and ICF (2015), Nepal Health Facility Survey 2015, Report, pp.51-52. Online at: <https://dhsprogram.com/pubs/pdf/SPA24/SPA24.pdf>
- Mishra, S. R., Ghimire, K., Khanal, V., Aryal, D., Shrestha, B., Khanal, P., ... & Adhikari, B. (2025). Transforming health in Nepal: a historical and contemporary review on disease burden, health system challenges, and innovations. *Health Research Policy and Systems*, 23(1), 61.
- MoFA (2017), Nepal Profile, Ministry of Foreign Affairs Website.
- MoHP (2019), Situation Analysis Report of Health Financing System in Nepal, Kathmandu: Ministry of Health and Population.
- MoHP (2020), National Strategy on HRH for Nepal 2021-2030, Report, p.5.
- MoHP (2022), Ministry of Health and Population Website. Online at: <https://www.mohp.gov.np/eng/about-us/about-mohp/about-us>

- Murtagh, M. J., & Hepworth, J. (2003). Feminist ethics and menopause: autonomy and decision-making in primary medical care. *Social Science & Medicine*, 56(8), 1643-1652.
- NHRC (2022), *Towards Universal Health Coverage: Addressing Financial Hardship and Improving Access to Healthcare in Nepal*, Policy Brief, Kathmandu: Nepal Health Research Council.
- NPC (2020), **Nepal's Sustainable Development Goals Progress Assessment Report 2016-2019**, National Planning Commission Report, p.29.
- NTB (2025), *Geography of Nepal*, Nepal Tourism Board. Online at: <https://ntb.gov.np/plan-your-trip/about-nepal/geography>
- PHC (2024), *Annual Health Report 2023/24*, Report. Online at: <https://phcnepal.com/annual-health-report-2080-81-2023-24-all-you-need-to-know/>
- Pasokh, Z., Seif, M., Ghaem, H., Rezaianzadeh, A., & Ghoddusi Johari, M. (2024). Age at natural menopause and its determinants in the female population of Kharameh cohort study: Comparison of regression, conditional tree, and forests. *Plos one*, 19(4), e0300448.
- Perez, N. (2025). *The Health and Economic Benefit of Increasing Funding for Gynecological Research* (Doctoral dissertation, Northeastern University).
- Puri M and Tamang A (2007), *Women's health in Nepal: Still not a priority*, *Reproductive Health Matters*, 15(30), pp.81-90, DOI: 10.1016/S0968-8080(07)30326-0.
- Ranabhat CL et al. (2015), *Chhaupadi culture and reproductive health of women in Nepal*, *Asia Pacific Journal of Public Health*, 27(7), pp.785-795.
- Rath, A. D., Basnett, I., Cole, M., Subedi, H. N., Thomas, D., & Murray, S. F. (2007). Improving emergency obstetric care in a context of very high maternal mortality: the Nepal Safer Motherhood Project 1997–2004. *Reproductive Health Matters*, 15(30), 72-80.
- Rockette, E. D. (2021). *Exploring Frontline Care Management Organization Leaders' Evidence-Based Practice Implementation and Facilitation Strategies: A Qualitative Descriptive Study* (Doctoral dissertation, Grand Canyon University).
- Rokaya, R. B. (2024). *Priorities of Health Issues in Periodic Plans of Nepal*. *Janaprakash Journal of Multidisciplinary Research*, 2, 142-155.
- Sharma S and Joshi A (2021), *Menopausal health status of women in Nepal: A population-based study*, *Journal of Mid-life Health*, 12(3), pp.191-197.
- Thapa R, Bam K, Tiwari P, Sinha TK, and Dahal S (2020), *Perspective Implementing Federalism in the Health System of Nepal: Opportunities and Challenges*, *Kerman University Medical Sciences Journal*, 8(4), pp.195-198, DOI: 10.15171/ijhpm.2018.121.
- UN (2024), *World Population Prospects*, Population Division Report. Online at: <https://population.un.org/wpp/>

- UNDP (2017), Annual Household Survey, Major Findings, May 2017, pp.1-26. Online at: https://cbs.gov.np/annual-household-survey-2016_17/
- UNDP (2020), Human Development Report 2020: Nepal, Brief Note, pp.1-7.
- UNFPA Nepal (2020), Sexual and reproductive health of women in Nepal, Report. Online at: <https://nepal.unfpa.org/>
- UNFPA Nepal (2021), Gender Equality and Social Inclusion in the Health Sector of Nepal, Report.
- UNFPA (2025), UNFPA and Dhulikhel Hospital inaugurate the first menopause clinic in Nepal, News Report. Online at: <https://nepal.unfpa.org/en/news/unfpa-and-dhulikhel-hospital-inaugurate-first-menopause-clinic-nepal>
- Utian, W. H. (2005). Psychosocial and socioeconomic burden of vasomotor symptoms in menopause: a comprehensive review. *Health and Quality of Life outcomes*, 3(1), 47.
- Bacon, J. L. (2017). The menopausal transition. *Obstet Gynecol Clin North Am*, 44(2), 285-296.
- Velentzis, L. S., Salagame, U., & Canfell, K. (2017). Menopausal hormone therapy: a systematic review of cost-effectiveness evaluations. *BMC Health Services Research*, 17(1), 326.
- Virdi, H. (2024). An Exploration of Psychological Practitioners' Awareness and Knowledge of the Menopause, and Their Experiences of Working Clinically With Menopausal Clients (Doctoral dissertation, University of Essex (United Kingdom)).
- WHO (2022), Women's health and wellbeing in the menopause, World Health Organization Fact Sheet. Online at: <https://www.who.int/news-room/fact-sheets/detail/menopause>
- World Bank (2025), Current health expenditure (% of GDP) - Nepal, Data Report. Online at: <https://data.worldbank.org/indicator/SH.XPD.CHEX.GD.ZS?locations=NP>.