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REVIEW

Indigenous women's access to maternal healthcare services in lower- and middle-income countries: a systematic integrative review

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Abstract

Objectives Globally, Indigenous people have lower-health status compared to non-Indigenous people due to unequal access to health care. Barriers or enablers to accessing maternal health services by Indigenous women are not well researched. This review aims to determine accessibility and utilisation of maternal primary healthcare services among Indigenous women in lower- and middle-income countries.

Methods We conducted a systematic integrative review of published and grey literature published between 2000 and 2017. Studies on maternal healthcare service utilisation by Indigenous women in lower- and middle-income countries were included. From 3092 articles identified, 10 met the eligibility criteria.

Results The most prominent barrier to accessing maternal primary healthcare services was the top-down nature of intervention programmes, which made programmes culturally unfriendly for Indigenous women. Distance, cost, transport, accommodation, language barriers and lack of knowledge about existing services also impacted access.

Conclusions Findings provided insights into understanding the gaps in existing policies for Indigenous women and their access to maternal health services. Results suggested that efforts be made to ensure appropriate programmes for Indigenous women's maternal health right.

Keywords Indigenous women · Accessibility · Healthcare services · Lower- and middle-income countries · Maternal health care

Introduction

Globally Indigenous people have higher rates of physical and mental illness, injuries, disability and lower life expectancy compared to their non-Indigenous counterparts; a substantial problem given more than 370 million Indigenous people live in 70 countries (Gracey and King 2009; Vickers et al. 2013). Maternal and child health issues have been a priority since the 2000 Millennium Development Goals (MDGs), with an expectation that all people would benefit from development (El Arifeen et al. 2014). After 15 years, the world has seen significant progress in maternal health outcomes (Graham et al. 2016; Lennox 2013; World Health Organization 2015). In 1990,

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estimated maternal deaths globally were 523,000 declining to 303,000 in 2015; a decrease of 44% (Black et al. 2016; Sachs 2015). Despite improvements to global maternal health figures, within countries there are substantial inequalities in outcomes for Indigenous peoples.

Maternal and child mortality rates are significantly higher among Indigenous communities (Gracey and King 2009; Lennox 2013; Stephens et al. 2006). There is a lack of disaggregated data available on Indigenous people as many countries have not recognised their Indigenous populations, and their health status is largely undocumented (Stephens et al. 2005; Wong et al. 2014). Indigenous women experience discrepancies due to their sexual, ethnic and cultural identities. Furthermore, their participation in civil, political, economic, social and cultural spheres is limited, so their voices are rarely heard (Dhamai 2014). Evidence from developed countries and a few developing countries suggests Indigenous women experience multiple barriers in accessing healthcare services during reproductive age, especially pregnancy and childbirth, reflecting inequity and inequality of their health rights (Målqvist et al. 2013; Peiris et al. 2008). With an aim of minimising gaps in health between Indigenous and non-Indigenous people with particular emphasis on Indigenous people's health rights, the 2015 Sustainable Development Goals (SDGs) seek to improve health and wellbeing and reduce inequalities (International Labour Organization 2016; Lennox 2013; Waage et al. 2015).

Accessing health services is complex and not easily measured (Gulliford et al. 2002). The presence of health facilities does not mean all people enjoy equal access to services. Accessing health services should be measured by the level of use in relation to users' needs. Access is multifactorial because health problems and needs of subpopulations are different (Davy et al. 2016; Gulliford et al. 2002). Accessing available health services depends on awareness of services, sociocultural influences; service costs, and the environment within the facility including whether it is user-friendly and culturally sensitive (Davy et al. 2016).

Health policies internationally have mostly developed with a top-down approach where health rights of the mainstream population receive priority over minority groups (Gracey and King 2009; Lennox 2013). Consequently, Indigenous people's access to healthcare services is constrained by financial, geographical and cultural barriers with limited understanding of the barriers or enablers to accessing maternal health (MH) services by Indigenous women of reproductive age (Davy et al. 2016). This review focuses on available healthcare services for Indigenous women of reproductive age and their accessibility and utilisation of those services in lower- and middle-income countries. Different countries use different terms (ethnic/tribal/Aboriginal/*Adivasi*) to indicate their Indigenous communities: we use the term "Indigenous" (World Health Organization 2007) to maintain uniformity of reporting results. This paper aims to comprehensively synthesise existing evidence on access to available MH care services by Indigenous women in lower- and middle-income countries and to identify gaps that need to be addressed to support Indigenous women to access these services.

