

REPRODUCTIVE HEALTH NEEDS OF WOMEN WITH DISABILITIES: A NON-PHARMACEUTICAL INTERVENTIONS APPROACH

OMOKHABI, Abiola Adiat

Department of Adult Education, University of Ibadan, Nigeria
E-mail: adiatomokhabi@gmail.com. Tel no: +234(0)8099181019
ORCID iD : [0000-0001-5861-5065](https://orcid.org/0000-0001-5861-5065)

ABSTRACT

This paper demonstrated barriers encountered by Women with Disabilities (WWD) as regards their reproductive health such as difficulty in accessing reproductive health needs and information, lack of knowledge and negative attitude of healthcare providers based on previous findings from researchers. This paper proposed a first-step non-pharmaceutical approach to providing women with disabilities with better reproductive health care. Women with disabilities require reproductive health care that is specific to women's needs and traits. There is also a need for training for healthcare professionals to understand the special requirements of WWD patients. This training should focus on patient-centered care, working effectively with women, and the link between disabilities and pregnancy is necessary for healthcare professionals. Education and resources should also be made available to enhance respect for women with disabilities and promote their safety to meet the population's needs for reproductive health. Also, the government should ensure advocacy for increased access to sexual and reproductive health services, including prenatal and postnatal care for women with disabilities.

Keywords: Reproductive Health, Women with Disabilities, Reproductive Health Needs of Women with Disabilities, Non-pharmaceutical Interventions

INTRODUCTION

Women with Disabilities (WWD) have the same reproductive health-care needs as other women, particularly modern contraceptives, family planning and childbirth. There have been misconceptions about the reproductive health needs of WWD hence there have been offered limited reproductive health-care services. Although disability has historically been under represented in development efforts, there is growing acceptance of the concept of disability-inclusive development, which is based on the belief that people with disabilities experience underdevelopment differently and thus requires different solutions (Grech, 2021).

Disability is explicitly mentioned in the World Health Organisation's rationale for taking a rights-based approach to providing contraceptive information and services (World Health Organisation, 2014). Disability is mentioned in the Sustainable Development Goals (SDG) including 3.7 on universal access to reproductive health-care services and 10.2 on inclusion of all regardless of among other things, disability (United Nations, 2015). There is also disability in Equity and Non-discrimination Rights Principle of Family Planning (FP) 2020 (now FP2030) (Stover & Sonneveldt, 2017; Family Planning, 2020). However, the reproductive health needs of WWD are underserved in research and practice (Carew, Braathen, Swartz, Hunt, & Rohleder, 2017; Hameed, Maddams, Lowe, Davies, Khosla, & Shakespeare, 2020). Whereas there is an ideological commitment to inclusiveness in the provision of reproductive health services, it can be undermined by a lack of actionable data about the needs of WWD (Abdul Karimu, 2018).

Nigeria is an important country, particularly in light of the global contraceptive goal known as 120 by 20, which aims to provide modern contraception to more than 120 million women by 2020 (Brown, Druce, Bunting, Radloff, Koroma, Gupta, Siems, Kerrigan, Kress & Darmstadt, 2020). The SDGs mainly include Reproductive Health (RH) under Goal 3 (target 3.7) and Goal 5 (target 5.6). Target 3.7 says that by 2030, ensure that everyone has access to sexual and reproductive health care services, including family planning, information, and education, and that reproductive health is integrated into national strategies and programmes. Therefore, until family planning

services are available to women with disabilities, this SDG target will not be met (Kuper & Heydt, 2019). Nigeria has struggled to meet its country goal of increasing contraceptive uptake by more than 1.5% per year to meet the Sustainable Development Goal target of 3.7 (Fagbamigbe, Afolabi, & Idemudia. 2018; Mercer, Lu & Proctor, 2019).

