


Gender inequities in public health insurance programs: A scoping review of the literature

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ARTICLE INFO

Keywords:

Gender
Public health insurance
Health financing
Low-and middle-income countries

ABSTRACT

Many governments have undertaken publicly funded/administered health insurance programs to achieve universal, equitable healthcare access, yet there is evidence that they may overlook women. This scoping review assesses how gender inequities manifest in public health insurance programs. We conducted a comprehensive search of peer-reviewed articles in three databases, as well as a targeted search of grey literature published in English between 2013 and 2025. Data were extracted using a piloted abstraction tool and findings were reported in narrative synthesis. Of the twenty publications included, ten featured programs in India, three in Kenya, two in China and Rwanda, and one in Ghana, Indonesia, and Kyrgyz Republic. Fourteen quantified gender differentials in enrollment/utilization and sixteen assessed gendered barriers to uptake/utilization. We found evidence that women were often less likely to enroll/utilize public health insurance programs, with intersectional vulnerabilities documented among disabled, elderly, and unmarried women. Studies pointed to three types of barriers to women's enrollment and utilization: individual/household, facility/provider, and insurance program design, rollout, and administration, many of which can be redressed through gender-responsive considerations in program design and implementation. Failure to adequately address the ways public health insurance reforms can exclude women risks undermining the long-term effectiveness of these programs.

1. Introduction

In line with the Sustainable Development Goals and the global commitment to Universal Health Coverage (UHC), many low- and middle-income countries (LMICs) are adopting national health insurance schemes to better address their populations' health needs (UHC2030, 2023). National insurance schemes include mandatory contributory schemes such as social health insurance programs, noncontributory tax-financed systems such as national health insurance, or a mix of both (Erlangga et al., 2019; James and Acharya, 2022).

While socio-economic inequities in the need for, access to, and utilization of health insurance programs in LMICs have received considerable attention, gendered inequities in how health insurance programs are designed and implemented to serve the differentiated needs of males and females have received less attention (Finkelstein et al., 2022; Jamal et al., 2022; Witter et al., 2017). There is well documented evidence that biologically women and girls have greater need for health care, and that

socially and economically, they face a number of barriers in accessing health care both for themselves and their children (Ellingrud et al., 2024; Langer et al., 2015; Van Der Ham et al., 2021). Beyond references to a range of hurdles that women and girls—especially those who are poor and marginalized—are likely to face in enrolling into and using health insurance programs due to inequities in income, decision-making, mobility, and care responsibilities, there is limited reference to gendered differentials and challenges in health insurance access and use (Morgan et al., 2016; United Nations Women, 2021). In particular, we currently lack an understanding of the evidence base on how gender inequalities are reflected in the design, implementation, and utilization of emerging and evolving health insurance programs in LMICs, and how in turn these programs are serving women and girls with regard to their health care needs and outcomes.

This scoping review seeks to address this gap by assessing the existing evidence base on gender inequities in the context of public health insurance programs in LMICs. We canvassed the literature to

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<https://doi.org/10.1016/j.ssmhs.2026.100210>

Received 23 October 2024; Received in revised form 10 October 2025; Accepted 4 April 2026

Available online 5 April 2026

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identify studies that investigated gender differentials in enrollment and utilization in large-scale public health insurance programs and included factors defining these differentials. As such, our scoping review helps shed light on the existing knowledge base on the extent to which the design and implementation of publicly funded health insurance reforms in LMICS unintentionally or intentionally disadvantage women and girls. Our aim is to highlight the strengths and gaps in this evidence as well as its relevance for supporting policy- and decision-makers in the development and execution of more gender equitable health insurance programs.

2. Methods

The scoping review followed a pre-specified research protocol guided by the methodological framework developed by Arksey & O'Malley that outlines the review aims and methods for both published and grey literature (Arksey and O'malley, 2005). (Appendix 1) Our research question broadly explored two dimensions: (1) the extent of gender imbalance in insurance enrollment and utilization, assessed using sex-disaggregated estimates; and (2) the underlying barriers driving this gender imbalance.

2.1. Data sources

We conducted a comprehensive search of peer-reviewed and grey literature to identify all relevant studies principally focused on gender and public health insurance financing in LMICs.

The search for peer-reviewed articles was conducted on July 20, 2023 and updated on July 23, 2025 across three electronic databases: Pubmed, Embase, and Econlit. A search strategy was developed using a combination of keywords for each of the three concepts: (1) public health insurance reforms, (2) gender equity, and (3) LMICs. The search was conducted by combining each of the three concepts using the Boolean operator "AND". (Appendix 2)

To capture a larger body of peer-reviewed literature, we conducted both backward and forward citation searches between August 13–14, 2025. In backward citation searching, we examined the references cited by the included articles to identify earlier works that are relevant to our research question and meet our inclusion criteria. More recently published articles that were relevant to our study and have cited the original included articles were captured through forward citation searching using the Dimensions database.

Additional a grey literature search was conducted in December 2023 and August 2025. We searched through the websites of organizations most likely to have published reports or identified documents related to our topic of interest. Websites of the following organizations were searched: World Bank, Global Financing Facility, African Development Bank, World Health Organization, Abt Associates, Results for Development, United States Agency for International Development, United Nations Children's Fund, United Nations Entity for Gender Equality and the Empowerment of Women, and the Global Fund. In addition, we used Google Advanced Search to search for relevant publications using keywords: gender imbalance, barriers to access of government, funded health insurance, challenges of access to social health insurance, social health insurance, developing countries, low and middle-income countries, poor countries, and women. We followed the PRISMA guideline for the reporting of scoping reviews (Tricco et al., 2018).