Methods

An integrative review using a systematic approach was conducted using the review framework prescribed by Whittemore and Knafl (2005). Integrative reviews synthesise available evidence on a given topic and provide a comprehensive understanding to apply the knowledge into practices (Souza et al. 2010; Whittemore and Knafl 2005). We systematically examined existing literature, including all methodological approaches allowing non-experimental and experimental studies to be comprehensively investigated. This approach was chosen over a traditional systematic review to incorporate factors associated with accessing services and women's reported experiences of accessing MH services. Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines were followed (Moher et al. 2009), see Fig. 1.

Eligibility criteria

Studies were eligible for inclusion if they were (1) from lower- and middle-income countries (The World Bank 2016), (2) focused on Indigenous women's health issues in their reproductive years, (3) investigated Indigenous women accessing MH care services (antenatal, delivery and post-natal care) at primary or community care facilities. Primary care facilities have developed to be universally accessible and affordable to individuals and families in the community (World Health Organization 1978). Articles that identified disparity or inequality regarding accessibility were included.

Although there is no unified definition of Indigenous populations (Stephens et al. 2005, 2006), the definition prescribed by the World Health Organisation (WHO) was adopted for this review. We included articles where participants themselves identified as "Indigenous"; have strong links to the land and resources, experienced separation from colonising peoples, have a historical continuity with pre-colonial societies, and practiced distinct social, cultural, economic or political systems (World Health Organization 2007). All included papers were published on Indigenous people who were minority groups in their countries. Participants were identified as "ethnic minority

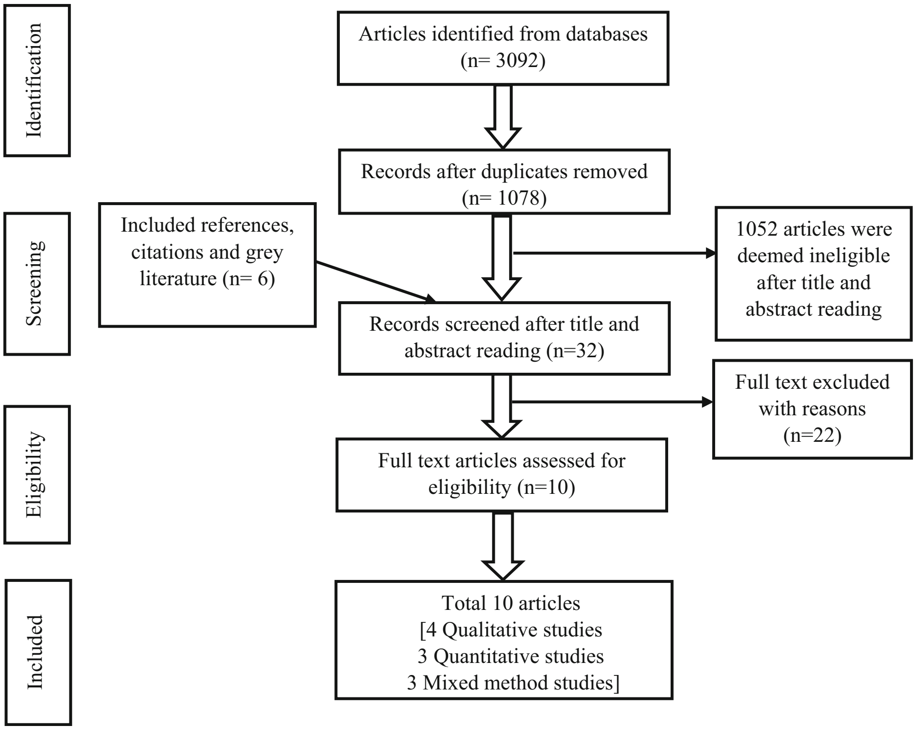

Fig. 1 Article search and selection process using PRISMA flowchart (Moher et al. 2009)

groups", "Indigenous people", "scheduled tribes", "Tribal", "Adivasi" ("original inhabitants") reflecting characteristics of Indigenous groups (Adhikari et al. 2016; Harris et al. 2010; Ibanez-Cuevas et al. 2015; Islam 2016; Islam and Odland 2011; Ruiz et al. 2013; Shah and Bélanger 2011; Varma et al. 2011; White et al. 2012).