According to Zandam, Mitra, and Mitra (2022), several initiatives have been implemented to improve contraceptive uptake, including mass media awareness campaigns. According to the research of Speizer, Guilkey, Escamilla, Lance, Calhoun, Ojogun, and Fasiku (2019), increasing awareness through mass media can influence people to take action. The impact evaluation of the Nigerian Urban Reproductive Health Initiative revealed that between 2015 and 2020, awareness campaigns via radio, television, and community events increased the use of modern contraceptives from 21.1% to 30.1% in the states where the programme was implemented (Atagame, Benson, Calhoun, Corroon, Guilkey, Iyiwose, Kebede, Lance, O'Hara, Ojogun, Speizer, Stewart, & Winston, 2017).

Despite the potential of education and awareness interventions, programme shortcomings have been identified, particularly in targeting harder-to-reach groups of women (Mercer Lu & Proctor, 2019). A review of contraception programme and policy documents revealed that WWD were not included in the design and planning of family planning programmes in Nigeria (Federal Ministry of Health, 2014; Family Planning, 2020). A recent review calls for more research into the barriers to good reproductive health that WWD may face and non-pharmaceutical interventions to overcome such barriers (Fraser, Corby, & Meaney-Davis 2021). This is the purpose of this paper.

Women with Disabilities

Women with disabilities do not make up a homogeneous group. They suffer from a variety of impairments, including physical, psychosocial, intellectual, and sensory conditions. These conditions may or may not be accompanied by functional restrictions. Women and girls with disabilities come in a variety of shapes and sizes, including those who have multiple and intersecting identities, such as being from a particular social class or ethnic, religious, or racial background. There are migrants, refugees, or those who seek asylum as well as internally displaced. There are also young, old and widowed. Women with disabilities face lower economic and social status, thus, increased risk of abuse and violence, which including sexual violence, discrimination and harmful gender-based discriminatory practices, and barriers to accessing justice, information, and services, as well as civic and political participation because of systemic marginalisation, attitudes, and environmental barriers. Consequently, WWD find it challenging to participate on an equal basis with others (United Nations(UN) Women, 2018).

Reproductive Health of Women with Disabilities

Reproductive Health is defined as a state of complete physical, mental, and social well-being, not simply the absence of disease or infirmity in all matters relating to the reproduction system, its function, and processes (The United Nations Development Programme (UNDP)/The United Nations Population Fund (UNFPA)/World Health Organisation (WHO), 2010 in Omokhabi, 2014). One of the fundamental components of development is promoting and achieving women's health, particularly reproductive health (Omokhabi, 2016). Reproductive health is an important component of overall health and well-being at all stages of life, and it is regarded as a prerequisite for social, economic, and human development by the United Nations. Menarche and menstruation, fertility, pregnancy and childbirth, gynecological cancers, sexually transmitted infections, sexuality, and sexual health and function are all aspects of women's reproductive health.

Women should be informed, empowered, and enabled to choose whether and when to become pregnant, to receive timely testing for reproductive cancers, to protect themselves against sexually transmitted diseases and infections, and to have a satisfying sexual life to achieve optimal reproductive health (United Nations Population Information Network, 2019). Reproductive health, sexuality, and sexual health are all important components of wellness for all women, and women with disabilities are no exception. Furthermore, research on healthcare shows that people with disabilities (PWD) have poorer health outcomes than their non-disabled counterparts. Women with disabilities are more likely than women without disabilities to have unmet healthcare needs among PWD according to Matin, Williamson, Karyani, Rezaei, Soofi and Soltani (2021).

Barriers to Reproductive Health Needs of Women with Disabilities

Young women with hearing impairments who use sign language in Nigeria reported hearing disability-specific challenges in interactions with Health Care Workers (HCW), such as the rarity of interpretation services being available at the facility, not being able to make themselves understood, not understanding everything an HCW said, missing a turn to be seen due to not hearing their name called, having concerns about confidentiality, and not receiving all the services. These women also reported not seeking care for reasons related to hearing loss, such as communication difficulties, a lack of someone to accompany them (and interpret), and dissatisfaction with the way they had previously been treated by an HCW (Arulogun, Titiloye, Afolabi, Oyewole, & Nwaorgu. 2013 in MacQuarrie, & Fleuret, 2022).

