SYSTEMATIC REVIEW

Women’s access to health care for non-communicable
diseases in South Africa: A scoping review. [version 1; peer
review: awaiting peer review]

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Abstract

Background: Non-communicable diseases (NCDs) such as obesity,
hypertension (HPT), and type II diabetes (T2D) are of increasing
concern in South Africa (SA), with women being more at risk. Authors
conducted a scoping review to identify and map the evidence
available about the barriers of access to obesity, HPT, and T2D care
among women in SA.

Methods: Arksey and O'Malley's framework for scoping review was
used. The search of the literature was completed in the Scopus, Web
of Science, and PubMed databases between April and May 2022. Only
studies conducted among women in SA were eligible for inclusion.
identified barriers were mapped onto Levesque's framework of access
to health care to determine which points along the chain of accessing
NCD health care among women are mostly impacted.

Results: Seven articles were included in the review: qualitative (n=2),
quantitative (n=2), mixed methods (n=2), and grey literature (n=1). The
included studies reported barriers of access to HPT and T2D care only,
and no study reported barriers to obesity care. Supply-side barriers
included lack of knowledge about available services, physician heavy
workloads, medicine stock-outs, limited availability of testing
equipment, unaffordable transport costs, travelling longer distances,
inefficiently longer waiting times, and delayed referral. Demand-side
barriers included women having low self-awareness of NCD status,
concerns about confidentiality, perceived discrimination, and poverty.

Conclusions: Access to HPT and T2D services is impacted from
perception of need to benefitting from care. Articles included identified barriers affecting the availability and accommodation dimension of access to care, suggesting that HPT and T2D care is often unavailable or that women are unable to reach health facilities or service providers. There is need for more and better-quality research about access to NCD health care in SA, especially among women having a disproportionately high burden of obesity, T2D, and HPT.

**Keywords**
Womens health, non-communicable disease epidemiology, obesity, hypertension, type 2 diabetes, access to care

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Introduction
The ultimate focus of any health care system is effective and efficient provision of evidence-based health care services fulfilling the needs of the clients and satisfying their expectation for receiving better quality services. Preferably, services should be approachable, acceptable, affordable, available, and appropriate to all users in situations of perceived need.\(^1\) This is relevant particularly among women who are more likely to have specific health care needs across their life course and given that approximately two out of three women die from non-communicable diseases (NCDs) globally, possibly more in sub-Saharan Africa (SSA).\(^2\)–\(^4\) Driving this increased risk among women, is persistent exposure to the leading modifiable risk factors for NCDs, coupled with other health conditions such as reproductive, maternal, child, and adolescent health.\(^3\)–\(^7\) Further, in the process of seeking health care services, women are subject to gender bias inherent within health systems, resulting in women receiving fewer examinations, screening, and diagnostic tests for NCDs compared to men with similar symptoms.\(^3\)

The burden of NCDs among women in SSA has doubled in the recent years.\(^7\) Specifically, there has been dramatic increase in the prevalence of NCDs such as type II diabetes (T2D) and hypertension (HPT),\(^8\)–\(^9\) with concomitant increase in NCD-related morbidity and mortality. According to the International Diabetes Federation, the projected rate of increase in T2D cases is highest in SSA compared to other regions. Further, in this region, South Africa (SA) has the highest proportion of people with T2D\(^10\) and T2D is the second leading cause of death in the country and the leading cause of death among women.\(^11\) The high burden of NCDs among women in SA is exacerbated by the fact that the prevalence of obesity among adults residing in SSA is now higher than the global obesity prevalence for adults,\(^8\) with SA having the highest prevalence of obesity, particularly in women.\(^1\)–\(^5\) Additionally, postpartum weight gain and gestational diabetes are prevalent in SA, resulting in an increased burden of NCDs among women, and demanding availability of specialized services during their life course.\(^12\)–\(^15\) The NCD burden is further compounded by evidence of substantial disparities in women’s health indicators, based on place of residence (rural/urban), socioeconomic status and other indicators of inequities in access to health care.\(^16\)–\(^17\)