2.2. Inclusion and exclusion criteria

The criteria for inclusion include English language publications which focus on health financing reforms/schemes, refer to gender or gender considerations, have relevance to one or more LMICs, and were published from 2013 onwards. Articles were excluded if the research addressed health financing generally without focusing on gender or gender inequality. They were also excluded if they targeted free

healthcare programs outside of government-financed and -administered health insurance programs, were written in a language other than English, or were from poster presentations, protocols, reviews, and abstracts without articles.

2.3. Article selection

References from the three database search results were imported to EndNote reference manager for duplicate removal. The remaining references were imported into Covidence screening and data extraction platform. Two independent reviewers (MN, IP) conducted the title and abstract screening followed by full-text reviews of selected articles. One independent reviewer (SE) resolved conflicts. Grey literature search and data abstraction were conducted by two independent reviewers (MN, IP) in December 2023 and September 2025.

2.4. Charting data and analysis

Data extraction was undertaken for all included studies using a charting form sheet developed and piloted by the authors. The data extracted included author name, study title, year, country or countries of focus, methods and aim of study, type and description of health insurance program, how gender was considered in the design, execution, or assessment of the program. After extracting and charting the data, we calculated frequencies and percentages to characterize the extracted body of literature, and synthesized evidence across studies using the thematic analysis.

3. Results

3.1. Description of studies

Fig. 1 demonstrates the process of screening and inclusion of articles. A total of 534 peer-reviewed articles were identified after duplicate removal, 54 full-texted articles were assessed for eligibility, and 15 peer-reviewed articles were included. In addition, 5 grey literature publications (1 pre-print article from databases and 4 reports from other sources) were found to meet the eligibility criteria and were included, bringing the total to 20 included studies. (Fig. 1; Appendix 3 Table 1)

The basic features of the included studies including title, authors, publication date and data sources as well as country focus and the program covered are shown in Appendix 3, Table 1. For our analysis, we classified the insurance schemes covered in these studies into four categories, using taxonomy commonly referenced in the literature for types of public health insurance programs:

1. Social health insurance (SHI): programs that involve a pooling of mandatory contributions by individuals, employers, or the government. This system is generally enacted through legislation and incorporates socio-economic equity considerations where the wealthy are required to contribute more than the poor (Fenny et al., 2021; Jamal et al., 2022; James and Acharya, 2022).
2. National healthcare insurance (NHI): programs that involve a single purchaser payer, which is often the government who finances a package of services on behalf of the population (James and Acharya, 2022).
3. Community-based health insurance (CBHI): programs where the community is involved in set up and management, and where membership is voluntary with a pooling of funds at usually a flat rate (James and Acharya, 2022; Mathauer et al., 2017). In many cases, CBHIs are partially financed, taken to scale, and adopted by the government.
4. A mix of the previous health insurance schemes: In practice, systems take on characteristics of more than one of the previously defined programs. We classified such programs as mixed.