Complex health conditions and mobility impairments can also have direct and indirect effects on pregnancy (Iezzoni, Yu Wint, Smeltzer, & Ecker, 2014), miscarriage risks (Horner-Johnson, Kulkarni-Rajasekhara, Darney, Dissanayake, and Caughey, 2017), postpartum depression (Mitra, Iezzoni, Zhang, Long-Bellil, Smeltzer, & Barton, 2015), sexual health and function, (Eisenberg, Andreski & Mona, 2015). Negative disability stereotypes and misperceptions about the needs and preferences of this female population can have a direct impact on access, utilisation, and quality of care (Streuer, Schafer, Garcia, Quint, Sandberg, Kalpakjian, & Wittmann, 2020). Although most people are aware of the special health care needs of this population (Taouk, Fialkow, & Schulkin, 2018), few receive information or training on how to care for women with disabilities (Smeltzer, Mitra, Long-Bellil, Iezzoni, & Smith, 2018).

Health care providers struggle with their own ambivalence or discomfort, as well as limited knowledge of disability to guide their care (Streuer, Schafer Garcia, & Wittmann. 2018). There are incorrect assumptions that people with disabilities are not sexual beings, resulting in a lack of sexual health education, barriers to access and uptake of family planning, sexual abuse and exploitation, and risk factors for Human Immunodeficiency Virus (HIV) and other sexually transmitted diseases (Rohleder, Braathen, & Carew, 2019). Studies highlight how girls and young women with disabilities are infantilised, disempowered and lack voice, choice and control to make decisions about their own bodies and sexualities (Jones, Presler-Marshall, & Stavropoulou, 2018).

There is a lack of comprehensive knowledge about appropriate family planning practices for women and girls with disabilities (FHI 360, 2017). High costs of accessing family planning services for people with disabilities, several studies have highlighted the financial barriers to family planning services faced by people with disabilities, particularly adolescent girls (Tanabe, Nagujjah, Rimal, Bukania, & Krause, 2015). People with disabilities are largely invisible in monitoring and evaluation activities, according to a recent scoping study commissioned by UK Department for International Development (DFID) (Buchy, Resch, Wapling, Jones, & Singh, 2017). Women with disabilities, particularly those with physical and sensory disabilities, face

barriers to accessing maternity care facilities (Mazurkiewicz, Stefaniak, & Dmoch-Gajzlerska 2018; Nguyen, King, Edwards, & Dunne ,2020).

Women with physical disabilities who used wheelchairs reported that they could not enter offices, restrooms, and washrooms without facilities that acknowledge their disabilities and recognize their inclusions (Nguyen et al., 2020). Women with sensory impairment have difficulty finding their way around, especially if no one is available to assist them (Mazurkiewicz et al., 2018). Tarasoff (2017) discovered that women with physical disabilities have limited access to adapted equipment. There is strong evidence that healthcare providers are unaware of the link between physical disability and pregnancy (Tran, Nippita, Nguyen, Nguyen, Huynh, Le Hua & Roberts ,2018).

According to the review of literature on the barriers to the reproductive health needs of women with disabilities, WWD are exposed to more likely to delay initiation of prenatal care and have an increased risk for adverse health conditions that impact maternal and infant outcomes, such as gestational diabetes, obesity, chronic hypertension, hypertensive disorders of pregnancy (such as preeclampsia), cesarean section, and infant low birth weight (Tarasoff, Ravindran, Malik, Salaeva, & Brown.,2020) Women with disabilities report that health care providers have limited knowledge about specific support needed and other resources for women with disabilities during and after pregnancy, or that providers have negative attitudes and misconceptions about women with disabilities' preferences or abilities to have children (Centers for Disease Control and Prevention, 2023)

Non-Pharmaceutical Interventions Approach in Women Reproductive Health

Non-Pharmaceutical Interventions Approach is *any method used to promote good reproductive health and behaviour of women generally without requiring pharmaceutical drug treatment*. Non-Pharmaceutical Intervention (NPI) refers to any type of health intervention that is not primarily based on medication. Non-pharmacological interventions may be used to prevent or treat disease or other health conditions, as well as to improve public health. They can be educational or involve various lifestyle or environmental changes (Abraha, Rimland, Trotta, Dell'Aquila, Cruz-Jentoft., Petrovic, Gudmundsson, Soiza., O'Mahony, Guaita & Cherubini,2017).Complex or multicomponent interventions employ multiple strategies (Boutron, & Ravaud ,2012) and they frequently entail the participation of multiple care providers (Boutron, Altman, Moher,Schulz Ravaud ,2017).