The key to averting NCDs and their associated outcomes among women is ensuring availability of regular and holistic NCD-related health care throughout their life course and particularly during critical periods such as pregnancy.\(^3\)–\(^6\)\(^,\)\(^18\)–\(^19\) For this to be effectively achieved, it’s imperative to first recognize and address any factors that impede access to NCD health care and utilisation among women. The concept of access is better explained as an interaction between characteristics of persons, social and physical environments and the characteristics of health systems and providers.\(^1\) All initiatives to promote health equity in access to NCD-related health care need to consider factors from both the supply-side of the health system and the demand-side of the population as highlighted in the Levesque’s dimensions of access to health care.

![Figure 1. A conceptual framework of access to health care by Levesque.\(^1\)](image-url)
Approaching access to health care with such perspective addresses the fact that access to health services depends not only on availability of the services but also on socioeconomic and sociocultural factors. These factors have a direct influence on barriers to access, hence necessitating exploration of access to health care from different perspectives and on different levels, which may require varying solutions to address.

The aim of this scoping review was to systematically map the evidence available regarding barriers to women’s access to health care for NCDs, focusing on obesity, HPT and T2D, over their life course in SA. The following research questions guided the review process: (a) What are the impediments of access to NCD-related health care services from demand-side (patient/client) perspective? (b) What are the impediments of access to NCD-related health care services from supply-side (provider/health system) perspective? (c) Which points along the chain to accessing NCD-related health care according to the Levesque framework of access to health care is mostly adversely impacted? The identified barriers were mapped onto the Levesque et al., framework of access to health care. The framework suggests a multidimensional view of health care access with five supply-side dimensions of accessibility: approachability, acceptability, availability/accommodation, affordability, and appropriateness and five demand-side corresponding individuals’ and population’s abilities: to perceive, to seek, to reach, to pay and to engage in health care (Figure 1). Integrating this framework into this review will assist in highlighting the weak points along the chain of access to health care for NCDs in South African women, which may help to inform strategies, policies, and practices that ultimately lead to a lower NCD burden.

Methods

The methodology of the scoping review was informed by the Arksey and O’Malley framework for scoping reviews. Given the complexity of research on access to health care for NCDs, a scoping review was deemed appropriate for collating and synthesizing the available literature on the topic. Studies were included if they (i) involved women; (ii) were conducted in SA; (iii) assessed barriers or facilitators to obtaining NCD-related health care (obesity, HPT, and T2D); (iv) were peer-reviewed or grey literature; and (v) the study explored perceptions from a provider or patient perspective. A study was excluded from the review if (i) it did not focus on access to health care for NCDs among women; (ii) was published in a language other than English; or (iii) was conducted outside SA. Some primary literature explored the perception of women in addition to those of men. Publications were included in the review if the authors distinguished between the findings that were specific to women to those from men.

Search strategy and selection of studies

The authors searched for primary literature from the following databases: Scopus, Web of Science, and PubMed, based on the criteria described above and the search strategy described in Table 1. The reference lists of included studies were also hand-searched for other relevant studies. All retrieved articles were uploaded into EndNote to remove the duplicates. The articles were then uploaded to Rayyan QCRI (Copenhagen: The Nordic Cochrane Centre, Cochrane), where titles and abstracts were assessed independently against the inclusion criteria by three reviewers. Disagreements on selected studies were discussed and resolved by consensus or the intervention of a fourth reviewer when necessary. Thereafter, full texts of studies were screened to verify their conformance with the inclusion criteria. Details of excluded studies at this stage and reasons for their exclusion are presented in Figure 2.

