

Table 3. Characteristics and quality appraisal of included studies

Authors, year of publication and country of study	Study design	Sample	Aim	Findings
Angus et al (2012) Canada	Community-based participatory research using focus groups	24 women with mobility disabilities	<ul style="list-style-type: none"> » To obtain views from women with mobility disabilities about breast, cervical and colorectal cancer screening » To illuminate constraints and facilitators to screening access 	Participants described their encounters with architectural barriers to healthcare. Participants discussed how they often had to advocate for themselves if they wanted screening and that there are often assumptions about asexuality for people with disabilities
Peterson et al (2012) US	Randomised controlled trial	156 women (from 211 randomised) aged 35 to 64 years with mobility impairments who reported not receiving a Papanicolaou (Pap) test in the past 3 years and/or mammogram (if age >40 years) in the last 2 years	To assess the efficacy of an intervention to promote mammography and Pap testing among women with mobility impairments overdue for screenings. The Promoting Access to Health Services (PATHS) programme is a 90-minute, small-group, participatory workshop with 6 months of structured telephone support, based on the health belief model and social cognitive theory	The intervention group received more cervical screenings than the control group at post-test (intervention group 61%, control group 27%)
Hachipola et al (2017) Zambia	Qualitative case study	12 women with physical and sensory disabilities 3 key informants from organisations working with people with disabilities 3 cervical cancer screening service providers	To examine service-related factors which influenced cervical cancer screening among women with physical and sensory disabilities	A variety of interrelated barriers to cervical cancer screening were identified. These included structural design of the health facility, inappropriate equipment, lack of information and education and limited skills of service providers
Hanlon and Payne (2017) New Zealand	Qualitative research using interviews either face-to-face or via Skype	11 women living with a physical impairment who had undergone or had attempted to undergo cervical screening	To identify the experiences of women with physical impairments and their uptake of cervical screening services in New Zealand	Women encountered several different types of barriers, such as lack of disabled parking, wheelchair-accessible toilets, transfer equipment and height-adjustable examination beds. Facilitators to overcome barriers related to healthcare professionals' attitudes. Nurses were identified as making the difference, through their adaptability and tailoring their practice to meet the women's needs
Halcomb et al (2019) Australia	Cross-sectional online survey	178 general practice nurses	To explore the current role of general practice nurses in women's health screening for individuals with physical disability	One third of participants reported having completed specific education about physical disability. Most general practices implemented strategies to facilitate physical access for those with a disability. A range of strategies were used to support women during these screening procedures. These could be broadly classified into: A) Providing practical assistance to facilitate screening B) Modifying technique and positioning for comfort
Kilic et al (2019) Turkey	Qualitative descriptive study using semi-structured, face-to-face interviews	16 women who use wheelchairs	To determine the experiences of women with physical disabilities regarding the barriers to their participation in breast and cervical cancer screening	Participants who did not have cervical cancer screening expressed a lack of knowledge/neglect, not knowing how/where the screening would take place, fear and embarrassment, feeling anxious about the examination process and dependency on others. Participants reported difficulties in undergoing basic routine medical examinations and thought it would, therefore, be even more difficult to undergo cervical cancer screening. Participants shared the problems they faced in leaving their home because of their physical disabilities. Participants who had cervical screening stated that they felt 'embarrassed' during the examination and had difficulty reaching the examination table
Pearson et al (2020) New Zealand	Online survey using both closed/choice questions and option for open-ended comments	84 women between the ages of 20 and 70 years and, at the time of the survey, who either identified as deaf or living with a disability	To describe access to and engagement with cervical and breast screening services for women who are deaf or live with a physical or sensory disability	Disability type was not related to smear on eligibility, uptake ever or uptake timeframe. A higher proportion of those with multiple disability types experienced service environment barriers to having a cervical smear. Specific barriers to screening related to accessibility, service environment and information
Sonalkar et al (2020) US	Qualitative study using semi-structured interviews	29 women with physical disabilities and 20 gynaecology healthcare providers	To assess provider and patient perspectives regarding barriers to gynaecological healthcare for women with physical disabilities	Healthcare providers discussed the difficulties of weighing the risks of forgoing recommended cervical screening intervals owing to the patient's physical limitation, compared with the risks of a pelvic examination under anaesthesia. Patients and providers had similar impressions of barriers that influenced equitable and patient-centred care, with structural barriers, including a lack of accessible space, closely related to perceptions of healthcare inequity between women with and without physical disabilities