Interventions for Promotion Reproductive Health Needs of Women with Disabilities

Several interventions can increase the access of women with disabilities to high-quality medical care. Family Planning Education in Ghana is made accessible through sign language, and copies of the Behavioural Change Communication (BCC) materials are printed in braille, according to the State Report (2018) in Fraser and Corby (2019). A successful campaign for deaf youth in three Latin American countries used posters with barcodes gave access to videos in sign language addressing sexuality and sexual health. Other pilots include the UNFPA-funded Deaf Elimu, a web and mobile-based application that targets 800,000 deaf youth users in Kenya who search for sexual-related health information in sign language, and that was also launched in 2016 (Plan International, 2017).

The World Health Organisation and John Hopkins University (2018) recommend physically accessible facilities (such as wheelchair ramps and large bathrooms with grab bars), community outreach programmes for people with limited mobility, and print materials with straightforward graphs to ensure that family planning services are accessible to women and girls with disabilities. For disabled girls and young women who live in remote or other isolated areas, in Uganda, the

Straight Talk Foundation established mobile clinics with trained multidisciplinary teams (Plan International, 2017).

Consequent upon these comparative analyses of these interventions from three selected countries in Africa (Ghana, Kenya, and Uganda) and three Latin American countries, women with disabilities, health care providers, organisations, communities, and governments have different roles to play in non-pharmaceutical interventions of the reproductive health needs of women with disabilities which include the following:

Health Care Providers (Obstetrician–gynaecologists)(HCP-OG) can discuss preventive health screenings with WWD and ensure they have access to recommended screenings. They can educate each woman with disabilities, about how to live a healthy, long life. The health concerns of WWD should be taken into account even if the WWD do not request it and they should be provided the information needed to prevent or treat a health condition. HCP-OG can maintain clear and direct communication with the WWD. Providers should repeat their questions or instructions to WWD if they are unable to understand what they have said. HCP-OG can increase clinical awareness and care of WWD conditions, functional effects of these conditions, and effective interventions. They can obtain information regarding a WWD's sexual history, sexual violence, reproductive preferences, and pregnancy intention for them. Make sure they get preventive health screenings HCP-OG should respect WWD's preferences, needs, and values by providing patient-centered care. They should respect WWD as individuals and value their knowledge of disability experiences.

HCP-OG can attend education and training programmes for persons with disabilities which have the capacity to improve disability and inclusion awareness among care givers to elicit positive attitudes and comfort about WWD. Women with disabilities experience stigmatisation and HCP-OG should tackle these stigma attitudes towards them. HCP-OG should advise and refer WWD to screening or mammography or other preventive medical examinations. They should plan for and address any unique requirements for Women with Disabilities (WWD), such as the need for specialized medical equipment, examination tables with accessible heights, and other equipment or supports to facilitate gynaecological and other health examinations. HCP-OG can provide reproductive health information and promote acceptance of a woman's right to consensual gender expression, including the rights of women with intellectual and other disabilities. They should assist WWD to identify and plan pregnancy intent preferences as well as provide infant care materials, such as cribs or changing tables, available to women with disabilities.

Organisations and communities can reduce structural barriers for persons with disabilities. They can follow state and federal statutes that govern accessibility for persons with disabilities such as the Disabilities Act and the Affordable Care Act to achieve this responsibility. Recently, the government of Nigeria enacted the Discrimination against Persons with Disabilities (Prohibition) Act, 2018. The Act addresses the promotion and protection of the rights of persons with disabilities as it relates to; accessibility, women with disabilities, right to inclusive quality education, right to living independently and being included in the community and right to equality and non-discrimination. Organisations and communities can design accessible treatment areas with features like parking, signage, and height-adjustable exam tables.