<table>
<thead>
<tr>
<th>#</th>
<th>Search terms used</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>“obesity” OR “diabetes mellitus” OR “type II diabetes” OR “hypertension” OR “high blood pressure”</td>
</tr>
<tr>
<td>2</td>
<td>“facilitators” OR “obstacles” OR “barriers”</td>
</tr>
<tr>
<td>3</td>
<td>“Delivery of health care” OR “healthcare” OR “access”</td>
</tr>
<tr>
<td>4</td>
<td>Acceptability OR “Availability” OR “accommodation” OR “Affordability” OR “Appropriateness”</td>
</tr>
<tr>
<td>5</td>
<td>“women” OR “female”</td>
</tr>
<tr>
<td>6</td>
<td>“South africa”</td>
</tr>
<tr>
<td>7</td>
<td>#1 AND #2 AND #3</td>
</tr>
<tr>
<td>8</td>
<td>#4 AND #7</td>
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<tr>
<td>9</td>
<td>#5 AND #8</td>
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<tr>
<td>10</td>
<td>#6 AND #9</td>
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</table>
### Charting the data

Data from eligible studies was charted using a standardised data abstraction tool designed for this study. Macro descriptive data included: Author(s); Title; Publication year; study type and the microdata included: Study location; Aim of the study; Study population/sample size; Study design; Duration of the study; type of data analysis used; Study intervention/s; NCD studied; Outcome measured; barriers. Three reviewers independently charted the data from each eligible article. Any disagreements were resolved through discussion between the reviewers or further adjudication by a fourth reviewer.

### Collating, summarising, and reporting the results

Quantitative data extracted were presented in tables or charts (as appropriate) in line with the review questions. The studies were grouped by the specific NCD, and summarised by the type of settings, populations, interventions, study designs, outcome measured, women’s life stage of focus. Identified barriers were mapped onto Levesque’s framework (five supply-side/health system dimensions and five demand-side/population dimensions) on access to health care to determine which points along the chain to accessing NCD-related health care among women are mostly adversely impacted (Figure 1). No additional quantitative analysis was conducted, other than that which was reported in the included source of evidence.

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**Figure 1. Flow of studies included in the review.**

**Figure 2. Flow of studies included in the review.**
Results
Overall, the search yielded a total of 139 articles, and nine articles were duplicates. 134 articles were screened based on titles and abstracts, and 59 articles were excluded as they did not meet the inclusion criteria. The full texts of 75 articles were retrieved and 68 articles were excluded for the following reasons: studies involving both men and women where results for women were not reported separately (24 articles); studies that did not explore barriers of access to NCD-related health care (40 articles); the study was not conducted in SA (one article); the manuscript was either a published protocol or a case report (three articles) (Figure 2). The remaining seven articles were included in the review.

Characteristics of included studies
Of the included studies, two were conducted in Western Cape (WC) province, one study was conducted in Gauteng (GA) province, one was conducted in Mpumalanga, Gauteng, and Limpopo, one study was conducted in Northern Cape (NC) and KwaZulu-Natal, one study was conducted in Eastern Cape (EC) province only, and one study was conducted in all nine provinces of SA. Of the seven included studies, six were published between 2011 and 2021 and one was published in 1997 (Table 2). For primary result articles, two studies included only women, while five studies also included men, but the proportion of women was significantly higher than that of men. Three studies reported barriers of access to T2D-related health care, two studies reported barriers of access to HPT-related health care, while two studies reported barriers of access to both HPT and T2D related health care. No studies reported barriers of access to obesity health care. A descriptive summary of the included studies is presented in Table 2.

Supply-side and demand-side barriers of access to NCD health care
The first dimension of accessibility from a health system perspective in the Levesque’s framework is the approachability dimension, relating to the fact that health care services are identifiable and visible to people facing health needs (Figure 1). In this review, two studies reported barriers that impacted the notion of approachability to services (Table 3). The barriers included women lacking knowledge about services available related to HPT and T2D care; a communication problem was identified as a health administration issue in management of maternal HPT.

Complementary to the dimension of approachability is the demand-side dimension; the person’s or population’s ability to perceive need for care (Figure 1). One study reported barriers impacting the ability to perceive dimension (Table 3). In this study, it was reported that women’s self-awareness of their HPT status was low.

The second dimension of accessibility from a health system perspective in the Levesque’s framework is acceptability (Figure 1). Acceptability relates to cultural and social factors that impact the person’s possibility to accept different aspects of NCD-related health care services. The barrier related to the acceptability dimension was reported in one study (Table 3). The barrier reported was mistrust of physicians at private hospitals where diabetes care is provided arising from treatment fee charges.