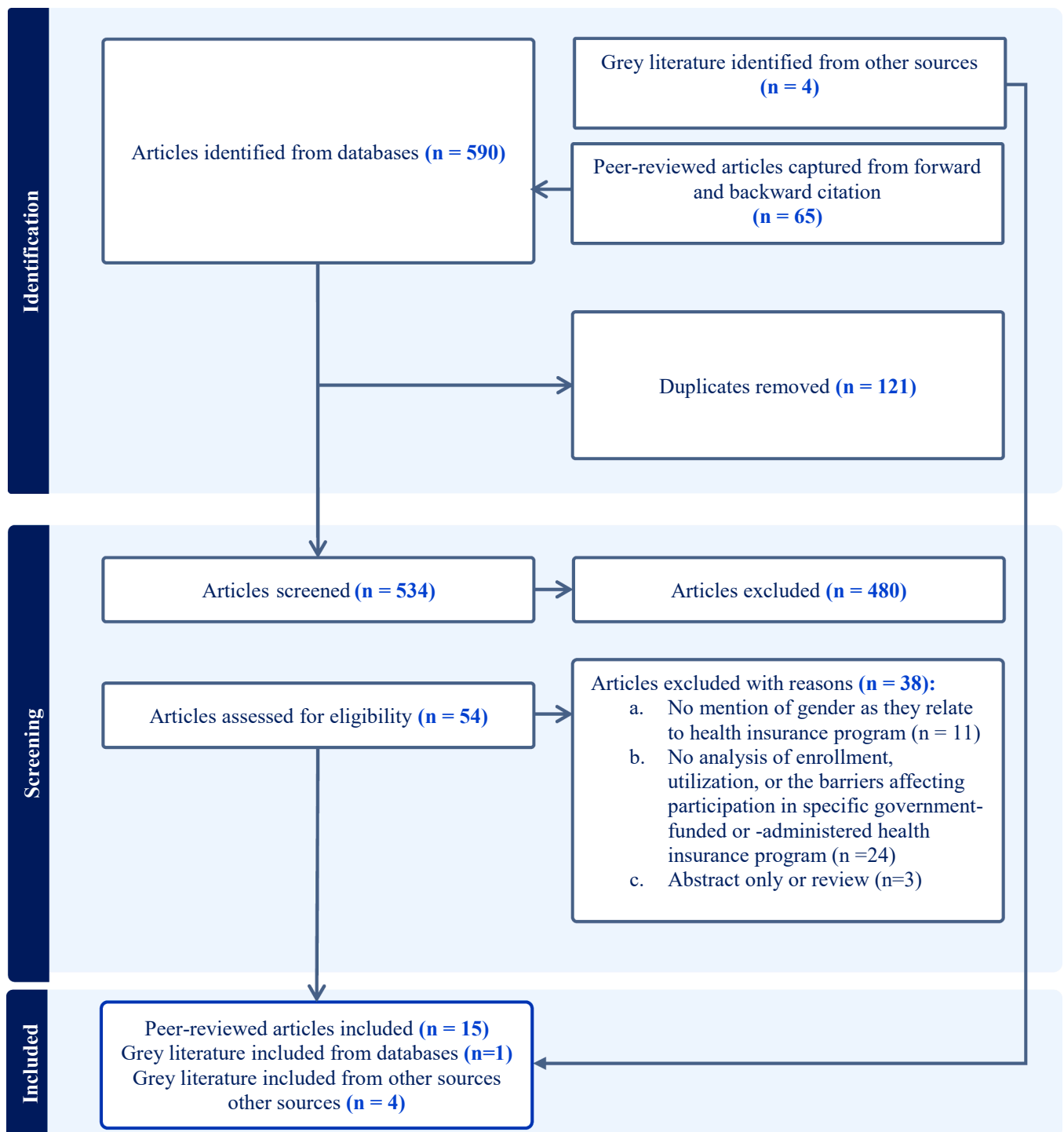


Fig. 1. PRISMA diagram.

Of the total twenty publications, seven studies featured SHIs, eight NHIs, two CBHI, and three mixed schemes. India was the most frequent focus country for analysis (n = 10), followed by Kenya (n = 3), China and Rwanda (n = 2 each), and Kyrgyz Republic, Ghana, and Indonesia (n = 1 each). Most publications were written by authors based in academic institutions (n = 10), while others came from multilateral finance institutions (n = 3) and Non-Governmental Organizations (NGOs) (n = 2). The remaining publications were produced by teams combining academic institutions with either government research agencies, academic institutions and/or NGOs (n = 5). Nine out of the twenty publications were written by a authors based in the Global South (e.g., regions

including Latin America, Asia, Africa, and Oceania) and seven were by a mix of authors based in the Global North (e.g., North America, Europe, Australia, and New Zealand) and South (Castro Torres and Albrez-Gutierrez, 2022; Dados and Connell, 2012), while the remaining four were written by authors exclusively from the Global North. In terms of maturity, half (n = 10) the social health insurance programs included were in years 5–9 of implementation and the remaining were either in 4 years or less of implementation or 10 years or more (n = 5 each).

Thematic analysis of the scoping review results yielded two broad categories based on our research question: (1) evidence illustrating

gender imbalance through sex-disaggregated estimates of insurance enrollment and utilization; and (2) evidence identifying the underlying barriers driving this imbalance. We first examined evidence on disparities in health insurance enrollment and utilization rates between women and men, followed by evidence on particular subgroups of women who were especially excluded. We then examined barriers that women overall as well as subgroups of women face in accessing or using coverage. Our analysis classifies these barriers across three levels: (a) individual and household level; (b) facility and provider level; and (c) systems level (e.g., program design, rollout and administration), guided by the socio-ecological model (McLeroy et al., 1988).

3.2. Gender differentials in the enrollment and utilization of publicly funded health insurance programs

In total, fourteen studies included a quantitative analysis of gender differentials in enrollment or utilization of public health insurance programs using health insurance claims data, or surveys with patients or households (Cook et al., 2022; Dake, 2018; Dupas and Jain, 2021; Finnoff, 2016; Giles et al., 2013; Laksono et al., 2022; Nandi et al., 2016; Philip and Iyer, 2024; Shaikh et al., 2018; Sharma et al., 2023; Woldemichael and Shimeles, 2015; Zhou et al., 2021; Ziegler et al., 2024; Ziegler et al., 2025).

Overall, the majority of studies reported a gender imbalance in enrollment, utilization, or both, favoring men. Exceptions included three studies in India and two studies in Rwanda that showed mixed findings, as well as one study in Ghana that indicated public health insurance coverage favoring women. Studies of programs implemented in China, India, Indonesia, and Kenya found that women, girls, and women-headed households were less likely to be enrolled and less likely to be using health insurance schemes compared to their male counterparts (Cook et al., 2022; Dupas and Jain, 2021; Finnoff, 2016; Giles et al., 2013; Shaikh et al., 2018; Zhou et al., 2021). Utilization in Rajasthan and Andhra Pradesh in India was lower among women than men (Dupas and Jain, 2021; Shaikh et al., 2018), as well as in urban China (Giles et al., 2013; Zhou et al., 2021) where spending was predominantly pro-male.

The studies in Rwanda presented mixed findings regarding healthcare enrollment and gender disparities. One study, based on a 2010/11 household survey, indicated that married women and women-headed households were more likely to enroll in the Rwandan *Mutuelle de Santé*, a health insurance program (Woldemichael and Shimeles, 2015). However, another study using data from an earlier 2005/06 household survey, which included information on children and household headship, found parity in enrollment between boys and girls but a gender disparity between female and male headed households whereby female-headed households were less likely to enroll compared to male-headed households (22% vs. 35%) (Finnoff, 2016).