Studies about access to services in high-income countries including the USA, Australia and Canada were excluded as these countries have distinct health policies for Indigenous people (Silburn et al. 2016). Studies that focused on secondary or tertiary health care or specialised services (such as gestational diabetes) during reproductive age or on MH issues of migrated or immigrated ethnic groups were excluded.

Databases and search

Six databases were searched: CINAHL, Embase, Medline, PsycINFO, Scopus and Proquest plus. Two hundred articles from Google Scholar and Proquest plus electronic citations of included studies in Google Scholar and reference lists of included articles. The search strategy was limited to relevant articles published in English between 2000 and 2017 to capture progress in Indigenous women's healthcare accessibility to MH care services during the MDG era.

Keywords used were: "delivery of health care", "health services accessibility", "health equity/health disparities", "access*, accept*, adjust*, adapt* and utili* (utilisation or utilisation)", "ethnic/minority groups/Indigenous people", and "maternal health services/community health" (see "Online Appendix 1" for search strategy).

Data extraction and evaluation

Results were imported into Endnote and duplicates removed. Titles and abstracts were reviewed to determine eligibility for full-text review based on the inclusion and exclusion criteria by one reviewer (SA). Eligibility for inclusion was determined after reaching team consensus. Two reviewers (SA and KD) independently assessed the methodological quality of the final articles using the QualSyst scoring system for qualitative and quantitative research methodologies (Kmet et al. 2011). Quantitative and qualitative studies were scored depending on whether they fully met the criteria (2 points), partially met the criteria (1 point) or not at all (0 points). Quantitative studies were scored against 14 criteria and qualitative studies against 10. A criterion for "evidence of ethical approach" was added to the QualSyst scoring resulting in a maximum total possible score of 22 for qualitative and 30 for quantitative designs. Mixed method studies were scored using the criteria for quantitative and qualitative studies. Disagreements were resolved by consensus.

Data analysis and synthesis of results

Results were synthesised by the proportion of women accessing services and associated factors affecting access to maternal healthcare services. Given the diversity of quantitative studies in terms of research questions, methods, samples, study settings, outcomes and outcome measures used, we undertook a narrative synthesis. Narrative synthesis is a systematic approach towards systematic review of quantitative studies where a statistical combination cannot be drawn from the studies, therefore, the results are reported using words (Verbeek et al. 2012).

Data from qualitative studies were classified and analysed thematically using NVivo qualitative data analysis Software 2015 (QSR International Pty Ltd. Version 11). The findings from the narrative synthesis of quantitative findings and the thematic analysis of the qualitative findings were then synthesised to identify common themes.

Results

Search results

The electronic database search retrieved 3092 articles and 1078 duplicates were found. After reading Title and Abstracts 1052 records were excluded (Fig. 1) as they did not meet inclusion criteria. The majority of articles were excluded because the focus was not on MH care service utilisation at primary care level or involved high-income countries. Following review of 32 full-text articles from database searches, citations and reference lists, 22 records were excluded (see "Online Appendix 4" for list of excluded articles with reasons). Ten studies met the inclusion criteria and nine met the quality criteria for inclusion. Among three mixed method studies, two studies were identified as methodologically "weak" (scored ≤ 0.50) in their qualitative component; however, their quantitative component scored above 50%. Therefore, only the quantitative components were included. The remaining study was identified as methodologically weak (scored ≤ 0.50) (see Supplementary Tables 2 and 3), and was excluded.

Study characteristics

Of the 10 studies that met the inclusion criteria most focused on antenatal services; access to post-natal care was the least mentioned services. Table 1 shows the characteristics of each study. All studies identified that utilisation of MH care services was lower among Indigenous women than non-Indigenous women (Adhikari et al. 2016; Harris et al. 2010; Ibanez-Cuevas et al. 2015; Islam 2016; Islam and Odland 2011; Ruiz et al. 2013; Shah and Bélanger 2011; Varma et al. 2011; White et al. 2012).

Findings from quantitative studies

Characteristics of included quantitative cross-sectional studies, including two mixed method studies, are shown in Table 1. Three studies were conducted in India: Studies 1, 3 and 9. Study 1 included currently married Indigenous women (Schedule Tribes) aged 15–49 years who delivered at least one child during the 5 years preceding the survey (Adhikari et al. 2016) and Study 3 included ever married Indigenous women aged 15–49 years gave birth to a child within 3 years preceding the survey (Shah and Bélanger 2011). Both studies used secondary data and examined factors associated with MH care services utilisation, particularly antenatal care (ANC) among Indigenous women using multivariate logistic regression techniques. Study 9 included women (age range not stated) from Indigenous and non-Indigenous communities and reported that 38% of Indigenous women completed 4–6 ANC checks compared to 66% among non-Indigenous women.