The corollary dimension of acceptability is ability to seek health care, relating to the concepts of individual autonomy, personal capacity to choose to seek NCD-related health care (Figure 1). One study reported barriers that affected this dimension of access to NCDs health care (Table 3), and these included: concerns about confidentiality and perceived discrimination hindering one’s ability to seek health care.

The third dimension of accessibility from the health system perspective in the Levesque’s framework is availability and accommodation (Figure 1). The dimension relates to the fact that health care services, either the physical space or health care personnel, are reachable both physically and in a timely manner. Six studies reported barriers that impacted on the availability and accommodation dimension of accessibility (Table 3). Physicians’ heavy workloads, and travelling longer distances to reach health facilities; medicine and pharmaceutical stock-outs; poor health facilities in public hospital; limited availability of testing equipment, inadequate staffing, and lack of transportation to physically reach service providers; transport and safety issues are the barriers that impacted availability and accommodation dimension. No barriers were reported to be impacting the demand-side dimension of ability to reach health care.

Affordability is the fourth supply-side dimension of accessibility, and it relates to people’s capacity to spend resources and time to use appropriate services (Figure 1). The dimension captures the direct costs of services and opportunity costs. The barriers related to affordability dimension were presented in two studies (Table 3) and they included: unaffordable transport costs; and the cost of transport and services being borne by women. The corollary dimension for affordability dimension is the ability to pay for health care, and it describes the capacity of a person to generate economic resources to pay for health care services (Figure 1). One study presented poverty as a barrier to ability to pay for diabetes health care services.
<table>
<thead>
<tr>
<th>Author (Year)</th>
<th>Study objective</th>
<th>Study design, data collection, year of data collection</th>
<th>Health care setting: location</th>
<th>Type of care; NCD studied</th>
<th>Sample size, women, age</th>
<th>Analytical approach</th>
<th>Perspective (provider perspective or client/patient perspective)</th>
<th>Barriers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hoffman (1997)</td>
<td>To determine the health status of women living in the peri-urban areas of South Africa and their utilisation of health services.</td>
<td>Cross-sectional study; household interview survey</td>
<td>Community based study: Khayelitsha, (Western Cape province)</td>
<td>Chronic illness care, maternal and child care; HPT, T2D</td>
<td>661 Women, 15-75 years old; socially disadvantage women</td>
<td>Univariate analysis, logistic regression</td>
<td>Senior women in household</td>
<td>Lack of knowledge about the services available. Travelling longer to reach health services; cost of transport; and services are borne by the women, physician overload.</td>
</tr>
<tr>
<td>Magadzire (2014)</td>
<td>This paper examines in a South African context supply- and demand- Access to essential Medicines barriers from the provider perspective using a five-dimensional framework.</td>
<td>Qualitative study; key informant interviews (nurses, doctors, pharmacists), purposively selected; March and April 2012</td>
<td>Community health centers: Eastern Cape province</td>
<td>Availability of a blood glucose lowering drug for T2D</td>
<td>30 (83.3%) Females, 24-63 years old; health care providers</td>
<td>Content analysis</td>
<td>Provider perspective</td>
<td>Medicine Stock outs. Public transport is either absent or limited. Poverty. Unaffordable transport costs.</td>
</tr>
<tr>
<td>Mendenhall (2015)</td>
<td>This article investigates women's experiences with diabetes care in Soweto, a township of Johannesburg, South Africa.</td>
<td>Qualitative study; face to face interviews; November and December 2012</td>
<td>Chris Hani Baragwanath hospital: Soweto, (Gauteng)</td>
<td>Diabetes care</td>
<td>27 Women, mean age 59 years old; recruited from Birth to Twenty Plus (Bt20) cohort</td>