CASP=Critical Appraisal Skills Programme; MMAT=Mixed Methods Appraisal Tool

Methodological rigour	Quality appraisal strengths and limitations
CASP: moderate	<p>Strengths</p> <ul style="list-style-type: none"> » Women with mobility disabilities from various demographics were included » Discussion topics and questions were informed by a systematic literature review and suggestions offered during a roundtable discussion with key informants <p>Limitations</p> <ul style="list-style-type: none"> » Potential lack of reflexivity as some of the research team members were women with disabilities involved in the health service and they verified and elaborated on certain themes from focus groups » The authors note that women with disabilities may be isolated from social participation and therefore the study sample may not be as diverse
CASP: moderate	<p>Strengths</p> <ul style="list-style-type: none"> » Purposeful sampling used » Clearly defined study protocol » Thorough description of study context and the data analysis process provided » Effects of the intervention reported on comprehensively <p>Limitations</p> <ul style="list-style-type: none"> » Small sample size for each screening test limited ability to detect small effects or assess multivariate relationships » 26% attrition over the course of the study, with a greater proportion of the attrition occurring in the intervention group which has a potential for bias
CASP: moderate	<p>Strengths</p> <ul style="list-style-type: none"> » Diverse methodology and maximum variation sampling strategy was used » The setting had a high number of screening centres in the area which allowed researchers to determine if screening was inclusive » The study was not restricted to women with disabilities but extended to other stakeholders to gather wider information about the topic under question <p>Limitations</p> <ul style="list-style-type: none"> » The study population was limited to defined disability groups (physical, visual and hearing impairment), therefore missing out on information which could have been obtained from a general overview of all disability groups » There were challenges experienced in interviewing women who were not fluent in Zambian Sign Language » In addition, some terms in spoken English
CASP: weak	<p>Strengths</p> <ul style="list-style-type: none"> » Quotations included which support claims and identify the participants' experiences <p>Limitations</p> <p>Recruitment process not outlined</p> <ul style="list-style-type: none"> » No data collection or data analysis information provided » No study limitations included
MMAT: moderate	<p>Strengths</p> <ul style="list-style-type: none"> » A balanced sample used, nurses recruited who provided women's healthcare in general » Descriptive survey tool was developed following literature review and discussions with experts in women's health, women with physical disability and general practice nurses » To reduce the potential bias of a survey based solely on women with a physical disability, items around women with physical disability were embedded in a broader survey which explored general practice nurses' involvement in women's health screening <p>Limitations</p> <ul style="list-style-type: none"> » No participants completed all items on the survey, therefore affecting the generalisability of the findings » Sole use of a survey to collect data meant that there was no opportunity to probe the responses other than via the open-ended items
CASP: strong	<p>Strengths</p> <ul style="list-style-type: none"> » Interviews used open-ended questions allowing for maximum retrieval of relevant content » Two researchers individually examined the data, analysed the results and established the topics to guarantee credibility and dependability » Research methods and findings explained in detail <p>Limitations</p> <ul style="list-style-type: none"> » Participants had similar income levels and perceived their income status to be at a low or medium level, therefore, findings may not be representative of the experiences of most women with disabilities such as those in a high-income category
MMAT: strong	<p>Strengths</p> <ul style="list-style-type: none"> » Clear study rationale, inclusion and exclusion criteria provided » Research methods and results explained in detail » Questionnaire was reviewed by two researcher colleagues: one who identified as deaf and the other who was physically disabled and used a wheelchair <p>Limitations</p> <ul style="list-style-type: none"> » Sample was a self-reporting, convenience sample and, therefore, may not be representative of the target population » Researchers had to classify eligibility for breast and cervical screening to their best ability with information available
CASP: strong	<p>Strengths</p> <ul style="list-style-type: none"> » Qualitative methodology used to give participants opportunity to discuss their most important issues » In-depth interviews rather than focus groups owing to the potentially sensitive nature of the topics and to allow flexibility in scheduling » Provider and patient transcripts were analysed separately, and participants in both groups were recruited until thematic saturation was reached <p>Limitations</p> <ul style="list-style-type: none"> » Range of perspectives may have been limited by the purposive sampling approach; maximum variation sampling may have allowed for a more diverse range of perspectives » People with disabilities were not included in the development of the design, conduct and analysis of the study