Study 2 and Study 8 conducted in Bangladesh included Mru Indigenous women (age not stated) who had at least one child (aged 5 years old or younger or a child who was stillborn or who died after delivery) and who used a MH care service at least once in the last 3 years between June and August 2009 (Islam 2016; Islam and Odland 2011). These two studies report data from the same sample of women (Islam 2016; Islam and Odland 2011); Study 2 reports quantitative data only and Study 8 reports qualitative and quantitative data.

Influential factors that affect Indigenous women's MH services access

Education Findings from four studies (Study 1, 2, 3 and 8) revealed that education positively affected accessing MH care services, particularly ANC services during pregnancy (Adhikari et al. 2016; Islam 2016; Islam and Odland 2011; Shah and Bélanger 2011). Studies 1 and 3 found that Indigenous women with higher levels of education were approximately three times more likely to complete an ANC check when compared to Indigenous women with lower levels of education (Adhikari et al. 2016; Shah and Bélanger 2011).

Study 2 found that Indigenous women who attended school were 11 times (OR 11, 95% CI 1.2, 63) more likely to use MH care services and 23 times (OR 23, 95% CI 4–119) more likely to access ANC services during pregnancy compared with those who had not attended school. PNC services utilisation was associated with school attendance (54%) (Islam and Odland 2011). Study 3 revealed that rates of giving birth in health facilities were 2–4 times higher among educated Indigenous women

Table 1 Summary of key characteristics of the included studies in the systematic integrative review of Indigenous women's access to maternal healthcare services in lower- and middle-income countries

Study No.	First author (year)	Country	Study setting	Research aim	Research design	Sample size (*n*) and participants characteristics	Data collection tools used
Quantitative study							
1	Adhikari (2016)	India		To examine the factors associated with the utilisation of antenatal care services among tribal women in four Indian states: Rajasthan, Odisha, Chhattisgarh and Madhya Pradesh	Cross-sectional	*n* = 14,058; Scheduled tribe married women aged 15–49 years	District level Household and Facility Survey (2007–2008)
2[a]	Islam (2016)	Bangladesh	Rural area	To explore factors associated with maternal healthcare services utilisation among the Mru in Bangladesh	Cross-sectional	*n* = 374; Mru women with children aged $\leq$ 5 years who died after delivery or/and stillbirth experience	Survey
3	Shah (2011)	India		To analyse and compare the utility patterns of maternal healthcare services by tribal women from different areas in India	Cross-sectional	*n* = 214,384; Married women aged 15–49 years	National Family Health Survey 1998–1999 and 2005–2006
Qualitative study							
4	Harris (2010)	China	Rural area	To explore factors contributing to ethnic minority women's decision to obtain care and make recommendations to encourage women to access local health services	Qualitative description	*n* = 63; 56 Yi and Mong women (service users) and 7 service providers	Interviews
5	Ibanez-Cuevas (2015)	Mexico	Hospital	To explore associated factors that contribute to Indigenous women's decision about their preferred care services during delivery and their perceptions about institutional health services	Qualitative: grounded theory	*n* = 25 (users = 6; non-users = 7; TBAs = 12) Indigenous women with deliveries in the past year and traditional birth attendants (TBAs)	Semi-structured interviews
6	Ruiz (2013)	Guatemala	Facility (maternity waiting homes)	To explore experiences of maternity waiting homes (MWHs), focusing on the user's perspective along with other stakeholders' opinion	Qualitative description	*n* = 48; Service users and non-users; providers;	Interviews
7	White (2012)	Vietnam	Rural area	To explore current practices and utilisation of care services among Indigenous women pertaining maternity	Secondary data analysis and qualitative ethnographic	*n* = 179 Hmong and Thai Indigenous women of reproductive age (15–49 years);	Secondary data through literature review in-depth interviews and focus group discussion
Mixed method							
8[a]	Islam (2011)	Bangladesh	Rural area	To examine the factors associated with antenatal and post-natal care visits among the Mru indigenous community in Bangladesh	Mixed method: cross-sectional and ethnography	*n* = 374; Mru Married women in Bandarban District, Bangladesh;	Survey and (open-ended) interviews