Meanwhile three studies in India also presented mixed findings. In one study in Raipur, urban slum women had slightly higher enrolment rates in *Rashtriya Swasthya Bima Yojana* (RSBY) than their male counterparts (68% vs. 65%), but were less likely to utilize the card for treatment compared to men (36% vs. 41%). When women utilized their RSBY cards, they primarily accessed non-pregnancy or gynecologic conditions, with higher usage for C-sections than for normal deliveries (Nandi et al., 2016). Another study across eight states in India found no significant gender differences in individual-level RSBY enrolment, but female-headed households were 36 times more likely to be enrolled (Ziegler et al., 2024). Similarly, the third study found no substantial gender differences in enrollment rates, yet women and girls were disproportionately represented among excluded family members (Philip and Iyer, 2024). Further, this study also found that poor Upper Caste men were more likely to be covered for hospitalization (OR 3.5) compared to poor women from the most disadvantaged castes (OR 0.05) (Philip and Iyer, 2024).

The study in Ghana found that women were more likely to be

enrolled in the National Health Insurance Scheme compared to men (38.9% vs. 29.7%). The findings also suggest that men may have greater financial means to access more costly healthcare options, such as private providers (Dake, 2018).

3.3. Subgroups of women facing greater inequity in enrollment and utilization

While most studies focused on assessing whether women overall were less likely to benefit from publicly funded health insurance schemes than men, a subset examined intersectional vulnerabilities by gender and other forms of inequity. In Kenya, gender and disability intersected such that disabled women had the lowest coverage and utilization, compared to disabled men and non-disabled women (Kabia et al., 2018). In Tamil Nadu in India, Ramprakash and Lingam (2021) found that gender inequality intersected with a number of other marginalizing factors in preventing or limiting access to health insurance benefits. Not having a socially acknowledged husband limited benefit coverage for unmarried, divorced, deserted, separated, polygamous or widowed women, with many imbibing strong feelings of guilt for using household resources. This was also true of elderly and disabled women. Newly married women, women in unregistered marriages, and even their daughters, were less likely to have health insurance benefits. Transgender women, sex workers, and domestic violence survivors were disadvantaged as well, as were women who had left their homes, or were without stable addresses (Ramprakash and Lingam, 2021). Two studies—one in Rwanda and one in India—found that married women have the highest enrollment rate in a typical household, possibly benefitting from this more formalized status, or possibly because they are more likely to be in the reproductive age group (Woldemichael and Shimeles, 2015; Ziegler et al., 2024).

Ramprakash and Lingam (2021) found that in Tamil Nadu, older and younger women were less likely to be enrolled compared to women of reproductive age. Witter et al. (2017), Philip and Iyer (2024) and Sharma et al. (Sharma et al., 2023) found that a major reason that girls and older women were excluded from coverage in the RSBY program in India was because the program places a cap on the number of household members who can enroll; given this limitation, households prioritize the health of other family members. Findings from Philip and Iyer (2024) study suggest that not just the program limitation, but cultural gender and age discrimination factors play a role in this exclusion. Although the *Ayushman Bharat Pradhan Mantri Jan Arogya Yojana* (AB-PMJAY) scheme replaced RSBY in 2018 and lifted the five-household member enrolment cap to reduce intrahousehold enrollment bias, gender gaps in utilization continued to persist (Philip and Iyer, 2024).

The study by Dupas and Jain (2021) showed that the discrimination is not limited to enrolment, but is also evident in utilization, where the biggest gender gap in utilization of the *Bhamashah Swasthya Bima Yojana* (BSBY) program in Rajasthan, India was among older women and girls. These gaps are likely driven by both the higher logistical demands associated with their healthcare, such as accompaniment, and the systemic bias in household resource allocation favoring males.

Despite evidence of inequity among disadvantaged women, one study in southern India found that public health insurance effectively reached marginalized subgroups of women with higher rates of enrolment among poor, uneducated, and elderly women (Sharma et al., 2023). Targeting strategies varied – some schemes focused on below poverty line population (*Dr. YSR Arogyashree*, *Karunya Arogya Suraksha Paddathi* (KASP)- PMJAY, Chief Ministers Comprehensive Health Insurance Scheme, and *Arogyashree* Scheme), while others encompassed population from both below and above the poverty line (*Ayushman Bharat Arogya Karnataka Scheme*), or exclusively above it (*Arogya Raksha Scheme*). Nevertheless, data from the 2015–2016 and 2019–2021 National Family Health Survey (NFHS) indicated an increased coverage among socio-economically disadvantaged women, suggesting that these schemes have progressively reached their intended

beneficiaries.

3.4. Barriers impeding women's access to and use of insurance programs

Sixteen of the twenty studies assessed the barriers that hinder women's uptake or enrollment in health insurance schemes and their use of such schemes. Four studies used quantitative methods (survey of health insurance recipients) (Cook et al., 2022; Dupas and Jain, 2021; Nguyen and Strizrep, 2019), four studies used qualitative methods (focus groups, in-depth interviews, and/or observation) (AHME and UCSF, 2019; Kabia et al., 2018; Karpagam et al., 2016; Ramprakash and Lingam, 2021), and one study used a case-study approach (Witter et al., 2017). In addition, seven studies delved into the gender barriers as part of a discussion of their quantitative findings on gender differentials in health insurance uptake and utilization (Giles et al., 2013; Nandi et al., 2016; Philip and Iyer, 2024; Shaikh et al., 2018; Sharma et al., 2023; Woldemichael and Shimeles, 2015; Zhou et al., 2021).