<td>Iterative analytical approach</td>
<td>Women perspective</td>
<td>Mistrust of physicians at private hospitals. Long waiting periods. Poor health facilities in public hospitals. No free medication available at CHC.</td>
</tr>
<tr>
<td>Author (Year)</td>
<td>Study objective</td>
<td>Study design, data collection, year of data collection</td>
<td>Health care setting: location</td>
<td>Type of care; NCD studied</td>
<td>Sample size, women, age</td>
<td>Analytical approach</td>
<td>Perspective (provider perspective or client/patient perspective)</td>
<td>Barriers</td>
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<tr>
<td>Mutabazi (2021)</td>
<td>This study assessed PMTCT outcomes, and how GDM screening, care, and T2D prevention was integrated into PMTCT in Western Cape (WC), South Africa.</td>
<td>Convergent mixed methods, semi-structured interviews (HIV/PMTCT experts, health care workers, women under PMTC diagnosed with GDM); 2016-2018</td>
<td>Primary Health care centers: Western Cape Province</td>
<td>Gestational Diabetes Mellitus care</td>
<td>26 (86.7%) Females, mean age 44.9 years old</td>
<td>Content and thematic analysis</td>
<td>Provider and patient</td>
<td>PMTCT programme not integrated with screening and addressing GDM; transport and safety issues.</td>
</tr>
<tr>
<td>Gómez-Olivé et al. (2017)</td>
<td>To measure the prevalence, level of awareness and control of HPT in a large population of 40–60-year-old participants of both sexes in six research sites across four SSA countries.</td>
<td>Cross-sectional; questionnaire administered participants; August 2013 - August 2016</td>
<td>MRC/Wits Health and Demographic Surveillance System Site (HDSS); Soweto (Gauteng), Dikgale (Limpopo), &amp; Agincourt (Mpumalanga)</td>
<td>HPT related care</td>
<td>Agincourt: n=891; Dikgale: n=774; Soweto: n=1002; total women=5879</td>
<td>Descriptive analysis (proportions, means, 95% CI), Chi-squared test.</td>
<td>Patient</td>
<td>Self-knowledge of being hypertensive was 69.3% in Agincourt, 64.5% in Dikgale and 35.1% in Soweto. Self-awareness was lower in Soweto.</td>
</tr>
<tr>
<td>Author (Year)</td>
<td>Study objective</td>
<td>Study design, data collection, year of data collection</td>
<td>Health care setting: location</td>
<td>Type of care; NCD studied</td>
<td>Sample size, women, age</td>
<td>Analytical approach</td>
<td>Perspective (provider perspective or client/patient perspective)</td>
<td>Barriers</td>
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<tr>
<td>Wollum et al. (2018)</td>
<td>To quantify the continuum of care—prevalence, diagnosis, treatment, and control—for diabetes, HPT, and hypercholesterolemia in two South African districts</td>
<td>Mixed-methods qualitative design; health facility surveys, qualitative FGDs, key informant interviews; 2011, 2012, 2014</td>
<td>Hospitals, CHC, PHC, mobile clinics, private pharmacy: Pixley ka Seme (Northern Cape Province) and Umngungundlovu (KwaZulu-Natal Province)</td>
<td>T2D and HPT care</td>
<td>Just over half the population (doesn’t give population sizes)</td>
<td>Descriptive analysis (quantitative data), the framework approach was used to analyse qualitative data</td>
<td>Client/patient</td>
<td>Lack of transportation; Concerns about confidentiality. Perceived discrimination. Long wait times. Limited availability of testing equipment, inadequate staffing, and pharmaceutical stock outs.</td>
</tr>
</tbody>
</table>

T2D: type II diabetes; HPT: hypertension; FGDs: focused group discussions; CHC: community health Center; PHC: primary healthcare Center; PMTCT: prevention of mother to child transmissions; GDM: gestation diabetes mellitus.
The fifth supply-side dimension of accessibility is appropriateness, relating to alignment of health care services with patients’ needs, the timeliness and quality of services provided (Figure 1). Three studies presented barriers that impacted appropriateness dimension of access to HPT and T2D care (Table 3). Inefficiently longer waiting times; and delayed referral and management at an inappropriate level of health care are the factors that adversely affected the appropriateness dimension of access to T2D and HPT care. No barriers were reported to be impacting the demand-side dimension of ability to engage health care.