Table 1 (continued)

Study No.	First author (year)	Country	Study setting	Research aim	Research design	Sample size (n) and participants characteristics	Data collection tools used
9	Varma (2011)	India	Rural area	To report the utilisation of antenatal care services by women living in tribal and rural areas in Andhra Pradesh in India	Cross-sectional study and descriptive qualitative	$n = 392$; Women having a child < 1 year old, and health service providers	Structured questionnaire; key informant interviews

[a] Study 2 and Study 8 appear to use the same sample of Mru Women

compared to those without secondary education (Shah and Bélanger 2011).

Income status Findings from two studies (Study 1 and 3) revealed that Indigenous women from middle- and higher-income groups had a higher likelihood of ANC compared to women from low-income groups (Adhikari et al. 2016; Shah and Bélanger 2011). However, Study 3 found women's employment status did not have a significant effect on utilising MH care (Shah and Bélanger 2011).

Exposure to mass media Study 2 reported that exposure to mass media affected MH care service use among Indigenous women. Indigenous women who had access to mass media were nine times more likely to use MH services (OR 8.7, 95% CI 1.8, 42) and 25 times (OR 25, 95 CI 6–96) more likely to use ANC services during pregnancy compared with those not exposed to mass media (Islam and Odland 2011).

Influences on service use Two studies (Study 1 and 9) reported that health workers activities positively influenced service utilisation among Indigenous women. Study 1 reported that motivation from health workers and close relatives (like family members) positively encouraged Indigenous women to complete their ANC check (Adhikari et al. 2016). Study 9 reported that for Indigenous women, health workers who made door-to-door visits were the main source of advice related to ANC (60%) and the time of initiation of an ANC check mostly occurred among Indigenous women during second trimester (91%) (Varma et al. 2011). Study 1 and 3, found that Indigenous women who delivered more than three children were less likely to complete an ANC check than Indigenous women with fewer children (Adhikari et al. 2016; Shah and Bélanger 2011).

Findings from qualitative studies

Common issues discussed in the included qualitative articles are summarised in Table 2.

Barriers before accessing services

Three of four qualitative studies (Study 5, 6 and 7) reported distance to services as a barrier for accessing MH services for Indigenous women due to remoteness of their locality, lack of transportation and cost of transportation (Ibanez-Cuevas et al. 2015; Ruiz et al. 2013; White et al. 2012). Studies 4 and 7 (China and Vietnam) revealed that when MH services were within the locality, service utilisation was still lower among Indigenous communities (Harris et al. 2010; White et al. 2012).

Lower socio-economic background and poor infrastructure of the transportation system prevented Indigenous people from accessing maternal services, reported in all four qualitative studies. Indigenous people could not afford the costs associated with accessing health care which included transport, drugs, food and accommodation (both patient and relatives) (Harris et al. 2010; Ibanez-Cuevas et al. 2015; Ruiz et al. 2013; White et al. 2012). Study 6 reported that service users had to pay for accommodation and food (Ruiz et al. 2013). Study 4 reported that despite the government introducing cooperative insurance schemes to help Indigenous women, they were unaware of how it worked and total costs often exceeded the insurance compensation (Harris et al. 2010). Qualitative findings from one mixed method study (Study 8) also identified lack of transportation as a key barrier (Islam and Odland 2011).

Barriers within the services

Studies 5 and 6 identified language as a barrier to effective communication between Indigenous services users and services providers, given that Indigenous people had their own language and health professionals usually speak the mainstream language (Ibanez-Cuevas et al. 2015; Ruiz et al. 2013). Due to this, people did not trust health professionals and feared accessing services (Ibanez-Cuevas et al. 2015).

Table 2 Key issues discussed in the included qualitative articles in this review

Common issues discussed in articles	Discussed in study no.
Lower utilisation of healthcare services	4, 5, 6, 7, 8
Barriers to accessing services (distance, literacy, socio-economic status, infrastructure)	4, 5, 6, 7, 8
Language as a barrier	4, 5, 6, 7
Care-seeking behaviour during and after pregnancy	4, 5, 6, 7
Problems with the facility services	
Culturally insensitive services	4, 5, 6, 7
Unavailability of resources	5, 6, 7
Awareness programmes to engage the community	5, 6, 7, 8
Policy suggestions to improve Indigenous health services	5, 6, 7, 8

Cultural preferences for care during and after pregnancy

Study 4 reported that Indigenous people were unaware of the importance of accessing antenatal care services from the beginning of pregnancy due to lack of need (Harris et al. 2010). Irregular and infrequent visits of health staff in the community prevented awareness of ANC (Harris et al. 2010).