We classified the barriers in women's enrollment and utilization of public health insurance highlighted by the studies into barriers operating at the 1) individual and household level; 2) facility and provider

Table 1
Illustrative examples of three different types of barriers to women's enrollment and utilization of health insurance programs discussed in the included studies.

Type of barrier	Example of barrier	Number of Studies (N)
Individual and household level barriers (N = 11)	Internalized bias and prioritization of male's health over the health of female members	6
	Restricted or diminished mobility for women and/or need for accompaniment to travel or to be in public places	6
	Transportation costs and other costs associated with care seeking (e.g., arranging childcare, elderly care, escorts)	4
	Lack of decision-making and control over household resources	3
	Household responsibilities and the unpaid care economy	3
	Distance to health facilities and geographic constraints	2
	Limited availability and accessibility of providers and facilities; facilities located in areas not well serviced/ connected to transportation; poor distribution of facilities	3
Facility and Provider level barriers (N = 3)	Discriminatory attitudes of providers and mistreatment of women	1
	Poor quality of care	1
	Limited awareness raising among women regarding insurance processes and entitlements	7
Bureaucratic level barriers in insurance program design, rollout and administration (N = 13)	Insurance related fees	6
	Insurance regulations that disadvantage women (household cap, number of births, number of cardholders per household)	7
	Benefits package excludes services that are important for women (e.g., sexual and reproductive health, gender-based violence, cesarean delivery, outpatient care)	4
	Requirements for eligibility papers	3
	Coverage linked to employment and specifically formal employment	2

level; and 3) bureaucratic level of the insurance program's design rollout and administration (Table 1). Several studies illustrated how these barriers disadvantage women overall and can be particularly problematic for women with intersectional vulnerabilities such as those with disability, elderly, widows, or women with low education.

3.4.1. Individual- and household-related barriers

Eleven studies reported individual- and household-related barriers that hindered women's utilization of health insurance programs. Internalized bias which drove the prioritization of male health compared to that of female family members and restricted or diminished mobility and need for accompaniment (n = 6 studies each) were the most common demand-side barriers, followed by transportation and care seeking costs (n = 4); household responsibilities and demand for women's care work (n = 3); lack of control over resources and decision-making (n = 3); and distance to health facilities and geographic constraints (n = 2).

Six studies noted the internalized biases shaped by societal norms, which dictate that women should endure pain silently compared to men, and which prioritize men as more deserving of healthcare as discouraging factors for women in their enrollment in or utilization of insurance (Dupas and Jain, 2021; Ramprakash and Lingam, 2021; Shaikh et al., 2018; Sharma et al., 2023; Witter et al., 2017; Woldemichael and Shimeles, 2015). One study in Rajasthan, India showed that households were willing to travel further and prioritize funds for male compared to female healthcare (Dupas and Jain, 2021). When family members or children increased in a household, women, especially those who are elderly, were likely to be deprioritized or excluded altogether from healthcare (Witter et al., 2017; Woldemichael and Shimeles, 2015).

Women encountered restricted mobility for various reasons. Societal norms and safety concerns often prevented them from traveling alone or seeking healthcare unaccompanied (Ramprakash and Lingam, 2021). Pregnancy and disability also limited women's ability to move freely and access healthcare services independently (Dupas and Jain, 2021; Kabia et al., 2018; Ramprakash and Lingam, 2021). Women's lack of financial resources due to their lower levels of paid labor force participation than men was also discussed in several studies as limiting their access to health insurance (Cook et al., 2022; Kabia et al., 2018; Ramprakash and Lingam, 2021). Studies illustrated the continuous and uninterrupted pressure women faced to be at home, doing household chores and taking care of dependents, which forced them to forego care or miss out on enrollment opportunities (Kabia et al., 2018; Ramprakash and Lingam, 2021). Lack of power to make decisions and control household resources were identified as another major barrier to insurance enrollment or utilization for women. For example, in their study in India, Witter et al. (2017) documented men having the decision-making power on key aspects such as payments and when to seek healthcare, even among wealthier families, or where women were educated and/or employed.

Distance to health facilities in addition to transportation costs and costs associated with care seeking, such as childcare and elderly care, were two major barriers, cited across studies in India and Kenya (Dupas and Jain, 2021; Kabia et al., 2018; Karpagam et al., 2016; Nandi et al., 2016; Ramprakash and Lingam, 2021). Those studies noted that women were expected to cover the costs of those accompanying them to the health facilities which made health seeking more expensive for women compared to men (Dupas and Jain, 2021; Kabia et al., 2018). Two studies in India reported the requirement from facilities for women to be attended in order to receive care or be admitted to hospitals, unless accompanied by a male family member, female patients were required to be accompanied by another woman, creating an accompaniment cost for women seeking care in addition to delayed care (Karpagam et al., 2016; Ramprakash and Lingam, 2021).

3.4.2. Facility- and provider-related barriers

Facility- and provider-related barriers were discussed in a limited number of studies, with three studies focusing on the limited availability

of providers and facilities, one on the discriminatory attitudes of providers and on the perceived poor quality of care.

The limited availability of providers and facilities in rural areas and in the insurance network limited women's available choices for care seeking in India (Ramprakash and Lingam, 2021; Witter et al., 2017). This was in part attributed to stringent requirements placed by insurance authorities regarding eligibility of providers to join the network, and at the same time due to the shortfalls in health professionals, equipment, and operational hours in the facilities that were empaneled, forcing women to seek care in private facilities where services were often not covered by the program (Ramprakash and Lingam, 2021). One study in Kenya documented that the empaneled health facilities did not meet the needs of the differently abled, citing lack of sign language interpreters and accessible ramps, toilets, and beds as barriers to care (Kabia et al., 2018).