Government at all levels should make sure that resources for breast cancer screening are available to women with disabilities (WWD). The government should create health education materials to encourage women with disabilities to get screened for breast cancer and raise awareness of the disease. The government should ensure that advocacy for increased access to



sexual and reproductive health services, including prenatal and postnatal care for women with disabilities. It is critical to provide accurate and verified information to pregnant women with disabilities, their partners, and families in collaboration with specialist Non-Governmental Organisations, so that they can make responsible decisions about their health and the health of their children regarding delivery and birth period, as well as their right to give their free and informed consent to any birth-related surgical procedure. They can create national policies and laws that ensure people with disabilities have access to sexual and reproductive health care and reproductive rights.

Furthermore, the government should provide sexual and reproductive health-care facilities and information to WWD, educate sexual and reproductive health workers about disability inclusion, combat discrimination, and improve service delivery to WWD, and create a monitoring and evaluation mechanism to track the implementation of policies and programmes on sexual and reproductive health access for people with disabilities. The government should enhance research and data collection in order to monitor, evaluate, and strengthen sexual and reproductive health and services for people with disabilities.

Women with disabilities can explore and use resources and opportunities available at their disposal to expand their reproductive health knowledge, including preparing for a healthy pregnancy. These women should discuss their reproductive health concerns and available services with health care providers, including contraception, pregnancy, and menopause. They should share reproductive health preferences with intimate partners, including contraceptive methods, pregnancy intention, and sexual activity. Women with disabilities should discuss cancer screening with a medical professional because all women, including those who have disabilities, are at risk for cervical cancer.

Conclusion

This paper has demonstrated that women with disabilities face a number of obstacles regarding their reproductive health, including challenges in accessing reproductive health needs and information as well as the ignorance and unfavourable attitudes of healthcare professionals based on prior research findings. This paper proposed a first-step non-pharmaceutical approach to providing women with disabilities with better reproductive health care. In essence, women with disabilities require reproductive health care that is specific to women's needs and traits. There is also a need for training for healthcare professionals to understand the special requirements of WWD patients. This training should focus on patient-centered care, working effectively with women, and the link between disabilities and pregnancy is necessary for healthcare professionals. Education and resources should also be made available to enhance respect for women with disabilities and promote their safety to meet the population's needs for reproductive health.