Studies 4 and 6 reported that Indigenous women preferred home delivery, accompanied by traditional birth attendants (TBAs) and close female relatives (Harris et al. 2010; Ruiz et al. 2013). In Vietnam, husbands also attended the delivery (White et al. 2012). Giving birth was considered a "natural event" in which pregnant women underwent specific traditional practices (Ruiz et al. 2013). Studies 5, 6 and 7 reported Indigenous women only visited the nearest health facilities if the situation became uncontrollable; if the labour was easy with no complications, the delivery took place at home (Ibanez-Cuevas et al. 2015; Ruiz et al. 2013; White et al. 2012). Post-natal care access rates for Indigenous women were low in Study 4 (9.7% China) due to the low use of skilled birth attendants (Harris et al. 2010).

Cultural preferences during delivery

Studies 5 and 6 described the importance of TBAs during delivery: they spoke the same language, accessible, affordable and knowledgeable about cultural practices and preferences. Women visited nearby facilities if TBAs recommended them (Ibanez-Cuevas et al. 2015; Ruiz et al. 2013). Study 10 mentioned that during delivery Indigenous women preferred their husband's presence (White et al. 2012). Two studies identified that Indigenous women felt secure if they were accompanied by close relatives during delivery (Ibanez-Cuevas et al. 2015; White et al. 2012). Study 6 found that despite the maternity homes in Mexico having Indigenous midwives, health staff often ignored their role (Ruiz et al. 2013).

Birthing position was an important cultural issue for Indigenous women, found in all four qualitative studies. Facility delivery did not allow Indigenous women to practice their preferred delivery positions and women were not given explanations as to why they had to give birth in the lying position (Ibanez-Cuevas et al. 2015; White et al. 2012). Home delivery allowed women to choose their preferred persons during labour and preferred birthing positions along with other cultural practices (Harris et al. 2010; Ibanez-Cuevas et al. 2015; White et al. 2012).

Service user's perspective on facilities

Culturally insensitive and invasive nature of care services All four qualitative studies reported that harmless cultural practices (presence of TBAs and relatives, herbal drinking, massage, birthing position) during pregnancy were not permitted within the facilities (Harris et al. 2010; Ibanez-Cuevas et al. 2015; Ruiz et al. 2013; White et al. 2012), and attitudes of health staff made Indigenous women reluctant to use health services. Due to a lack of culturally sensitive services within the facilities, Indigenous communities were unsatisfied with service quality (Harris et al. 2010; Ibanez-Cuevas et al. 2015; Ruiz et al. 2013).

Invasive behaviour of staff, such as inserting intrauterine devices, vaginal examinations and taking off clothes without consent, resulted in a sense of fear and distrust in health facilities (Harris et al. 2010; Ibanez-Cuevas et al. 2015). Indigenous women felt embarrassed if they were kept uncovered during delivery and feared to have caesarean sections that they believed caused infertility (Ruiz et al. 2013).

Studies 4, 5 and 6 mentioned gender issues that prevented Indigenous women from accessing services, particularly during delivery (Harris et al. 2010; Ibanez-Cuevas et al. 2015; Ruiz et al. 2013) as the doctors were mostly male. Delivery was considered by Indigenous women as a private event, and they preferred the presence of same-sex health staff (Harris et al. 2010; Ibanez-Cuevas et al. 2015).

Husbands did not want their partners to be seen by male doctors (Ruiz et al. 2013).

Lack of available resources

Three of the qualitative studies (Study 5, 6 and 7) described poor infrastructure of facilities, including limited service hours, lack of staff availability and limited funds (Ibanez-Cuevas et al. 2015; Ruiz et al. 2013; White et al. 2012). Study 5 reported that facilities failed to fulfil Indigenous peoples' health needs due to limited hours (Ibanez-Cuevas et al. 2015). Maternity waiting homes had a lack of sustainable funding from the government thus women who utilised their services had to pay for a bed and meals (Ruiz et al. 2013). Study 5 mentioned that maternity homes lacked equipment (Ibanez-Cuevas et al. 2015), while Study 7 reported that hospitals experienced frequent power-cuts and had insufficient staff (White et al. 2012).