In their study on Kenya as well, Kabia et al., 2018 document that the quality of care in the facilities included in the network was in many cases low, and some programs only included public sector providers who were perceived as lower quality compared to private sector providers. As a result, many women either opted not to enroll into the scheme or enrolled and then paid out-of-pocket (OOP) to receive care in private facilities. They also found that another issue deterring women from accessing services they were entitled to was mistreatment and disrespect by providers, especially when women were seen as having a social, financial or physical disadvantage.

3.4.3. Bureaucratic barriers related to insurance program design, rollout and administration

The most common gender barriers was addressed in the thirteen studies related to the design of the health insurance itself, which in many cases was shown as presenting formidable challenges for women. A major barrier cited by seven studies was the limited public communication of health insurance processes and entitlements which were perceived as complex or difficult to navigate by women in particular because of their lack of access to communication and formal networks, lower educational levels, and/or limited understanding of bureaucracy. Six studies discussed insurance related fees which did not take into account gender differentials in ability to pay while seven studies discussed women's disadvantage related to insurance requirements and regulations. Four studies discussed exclusion of female relevant services from benefits packages, and two discussed requirements for eligibility papers and coverage linked to formal employment that disadvantaged women.

Several studies show that overall awareness of insurance schemes, how to enroll, which health facilities are empaneled, and which services are free, is low among both participants and providers (AHME & UCSF, 2019; Cook et al., 2022; Kabia et al., 2018; Karpagam et al., 2016; Nguyen and Strizrep, 2019; Ramprakash and Lingam, 2021; Witter et al., 2017). Awareness was often lower among women compared to men, particularly women residing in rural and remote areas (Cook et al., 2022; Ramprakash and Lingam, 2021). In the case of India, it was especially low among women of lower castes as they typically resided away from enrollment sites or in colonies which authorities were unable to enter due to caste-segregation (Ramprakash and Lingam, 2021). When they learnt about enrollment campaigns, many women stated that they were given short notice which made it hard for them to set aside time, effort, and money to attend. In the case of RSBY in India, their digital grievance redressal system excluded women who lacked computer access and literacy, limiting their ability to report issues or obtain information (Karpagam et al., 2016). Women also reported having to establish and maintain friendly relations with authority figures to understand and obtain their benefits which due to social restrictions and power imbalances was more difficult for them compared to men in their families (Ramprakash and Lingam, 2021; Witter et al., 2017).

Several insurance schemes did not impose user fees or OOP expenses in theory but did so in practice which was typically more problematic for women. User fees and contributions were noted as barriers to healthcare

utilization for women in Kenya with women reported spending 29% more OOP expenses than men (Cook et al., 2022), and studies conducted in India revealed that women were paying for unexplained costs for services that were supposed to be free under the program or with use of an insurance card (Dupas and Jain, 2021; Karpagam et al., 2016; Ramprakash and Lingam, 2021). Despite being insured under the RSBY or *Mukhyamantri Swasthya Bima Yojana* schemes, 96% of women in the study by Nandi et al. (2016) still incurred OOP hospital expenses, relying on loans, selling jewelry or mortgaging assets to pay for care. The Nguyen and Strizrep (2019) study in the Kyrgyz Republic found that the majority of participants perceived covered services such as ultrasound for pregnant women as not being free. Profit motives of providers resulted in the coercion of women to enroll in programs as a condition for receiving care, including for services that were covered outside of the insurance (Ramprakash and Lingam, 2021). In other cases, unnecessary OOP expenses were due to the unclear distinction among providers and users around the services covered in the benefit package (AHME and UCSF, 2019; Nguyen and Strizrep, 2019). In Kenya, for example, women were charged for postpartum family planning which is intended to be within their health insurance benefit (AHME and UCSF, 2019). The *Vajpayee Arogyasri Scheme* (VAS) in India mandated out-of-pocket payments at reduced rates for diagnostic tests and procedures, reimbursed only if the condition qualified under the scheme, placing financial strain on below-poverty-line population that it was meant to serve (Karpagam et al., 2016).

Insurance schemes sometimes imposed regulations leading to the exclusion from coverage of subgroups of women who are unmarried, divorced or widowed or outside of mainstream marital relationships, for example due to a cap on the number of household members enrolled and per annum amount covered by RSBY (Philip and Iyer, 2024; Ramprakash and Lingam, 2021; Sharma et al., 2023; Witter et al., 2017). In the case of the *Janani Suraksha Yojana* (JSY) tax-funded Conditional Cash Transfer scheme for maternal care in India, the program excluded women who already had two live births (Ramprakash and Lingam, 2021). One regulatory barrier under VAS was the waiting period for insurance authorization, lasting four to seventeen days, that caused delays in care and denial of pain relief for women until insurance clearance was received (Karpagam et al., 2016).

An issue that was mentioned in several studies was the issuance of a single insurance card per household provided to the husband as the primary cardholder, which reduced women's autonomy and decision-making when it came to its utilization. Studies in Kenya found that wives either did not have access to the card, or were not included in the coverage, or were not aware of the card to begin with (AHME and UCSF, 2019; Cook et al., 2022). In some cases, insurance benefit packages did not include services especially important for women. The Chief Minister's Comprehensive Health Insurance Scheme in Tamil Nadu for example, excluded sexual and reproductive health (SRH) services such as spontaneous or induced abortions, infertility, contraception, adolescent health care, or gender-based violence services – all of which are predominately needed by women and girls (Ramprakash and Lingam, 2021). Another program excluded certain SRH services (i.e., cesarean delivery) (Shaikh et al., 2018) or omitted outpatient services from their benefit packages (Karpagam et al., 2016; Ramprakash and Lingam, 2021; Witter et al., 2017).