REFERENCES

- Abdul Karimu, A. T. F. (2018). Disabled Persons in Ghanaian Health Strategies: Reflections on the 2016 Adolescent Reproductive Health Policy. *Reproductive Health Matters* 26 (54): 20–24.
- Abraha I, Rimland J.M, Trotta FM, Dell'Aquila G., Cruz-Jentoft A., Petrovic M., Gudmundsson A, Soiza R., O'Mahony D., Guaita A, & Cherubini A (2017). Systematic review of systematic reviews of non-pharmacological interventions to treat behavioural disturbances in older patients with dementia. The SENATOR-OnTop series. *BMJ Open*.;7(3):e012759. doi: 10.1136/bmjopen-2016-012759.7(7):e012759corr1. PMID: 28302633; PMCID: PMC5372076.
- Arulogun O. S. Titiloye M. A. Afolabi N. B. Oyewole O. E. & Nwaorgu O. G. B. (2013). 'Experiences of girls with hearing impairment in accessing reproductive health care services in Ibadan, Nigeria'. *African Journal of Reproductive Health*, 17, 85 – 93 . doi: 10.4314/ajrh.v17i1
- Atagame, K. L., Benson, A., Calhoun, L., Corroon, M., Guilkey, D., Iyiwose, P., Kebede, E., Lance, P., O'Hara, R., Ojogun, O. T., Speizer, I. S., Stewart, J. F. & Winston, J. (2017) Evaluation of the Nigerian urban reproductive health initiative (NURHI) programme. *Studies in Family Planning*. 48(3):253–68.
- Boutron I, & Ravaud P (2012). Introduction. In Boutron I, Ravaud P, Moher D (eds.). *Randomized clinical trials of non-pharmacological treatments*. Boca Raton: CRC Press. pp. xi–xii. ISBN 9781420088021.
- Boutron I, Altman DG, Moher D, Schulz KF, & Ravaud P (2017). "CONSORT Statement for Randomized Trials of Non-pharmacologic Treatments: A 2017 Update and a CONSORT Extension for Non-pharmacologic Trial Abstracts". *Annals of Internal Medicine*. 167 (1): 40–47. doi:10.7326/M17-0046. PMID 28630973.
- Brown, W., Druce, N., Bunting, J., Radloff, S., Koroma, D., Gupta, S., Siems, B., Kerrigan, M., Kress, D. & Darmstadt, G. L. (2020). Developing the "120 by 20" goal for the Global FP2020 Initiative. *Studies in Family Planning* 45(1):73-84 doi:10.1111/j.1728-4465.2014.00377.x
- Buchy, M, Resch, E, Wapling, L, Jones, S. & Singh, P. (2017). *Scoping Study: Donor Support for Disability Inclusive Country Led Evaluation Systems and Processes. Synthesis Report*. Oxford: Oxford Policy Management
- Carew, M. T., Braathen, S. H., Swartz, L., Hunt, X., & Rohleder, P. (2017). 'The sexual lives of people with disabilities within low-and middle-income countries: A scoping study of studies published in English'. *Global Health Action*. 10(1), 1337342 <https://doi.org/10.1080/16549716.2017.1337342>
- Centers for Disease Control and Prevention(2023) Supporting Women with Disabilities to Achieve Optimal Health https://www.cdc.gov/healthequity/features/women_disabilities/index.html
- Eisenberg N. W., Andreski S. R., Mona L. R. (2015). Sexuality and physical disability: A disability-affirmative approach to assessment and intervention within health care. *Current Sexual Health Reports*, 7, 19–29.
- Fagbamigbe A.F., Afolabi R.F., & Idemudia, E.S. (2018). Demand and unmet needs of contraception among sexually active in-union women in Nigeria: distribution, associated characteristics, barriers, and programme implications. *Sage Open*. 8(1) <http://journals.sagepub.com/doi/10.1177/2158244017754023>.
- Family Planning (2020). <http://www.familyplanning2020.org/nigeria>.
- Federal Ministry of Health Nigeria Family Planning Blueprint (Scale-Up Plan) (2014). Federal Government of Nigeria
- FHI 360 (2017). Assessment on Family Planning Needs of People Living with Disabilities: Case of Addis Ababa, Ethiopia. USAID, FHI 360, Ministry of Health.
- FP (2015). *Family Planning 2020: Rights and Empowerment Principles for Family Planning*. Washington, DC: FP2020 Rights & Empowerment Working Group. http://www.familyplanning2020.org/sites/default/files/rightsbasedfp/FP2020_Statement_of_Principles_FINAL.pdf