Lack of community participation

Studies 5 and 6 reported a lack of awareness programmes for Indigenous people about the purpose of existing services (Ibanez-Cuevas et al. 2015; Ruiz et al. 2013). Study 6 identified that Indigenous women who visited maternity waiting homes often had to stay for hours or days, without any health education (Ruiz et al. 2013). Study 7 criticised the top-down approach of policy makers, as services were designed as "one-size-fits-all" with no space for community participation (White et al. 2012).

Study 6 emphasised the importance of Indigenous community participation to develop acceptable and sustainable intervention programmes for Indigenous people (Ruiz et al. 2013). Study 5 emphasised the importance of awareness programmes for non-users of services to encourage them to seek health care in a timely manner even if there were no complications (Ibanez-Cuevas et al. 2015).

Policy recommendations to improve Indigenous health services

Two studies (Study 6 and 7) claimed that existing policies followed a "one-size-fits-all" approach which failed to address gaps in maternal care services (Ruiz et al. 2013; White et al. 2012). Three studies (Studies 4, 6 and 7) emphasised the need for a bottom-up policy approach, ensuring community participation (Harris et al. 2010; Ruiz et al. 2013; White et al. 2012). Vertical models and hegemonic nature of existing services were criticised where Indigenous communities' cultural issues were ignored (Ibanez-Cuevas et al. 2015; Ruiz et al. 2013; White et al. 2012).

Studies 4 and 5 recommended designing programmes to support human rights and gender equity (Harris et al. 2010; Ibanez-Cuevas et al. 2015). Study 4 criticised the cultural contexts and disparities in economic capacities of Indigenous people and advocated incorporating Indigenous values such as working with TBAs (Harris et al. 2010). Study 8 recommended the development of community-level quality healthcare delivery systems for Indigenous women who were in need of special care during pregnancy (Islam and Odland 2011).

Integration of findings from included studies

All studies revealed that MH service access among Indigenous women was lower. Higher levels of education, socio-economic factors (level of income and cost of services) and distance to services were common themes identified across included quantitative and mixed method studies, related to ANC service access. Issues related to facility delivery were mainly discussed in qualitative studies. All studies also emphasised need to implement culturally appropriate health intervention programmes (see Table 3).

Discussion

This integrative literature review examined accessibility and utilisation of MH care services among Indigenous women of reproductive age in lower- and middle-income countries. Ten studies met the inclusion criteria with most quantitative research focused on antenatal services and most qualitative research on delivery services. Access to PNC services was the least mentioned in the included studies. Findings revealed that Indigenous women accessed antenatal services if there were doorstep services, and accessed facility delivery if they faced complications during labour. Failure to consider social, economic and cultural factors related to healthcare decision making for Indigenous communities could explain poor utilisation of MH care services.

Indigenous women experienced barriers in accessing MH care services in two stages: before accessing the services (outside the facility) and after accessing the services (inside the facility). Barriers outside the facility included lack of knowledge, distance to the services, costs of accessing services, and approval from family, particularly husbands. Global experience indicates that minority Indigenous population experience systematic discrimination and exploitation by powerful majority groups; women within minority ethnic populations experience double discrimination influencing access to healthcare services (King et al. 2009; Nettleton et al. 2007). The barriers faced within

Table 3 Key maternal healthcare services antenatal care (ANC), delivery and post-natal care (PNC) discussed in each study

Study No.	First author (year)	Key objectives related to maternal health services	Limitations
Quantitative studies			
1	Adhikari (2016)	ANC service utilisation and its associated factors among Indigenous women in India	Did not focus on delivery and post-natal care services utilisation and their associated factors
2[a]	Islam (2016)	Maternal healthcare service utilisation and it associate factors among Mru population in Bangladesh	Did not identify each service utilisation separately
3	Shah (2011)	Influential factors on utilising ANC and delivery service among Indigenous women in India	Did not identify PNC service utilisation among these groups
Qualitative studies			
4	Harris (2010)	Challenges to ANC and delivery care service utilisation among women from Yi and Mong ethnic groups	PNC service was not detailed as this service was available for women who had delivered their child in the hospitals.
5	Ibanez-Cuevas (2015)	Indigenous women's preference regarding accessing delivery services in the community (in Mexico)	ANC and PNC services utilisation were not addressed
6	Ruiz (2013)	Barriers in using delivery services in maternity waiting home by Indigenous women in Guatemala	ANC and PNC services utilisation were not addressed
7	White (2012)	Barriers in using maternal health services utilisation for delivery among Hmong and Thai ethnic minority groups in Vietnam	ANC and PNC services utilisation were not addressed
Mixed method			
8[a]	Islam (2011)	ANC and PNC services utilisation and its associated factors among Indigenous women in India	Delivery service utilisation was not addressed
9	Varma (2011)	ANC service utilisation between tribal and non-tribal women in rural India	Delivery and PNC services utilisation were not addressed