Analyses by Witter et al. (2017), Ramprakash and Lingam (2021), and Karpagam et al. (2016) highlight the extent to which insurance enrollment procedures and bureaucratic requirements for documentary proof were a challenge for women, especially for disabled, unmarried, and deserted women, women in polygamous unions, transwomen, sex workers, domestic violence survivors, women without stable addresses, those born out of unregistered marriages, newly married women, and women who were separated. Finally, insurance programs, such as the Urban Employee Basic Medical Insurance scheme in China, were tied to formal employment, thereby disadvantaging women in informal sector and women who are unemployed (Giles et al., 2013; Zhou et al., 2021).

4. Discussion

Our review examined a variety of publicly funded or administered health insurance reforms implemented over the past two decades that have assessed gender inequities. Despite the limited number of studies included in our review, the majority pointed to important gender disparities in enrollment and utilization and found evidence for increased risk of marginalization and exclusion among specific subgroups of women. Measures to remove the barriers facing women – and not just those of reproductive age – are critically needed to ensure that insurance reforms are gender responsive and inclusive.

Our review brings to sharp focus a set of barriers – individual and household-side, facility and provider-side, and insurance related barriers – that keep women from enrolling into and benefitting from public insurance programs. Many of these barriers can be redressed by making modifications in the design and rollout of insurance reforms to make them more gender-responsive. Others can require addressing underlying social and gender norms and roles related to health seeking and decision-making around health more generally, but even these barriers may be better overcome taking them systematically into account in the design and rollout of insurance schemes. For example, outreach programs aimed at enrolling and facilitating women access to and use of insurance related services could significantly address the transportation, mobility, and resource constraints women face in the household.

The explicit lack of such considerations is evident in that one of the most important findings from the review relates to the role financial barriers play in keeping women from accessing care. Even in the context of public national insurance reforms, several studies reported persistent OOP despite supposed fee-exempt care. These OOPs were in part due to providers' poor understanding of the payment system, ambiguity and limitations of the benefits package, or low reimbursement for service fees (Achadi et al., 2014; AHME and USCF, 2019; Nguyen and Strizrep, 2019). Unexpected charges disproportionately affect poor women who do not have the resources beyond the protection of a cost-free program, which leads to distrust in the health system, deterring women from insurance scheme uptake and health facility utilization. Evidence points to the importance of removing user fees and reducing OOP, specifically for maternal and child health services (Lagarde et al., 2022; Marye et al., 2023; Steele et al., 2019).

In addition to healthcare costs, the featured programs did not cover the costs of transportation, which deterred access for rural, poor, and disabled women who live far from city-based health facilities and do not have access to personal vehicles or public transportation. While men are also hindered by transportation costs and potential earnings lost due to care-seeking, women additionally account for the costs of childcare, elderly care, and accompaniment due to their household responsibilities and prevailing gender norms that restrict their mobility. Moreover, men generally have better access to motorized transportation than women (Parnell, 2025; Tiikkaja and Liimatainen, 2021). One clear recommendation emanating from these findings is the need to offset some of the additional costs that women disproportionately bear, including accommodating their transportation, care and accompaniment needs over the course of implementing health financing reforms. Demand-side financing solutions such as cash transfers, transportation vouchers and subsidies for childcare costs are some potential avenues for improving women's enrollment and utilization of health insurance programs. Indeed, evidence from other countries has shown that demand-side financing can increase utilization of health services, resulting in improved maternal and child health outcomes (Hunter and Murray, 2017; ILO, 2014).

Several studies featured in the review illustrate, however, that removing financial barriers alone is not sufficient to meet women's needs for healthcare. A myriad of barriers hinder women from accessing care, including intra-household power dynamics and discrimination that disadvantages women, especially elderly or younger women from accessing household resources, including healthcare coverage or funds.

The finding that insurance utilization is affected by intra-household competition on who receives or can utilize health insurance resources with women prioritizing the needs of their husbands and children over their own is consistent with other studies looking at barriers to care more generally, and not just in the context of public insurance programs (Ramprakash and Lingam, 2021; Shaikh et al., 2018; Woldemichael and Shimeles, 2015). Other published work indicates that gender norms often force women to forgo care and endure their pain in silence (Dupas and Jain, 2021; Ramprakash and Lingam, 2021). While some of these barriers must be addressed to ensure better uptake and utilization for women, there is evidence that expanding insurance coverage and fee exemption alone can go a long way in increasing women's access and uptake of health services (Beaujoin et al., 2021; Bolarinwa et al., 2022; Kavanaugh et al., 2020).

It is critical that health insurance programs ensure that they reach their intended users. The studies included in this review illustrate that women are often left out of discussions and outreach events for health insurance programs due to literacy and mobility limitations, leaving them little knowledge about their rights to those programs and the accompanying benefits (AHME and UCSF, 2019; Cook et al., 2022; Kabia et al., 2018; Ramprakash and Lingam, 2021). Further, the design of the health insurance program itself may unintentionally lead to the exclusion of women. In Kenya, for example, men were considered the default principal member, which disallowed women from enrolling at registration events without their husbands' presence (AHME and UCSF, 2019). Targeted awareness raising is essential to promote gender equality in health insurance programs and should also be coupled with flexible requirements that do not impede women's enrollment.