- Fraser E & Corby N (2019) Family Planning for Women and Girls with Disabilities Disability Inclusion Helpdesk Report Pilot 2 Ukaid from the Department for International Development file:///C:/Users/User/Downloads/query-2-family-planning-1.pdf
- Fraser, E, Corby, N & Meaney-Davis, J (2021). Family Planning for women and girls with disabilities. Disability Inclusion Helpdesk Research Report No. 60. London, UK: Disability Inclusion Helpdesk
- Grech, S. (2021). Critical Thinking on Disability and Development in the Global South in Brown, R., Maroto, M. and Pettinichio, D. (eds.). *The Oxford Handbook of the Sociology of Disability*, Oxford University Press <https://doi.org/10.1093/oxfordhb/9780190093167.013.9>
- Hameed, S., Maddams A., Lowe H., Davies L., Khosla, R., & Shakespeare T. (2020). From Words to Actions: Systematic Review of Interventions to Promote Sexual and Reproductive Health of Persons with Disabilities in Low-and Middle-Income Countries. *BMJ Global Health* 5 (10): e002903. <http://dx.doi.org/10.1136/bmjgh-2020-002903>
- Horner-Johnson, W., Kulkarni-Rajasekhara, S., Darney, B. G., Dissanayake, M., & Caughey, A. B. (2017). Live birth, miscarriage, and abortion among U.S. women with and without disabilities. *Disability Health Journal*. 10:382–386
- Iezzoni L.I., Yu, J., Wint, A.J., Smeltzer, S.C., & Ecker, J.L.(2014). General health, health conditions, and current pregnancy among U.S. women with and without chronic physical disabilities. *Disability Health Journal*. 7(2):181-8.
- Jones, N., Presler-Marshall, E. & Stavropoulou, M. (2018). Adolescents with Disabilities: Enhancing Resilience and Delivering Inclusive Development, London: GAGE Programme. <https://www.odi.org/sites/odi.org.uk/files/resource-documents/12323.pdf>
- Kuper H. & Heydt P (2019). The Missing Billion: Access to health services for 1 billion people with disabilities https://www.themissingbillion.org/s/v3_.
- MacQuarrie, Kerry L. D. & Fleuret, J. (2022). Patterns of Reproductive Health among Women with Disabilities. DHS Analytical Studies No. 80. Rockville, Maryland, USA: ICF.
- Matin, B.K., Williamson, H. J., Karyani, A. K. Rezaei, S, Soofi, M., & Soltani, S. (2021). Barriers in access to healthcare for women with disabilities: a systematic review in qualitative studies. *BMC Women's Health* 21, 44 <https://doi.org/10.1186/s12905-021-01189-5>
- Mazurkiewicz B., Stefaniak, M., & Dmoch-Gajzlerska, E. (2018). Perinatal care needs and expectations of women with low vision or total blindness in Warsaw Poland. *Disability. Health Journal.*, 11, 618-623, 10.1016/j.dhjo.2018.05.005
- Mercer, L. D., Lu, F., & Proctor, J. L. (2019). Sub-national levels and trends in contraceptive prevalence, unmet need, and demand for family planning in Nigeria with survey uncertainty. *BMC Public Health*. 19(1):1–9.doi: 10.1186/s12889-019-8043
- Mitra, M., Iezzoni L. I., Zhang, J., Long-Bellil, L. M., Smeltzer, S. C., Barton, B. A. (2015). Prevalence and risk factors for postpartum depression symptoms among women with disabilities. *Maternal Child Health Journal* 19:362–372
- Nguyen, T.V., King, J., Edwards, N., & Dunne, M. P. (2020). "Nothing suitable for us": experiences of women with physical disabilities in accessing maternal healthcare services in Northern Vietnam Disability. Rehabilitation. pp. 1-9, 10.1080/09638288.2020.1773548
- Omokhabi, A. A. (2014). Determinants of Reproductive Health Behaviour among Female Workers in Tertiary Institutions in Southwestern Nigeria. *Unpublished Ph.D. Thesis, Department of Adult Education, Faculty of Education, University of Ibadan, Ibadan, Nigeria*
- Omokhabi, A. A. (2016). Factors Influencing Reproductive Health Behaviour of Female Non-Academic Staff in the Nigerian Universities. *Ibadan Journal of Educational Studies*. 13(1).89-102.