[a]Study 2 and Study 8 appear to use the same of Mru Women

the facility related to the hegemonic behaviour of health staff and lack of understanding about the medical procedures made Indigenous women reluctant or afraid of using health services (Stephens et al. 2005). The World Health Organization and United Nations Children's Fund (UNICEF) (2015) recommend that women choose birthing positions and their preferred companion to accompany them throughout labour during non-emergency delivery. Invasive procedures and culturally inappropriate behaviours of care providers led to distrust and fear.

Health intervention programmes for Indigenous groups may fail due to their top-down nature (Cyril et al. 2015). Although intervention programmes in Guatemala, Mexico and Vietnam adopted intercultural service provisions for pregnant Indigenous women, those programmes had limited opportunity for community engagement. Without engaging Indigenous people through community participation, it is difficult to identify communities' needs (such as infrastructure to reach the facility, socio-economic affordability), and prioritise needs according to appropriate cultural values (Ibanez-Cuevas et al. 2015; Mohindra 2015).

Interventions need to target service providers, by recruiting health staff from Indigenous communities and provide cultural training. Culturally appropriate community awareness programmes for Indigenous men and women with targeted messages about the importance of accessing MH services are required. To develop sustainable and successful healthcare services for Indigenous women, it is important to ensure community participation from the beginning to create a sense of belonging among Indigenous women and their communities (Manandhar et al. 2004).

Findings from a recent population study on Indigenous health identified that many countries did not recognise Indigenous groups living within the countries, and, the need for constitutional recognition of Indigenous groups to accomplish the SDGs (Anderson et al. 2016). These groups were absent in data reported in the previous Millennium Development Goals era. Collecting and presenting disaggregated statistical data for Indigenous people are important in close collaboration with Indigenous communities to understand and monitor inequalities (Anderson et al. 2016; Gracey and King 2009).

Examples from developed countries reveal that despite having MH care services for Indigenous women, countries like Australia and Canada are attempting to address cultural diversity needs (Kildea et al. 2016). In Australia, Indigenous midwifery services for Indigenous women were found to be an effective programme for enabling women during their pregnancy and delivery. Services were managed by the Indigenous community where people felt more empowered, and the services were highly valued (Corcoran et al. 2017). Such models provide an opportunity to learn from other Indigenous led practice in assisting low-income countries to achieve positive outcomes and effective policy change.

Strengths and limitations

While systematic in approach such reviews risk missing relevant papers. To overcome this, search strategies were tested multiple times and authors of included studies were contacted. This review included diverse studies for which it was difficult to aggregate findings. However, the thematic summary provides synthesised evidence. Furthermore, Indigenous people from high-income countries were not included, which may have limited what could be learnt from models of care; however, piloting of culturally appropriate birthing programmes could be beneficial to places such as Bangladesh.

Conclusion

Existing research on Indigenous women's access to MH care services, and how policy impacts on their health rights, highlights major gaps in designing and delivering services for Indigenous women. Improving the level of education of Indigenous women, better transport options and lower cost of services could substantially increase access to MH care. To develop a wider understanding of MH services accessibility among Indigenous women more research is needed particularly for delivery and post-natal care. Translation of health knowledge into effective services to align with local cultural values will improve access to MH care services for Indigenous women. Education and policy reform are vital to support Indigenous women during their child-bearing years. Policy reform, practice changes and better education will enable Indigenous women to make informed choices and empower them to birth their babies according to their personal, cultural or social preferences.

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Compliance with ethical standards

Conflict of interest The authors declare that they have no conflict of interest.

Ethical approval The authors did not collect any primary data or undertake research activities that involved human participants or animals in completing this review.

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