**Table 3. Barriers to access to hypertension (HPT) and type 2 diabetes (T2D) care for women in South Africa according to Levesque’s framework of access to health care.**

<table>
<thead>
<tr>
<th>Dimensions of accessibility based on Levesque’s framework</th>
<th>Barriers identified</th>
<th>Number of articles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply-side dimensions</td>
<td>Lack of knowledge about the services available</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Communication problem</td>
<td>1</td>
</tr>
<tr>
<td>Acceptability</td>
<td>Mistrust of physicians at private hospitals</td>
<td>1</td>
</tr>
<tr>
<td>Availability and accommodation</td>
<td>Physicians’ heavy workloads</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Travelling longer distances to reach health facilities</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Medicine and pharmaceutical stock-outs</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Poor health facilities in public hospitals</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Limited availability of testing equipment</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Inadequate staffing</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Lack of transportation to physically reach service providers</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Transport and safety issues</td>
<td>1</td>
</tr>
<tr>
<td>Affordability</td>
<td>Unaffordable transport costs</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Cost of transport and services being borne by women</td>
<td>1</td>
</tr>
<tr>
<td>Appropriateness</td>
<td>Inefficiently longer waiting times</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Delayed referral and management at an inappropriate level</td>
<td>1</td>
</tr>
<tr>
<td>Demand-side dimensions</td>
<td>Low self-awareness of HPT status</td>
<td>1</td>
</tr>
<tr>
<td>Ability to perceive</td>
<td>Concerns about confidentiality</td>
<td>1</td>
</tr>
<tr>
<td>Ability to seek</td>
<td>Perceived discrimination</td>
<td>1</td>
</tr>
<tr>
<td>Ability to reach</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Ability to pay</td>
<td>Poverty</td>
<td>1</td>
</tr>
<tr>
<td>Ability to engage</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

The fifth supply-side dimension of accessibility is **appropriateness**, relating to alignment of health care services with patients’ needs, the timeliness and quality of services provided (Figure 1). Three studies presented barriers that impacted appropriateness dimension of access to HPT and T2D care (Table 3). Inefficiently longer waiting times; and delayed referral and management at an inappropriate level of health care are the factors that adversely affected the appropriateness dimension of access to T2D and HPT care. No barriers were reported to be impacting the demand-side dimension of ability to engage health care.

**Discussion**

This scoping review of seven studies expounded on the barriers of access to health care for HPT and T2D from the perspective of both the women and the health care providers. The identified barriers were mapped onto the Levesque et al., framework of access to health care in order to identify which points along the chain to accessing health care are critically impacted by the identified impediments in the review. Mapping of the barriers on the framework highlight the weak points along the chain to accessing NCD care and allow for targeted intervention and effects to alleviate barriers to accessing NCD care in SA.

Six out of the seven studies included in this review impacted the availability and accommodation dimension (supply-side). This dimension of accessibility of services is on the Levesque’s framework of access to health care (Figure 1) hence suggesting that access to HPT and T2D care is likely to be impeded right in the middle of the access to care process. The findings from this review indicate that from the health system and provider perspective, there are challenges related to
pharmaceutical stock-outs, inadequate staffing, limited availability of testing and screening equipment and poor health facilities. These factors have been highlighted as key barriers to management and control of NCDs in SSA and globally. Efforts have been made to increase the number of health care workers (HCWs) and improve their capacity to deliver NCD care in SA; however, there are still inadequacies in HCW’s and health system’s capacity to cater for the increasing burden of NCDs. Inadequacy and overstretched staff could benefit from community health workers’ (CHW) engagement in health programmes since CHWs’ support has been reported to be effective in low- and middle-income countries (LMICs) in HPT and diabetes control. Further, integration of NCDs care services with existing HIV programmes have been reported to be effective in increasing the availability of NCDs care at primary and community health centers.

Travelling longer distances and limited availability of means of transportation to reach health facilities were also reported as supply-side barriers to access of HPT and T2D care. This is similar to findings from related studies that have been conducted in LMICs. It has been reported in SA that the poorest tend to reside furthest from the nearest clinic and their inability to bear travel costs constrains them to lower quality health care facilities. Since distance plays a significant role in mediating health care utilisation behaviour, more research is needed to quantify the relationship between the growing need for NCD care and access to this care nationally among women to support implementation decisions.