- Plan International (2017). Let me decide and thrive: Global discrimination and exclusion of girls and young women with disabilities, Working: Plan International
- Rohleder, P., Braathen, S., & Carew, T (2019). *Disability and Sexual Health: A Critical Exploration of Key Issues*, Abingdon: Routledge.
- Smeltzer, S. C., Mitra, M., Long-Bellil, L., Iezzoni, L. I., Smith, L. D. (2018). Obstetric clinicians' experiences and educational preparation for caring for pregnant women with physical disabilities: A qualitative study *Disability Health Journal*. 11. 8-13.
- Speizer, I. S., Guilkey, D. K., Escamilla, V., Lance, P. M., Calhoun, L.M., Ojogun, O. T., & Fasiku, D. (2019). On the sustainability of a family planning program in Nigeria when funding ends. Anglewicz P, editor. PLoS One. 14(9):e0222790. doi: 10.1371/journal.pone.0222790. <https://dx.plos.org/10.1371/journal.pone.0222790>.
- Stover, J., & Sonneveldt, E. (2017). Progress toward the Goals of Family Planning 2020. *Studies in Family Planning*. 48 (1): 83–88.
- Streur, C. S., Schafer, C. L., Garcia, V. P., & Wittmann, D. A. (2018). "I Don't Know What I'm Doing I Hope I'm Not Just an Idiot": The need to train pediatric urologists to discuss sexual and reproductive health care with young women with spina bifida. *Journal of Sex Medicine*. 15:1403–1413
- Streur, C. S., Schafer, C. L., Garcia, V. P., Quint, E. H., Sandberg, D. E., Kalpakjian, C. Z., & Wittmann, D. A. (2020). He told me it would be extremely selfish of me to even consider (having kids): The importance of reproductive health to women with spina bifida and the lack of support from their providers. *Disability Health Journal*. 13(2):100815.
- Tanabe, M., Nagujah, Y., Rimal, N., Bukania, F. & Krause, S. (2015) 'Intersecting sexual and reproductive health and disability in humanitarian settings: risks, needs, and capacities of refugees with disabilities in Kenya, Nepal, and Uganda' *Sexuality and Disability* 33(4): 411–427.
- Taouk, L. H., Fialkow, M. F., & Schulkin, J. A. (2018). Provision of reproductive healthcare to women with disabilities: A survey of obstetrician-gynecologists' training, practices, and perceived barriers. *Health Equity*. 2:207–215.
- Tarasoff, L.A. (2017). "We don't know. We've never had anybody like you before": Barriers to perinatal care for women with physical disabilities. *Disability Health Journal*. 10:426–433
- Tarasoff L, Ravindran S, Malik H, Salaeva D, Brown H. (2020) Maternal disability and risk for pregnancy, delivery, and postpartum complications: A systematic review and meta-analysis. *American Journal Obstetrics and Gynaecology* ;222:27..e1–27.e32.
- Tran, H. T., Nippita, T., Nguyen, P. T. K., Nguyen, P. T. T., Huynh, T. T. D., Le Hua, O. T., & Roberts, C. L. (2018). Knowledge, experience and attitudes towards skin-to-skin contact following Caesarean sections among health professionals in Vietnam *Acta Paediatrica* 107 1917-1923.
- UN Women (2018). The Empowerment of women and girls with disabilities towards full and effective participation and gender equality <https://www.unwomen.org/sites/default/files/Headquarters/Attachments/Sections/Library/Publications/2018/Empowerment-of-women-and-girls-with-disabilities-en.pdf>
- United Nations Population Information Network (2019). Guidelines on Reproductive Health. : www.un.org/popin/unfpa/taskforce/guide/iatfreph.gdl.html
- United Nations. (2015). Transforming Our World: The 2030 Agenda for Sustainable Development. A/RES/70/1. New York, NY, USA: UN Division for Sustainable Development Goals and UN General Assembly. http://wedocs.unep.org/bitstream/handle/20.500.11822/11125/unep_swio_sm1_inf7_sdg.pdf?sequence=1
- World Health Organisation WHO (2014). *Ensuring Human Rights in the Provision of Contraceptive Information and Services: Guidance and Recommendations*. Geneva, Switzerland: World Health Organization
- World Health Organization Department of Reproductive Health and Research (WHO/RHR) and Johns Hopkins Bloomberg School of Public Health/Center for Communication Programs (CCP) (2018) Knowledge for Health Project. Family Planning: A Global



Handbook for Providers. Baltimore and Geneva: CCP and WHO,

Zandam, H., Mitra M., & Mitra, S. (2022). Awareness and access to mass media sources of information about modern family planning methods among women with disabilities in Nigeria: An analysis of 2018 demographic and health survey. *Frontier in Global Women's Health*. G 3:746569.doi: 10.3389/fgwh.2022.746569.