On the provider and facility side, our review points to the importance that distance to network facilities and quality of the health services play. While health insurance programs may provide financial protection and a mechanism to access healthcare, our review shows that the availability and distribution of health facilities and providers is often lacking, especially in rural and remote areas. Systems must ensure that health facilities are physically accessible at all hours and are ready to deliver essential health services for women that are respectful and inclusive of their needs.

Moreover, our review indicates that some insurance programs exclusively cover high-level procedures, while others focus solely on childbirth and delivery services, neglecting essential healthcare functions vital for women (Nguyen and Strizrep, 2019; Ramprakash and Lingam, 2021). The existence of multiple schemes, with varying eligibility criteria such as formal employment or documentation, leaves certain subgroups of women—such as those in informal marriages, widows, disabled women, sex workers, and transgender women—without coverage. Fragmentation within these programs diminishes the efficiency of current investments and creates service gaps that disproportionately affect women and other vulnerable groups (Barnea et al., 2021; Lie et al., 2015). While barriers like fragmented services and segmented beneficiary groups reduce overall program efficiency, they tend to have a greater impact on women, who are often more vulnerable than men.

Our study has several limitations. First, the review relied on a limited number of studies that explored publicly funded insurance programs through a gender and intersectionality lens. Language and publication date restrictions may have further reduced the scope of evidence included. We focused on studies from 2013 to 2023, as the Universal Health Coverage UHC agenda, which sparked many public health financing reforms, gained momentum following the UN General Assembly's 2012 resolution on UHC2030 (2023). Moreover, the included studies were concentrated in certain contexts and insurance schemes, with much of the synthesized findings originating from a small set of studies focused on just six countries, India being the most prominent. This geographical bias and contextual concentration in India, combined with language restrictions to English-only articles, may limit the generalizability of the study's conclusions to broader or more

diverse settings. A second limitation is that our targeted grey literature search may have missed relevant outputs published on different platforms. Third, publicly financed health insurance reforms vary in structure, and categorizing them requires subjective judgment. As a result, some programs might have been excluded if their public funding status was ambiguous.

Our study has several strengths. We systematically scanned the literature by conducting searches across several electronic databases and a comprehensive list of organizations' websites. We identified a reasonable number of studies which allowed us to draw conclusions across various settings and reforms. We also validated our study findings by presenting the results of our review to renowned experts in the gender and health financing fields and solicited their feedback on our methodology and interpretation.

Despite limited evidence, this review highlights important shortcomings in the gender responsiveness of public health insurance schemes. Simplifying enrollment, removing restrictive regulations, and including services that reflect women's and girls' needs are some promising steps that public health insurance programs can do to redress structural gendered power imbalances. Furthermore, this review reveals gaps in gender-disaggregated evidence, underscoring the need for consistent sex-disaggregated data on enrollment, utilization, and OOPs, particularly in Africa and other parts of Asia, and as programs mature. Understanding which gender-related barriers are context-specific and which recur across settings is essential for recommendations forward. Most studies reviewed involved programs implemented within a 5–9-year period, and hence future analysis should explore how scheme maturity influences the ability to address gender constraints and promote equity.

5. Conclusion

Publicly funded health insurance reforms have shown great promise in helping countries achieve the ambitious goal of universal health coverage. However, failure to fully recognize and address the ways in which these programs can exclude or marginalize women and girls threatens to undermine their success. Our review highlights barriers that must be adequately addressed at the design and implementation phases of health financing reforms to ensure that access is truly universal, and women are not left behind. However, the current evidence base remains limited in scope and geographic representation. To advance equity in health insurance programs, future research is needed to fill these gaps and evaluate the effectiveness of gender-responsive health insurance programs across diverse contexts.

CRedit authorship contribution statement

Shatha Elnakib: Writing – review & editing, Writing – original draft, Visualization, Supervision, Methodology, Investigation, Formal analysis, Conceptualization. **Rosemary Morgan:** Writing – review & editing, Methodology, Conceptualization. **Milly Nakatabira:** Writing – review & editing, Methodology, Investigation, Data curation, Conceptualization. **Anju Malhotra:** Writing – review & editing, Writing – original draft, Methodology, Conceptualization. **Indira Puspita Prihartono:** Writing – review & editing, Writing – original draft, Visualization, Methodology, Investigation, Formal analysis, Data curation, Conceptualization.

Funding

This work was supported, in whole or in part, by the Bill & Melinda Gates Foundation, investment INV032701.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence

the work reported in this paper.

Acknowledgements

The Monitoring & Action for Gender & Equity (MAGE) project is a partnership between Johns Hopkins University (JHU) and the Global Financing Facility for Women, Children and Adolescents (GFF), a multi-stakeholder global partnership housed at the World Bank that is committed to ensuring all women, children and adolescents can survive and thrive. MAGE aims to advance and strengthen the capacity and execution of gender- and equity-intentional monitoring and evaluation and build sustainable systems and capacity for the use of data to improve gender equality and reproductive, maternal, newborn, child and adolescent health and nutrition (RMNCAH-N) outcomes for women, children and adolescents in GFF partner countries and beyond.

Appendix A. Supporting information

Supplementary data associated with this article can be found in the online version at [doi:10.1016/j.ssmhs.2026.100210](https://doi.org/10.1016/j.ssmhs.2026.100210).

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