Further, two studies cited barriers related to the affordability dimension of access to health care which included unaffordable transport fares incurred by the women during the process of accessing services and all the costs are borne by the patient. In a bid to promote equitable financial access to health care services, SA has implemented different health financing policies such as user fee abolitions. Indirect costs such as transport, however, have continued to be highlighted as significant barriers for the poor. Poverty remains a constraint in accessing NCD care, mainly due to the inability to afford transport fares, and recommended medication. Similar findings have been reported in other LMICs which have implemented different forms of user fee abolition.

Women’s lack of information about available HPT and T2D services was highlighted as a barrier impacting the approachability dimension of access to health care. Inadequate knowledge about health care services available limits women’s choice and directly impacts utilisation of the services. Availability of clear, correct, and timely information about NCD services increases women’s abilities to perceive need for care and seeking out for services. This demands more efforts to raise user awareness about HPT and T2D health care services available through use of mass media like radio and television, which has been associated with better use of health services in other LMICs.

Furthermore, one study reported a low self-awareness of HPT status among women, which negatively impacted their ability to perceive a need for care. People’s lack of awareness about NCDs and risk factors especially HPT and T2D is not uncommon in SA and globally. The lack of knowledge about NCDs and their risk factors among the women and the general population makes it challenging to reduce the burden of NCDs. Adopting of a multisectoral approach such as CHW raising NCD awareness through health education, and integration of NCD education in school curriculum could assist in behaviour change, increased knowledge about NCD risk factors and care available among women.

Longer waiting times and delayed referral were cited as barriers that impacted the appropriateness dimension of access to HPT and T2D care. Longer waiting periods are largely influenced by the large number of people seeking a specific service and the number of HCWs available to offer the service. Given the scale of NCDs burden, integration of the management of diabetes, and HPT into primary health care (PHC) represents a feasible, affordable, and equitable option for addressing women’s needs for NCDs care in a timely manner. This is because PHC is the most frequent entry point for the general population to the health system, hence offers a great opportunity for early detection and management of high-risk women visiting health services for other reasons such as antenatal care.

Limitations of the review

The concept of health care access is comprehensive, and its definition and influencing factors are still evolving globally. Firstly, since this was a scoping review, the quality of the methodology used in the selected studies was not assessed. The summary findings should be interpreted cautiously, though the barriers reported in the reviewed studies are well corroborated, giving our findings some degree of credibility. Secondly, although three reviewers examined all articles, given the ambiguity and overlap of the dimensions of access to health care in the Levesque’s framework, it is possible that we missed or incorrectly categorised pertinent findings, potentially altering the results. Thirdly, only studies published in English were included in this review, therefore this may have led to omission of other relevant studies not published in English. Despite these limitations, this scoping review highlights the complexity of access to HPT and T2D care in SA and shows that limited studies have been conducted on access of health care services related to HPT, T2D, and obesity in SA and in women particularly.
Conclusion
This scoping review highlights barriers to accessing HPT and T2D health care in SA, preventing women from achieving the full extent of their health. Access to HPT and T2D services is impacted all along the chain of access, from perception of need to benefitting from care, though most of the barriers to accessing HPT and T2D health care that were reported in this review originated from supply-side (health system perspective) dimensions of access. This information underlines the need for more and better-quality research about access to NCD health care in SA especially among women who have a disproportionately high burden of obesity, T2D, and HPT.

Data availability
Underlying data
All data underlying the results are available as part of the article and no additional source data are required.

Extended data
Figshare: Review protocol for “Women’s access to health care for non-communicable diseases in South Africa: A scoping review”. https://doi.org/10.6084/m9.figshare.20292480.v1.21

This project contains the following extended data:

- Scoping review Protocol.pdf (Review protocol for this study).

Data are available under the terms of the Creative Commons Zero “No rights reserved” data waiver (CC0 1.0 Public domain dedication).

Reporting guidelines

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