

# **Beyond Legislation: Examining Awareness about Disability-Related Health Rights Legislations among Women with Disabilities in Ghana**

**Charlotte Ofori & John Kuumuori Ganle**

## **Introduction**

One fundamental right of every individual is access to quality healthcare regardless of one's physical appearance, health status, and socio-economic standing. However, discriminatory public attitudes towards persons with disability (PWDs), stigma and prejudice continue to pervade the prevailing discourse, erecting further barriers to human rights and limiting their access to essential services such as healthcare (Abraham, Agyei-Baffour, & Yarfi, 2018; Akasreku, Habib, & Ankomah, 2018; Ganle, Baatiema, Quansah, & Danso-Appiah, 2020; Ganle, Otopiri, Obeng, & Edusie, 2016; Schenk et al., 2020). PWDs encounter several physical and institutional hurdles when it comes to access to good healthcare services. Studies suggest that PWDs are frequently denied access to quality sexual and reproductive medical care by healthcare providers (Ganle, Baatiema, et al., 2020; Mfoafo-M'Carthy, Grischow, & Stocco, 2020; Mulumba et al., 2014).

The challenges faced by PWDs are exacerbated for women with disabilities (WWDs) (Akasreku et al., 2018; Bourgeois, 2011; Mprah, Anafi, & Sekyere, 2014; Naami, 2015; Schenk et al., 2020). For WWDs, these problems are amplified due to deep-rooted inequalities that are perpetuated against women. WWDs are more likely than their non-disabled counterparts to be poorer, have a worse social and economic position, experience heightened vulnerabilities to pregnancy, abuse, inequitable gender norms, and poor healthcare access (Bassoumah & Mohammed, 2020; Ganle, Apolot, Rugoho, & Sumankuuro, 2020; Ganle, Ofori, & Dery, 2021; Mitra, Posarac, & Vick, 2013; Naami, 2015; Schenk et al., 2020). More women than men with disabilities have poor access to reproductive and sexual health rights and services (Mac-Seing et al., 2020; Schenk et al., 2020). In many low-income

countries, including Ghana, many women still lack access to life-saving sexual and reproductive health treatments (Ganle et al., 2021). According to Naami et al. (2015) women in Ghana generally must cope with gendered socio-cultural beliefs, religious and socio-economic challenges but WWDs face more strident conditions because they are women, have a disability, and come from a low income country. Again, past literature shows that WWDs have poor access to modern contraception, skilled maternal healthcare services, lack of privacy and experience poor concern to their problems by healthcare personnel (Abodey, Vanderpuye, Mensah, & Badu, 2020; Ganle et al., 2016; Laur, 2018; Senayah, Mprah, Opoku, Edusei, & Torgbenu, 2019). Even more alarming is the fact that health institutions and providers are not sensitive to the needs of WWDs (Bassoumah & Mohammed, 2020; Dassah, Aldersey, McColl, & Davison, 2018; Ganle, Baatiema, et al., 2020; Ganle et al., 2021). This could be as a result of their poor knowledge about the sexual health, family planning and maternal care needs of WWDs. When health personnel treat WWDs well, they would be more likely to visit health facilities (Senayah et al., 2019). Although medical professionals are required to provide their patients with all necessary and relevant information about any diagnosis, proposed treatment, investigation, or procedure so that they can weigh the benefits and drawbacks of any treatment before deciding this may not always be the case (Laur, 2018). For people with PWDs, especially WWDs the poor manner in which they are treated in their bid to access healthcare services makes it difficult for them to visit medical centers. The mode in which WWDs are treated at health facilities is due to the widespread belief among the general population including health personnel that they are asexual (Akasreku et al., 2018; Bassoumah & Mohammed, 2020; Bourgeois, 2011; Ganle et al., 2016; Mfoafo-M'Carthy et al., 2020). Yet, one's disability may have nothing at all to do with their sexuality or their capacity to have children. This assertion maintains an environment of stigma, oppression, and an infringement of one's fundamental human rights

(Mfoafo-M'Carthy et al., 2020). Therefore, it is imperative for PWDs especially WWDs to be well conversant with laws that protect them. Laws and policies play a critical role in avoiding or correcting harmful cultural attitudes or behaviors and institutional practices, as well as preventing discrimination against individuals with disabilities (Rohwerder, 2018).

Over the past few decades however, there has been a rising interest and recognition of the rights of persons with disabilities from both the international and local communities. This has led to the ratification of laws and conventions needed to guide state institutions in order to foster and sustain the rights of PWDs worldwide. The United Nations Convention on the Rights of Persons with Disabilities (UNCRPWD) was adopted in 2006 as a human rights instrument to change people's perceptions about PWDs and also, ensure that governments commit to addressing the human rights needs of persons with disabilities (MacKay, 2006). This Convention ensures that PWDs enjoy equal rights and privileges as all other people do. Article 6 of the CRPWD states that “States Parties shall take all appropriate measures to ensure the full development, advancement and empowerment of women, for the purpose of guaranteeing them the exercise and enjoyment of the human rights and fundamental freedoms set out in the present Convention” (Lawson, 2018, p. 6). The CRPWD therefore comes in to clarify and qualify how PWDs including WWDs can effectively exercise their health rights in areas that have been violated and seek protection (Lawson, 2018). As a signatory to the United Nations Convention on the Rights of Persons with Disabilities, Ghana, in 2006 passed the Persons with Disability Act 715 to provide a framework which protects the rights of people with disabilities and to create a National Council on People with Disabilities mandated to address issues that pertain to persons with disabilities. The enactment of these conventions and Acts have become necessary because PWDs grapple with challenges in all aspects of their lives and require that states make

deliberate efforts to ensure that the fundamental rights of PWDs are protected and their standard of living are improved upon.

Knowing these rights and privileges that one is entitled to enables individuals to demand for them. The enablers of demand for and access to services for PWDs are based on raising awareness of disability rights (Stern, Heijden, & Dunkle, 2020). Although PWDs in Ghana may be thought to have been empowered with the CRPWD and Persons with Disability (Act 715) to help them access their basic human rights as citizens, the existence these conventions and laws does to translate to individuals knowing them and demanding that governments and local institutions put sustainable strategies in place to allow WWDs to fully enjoy these rights. Access to information is one of the most significant barriers for WWDs (Akasreku et al., 2018; Badu et al., 2019; Schenk et al., 2020). PWDs who were aware of legislation and support formed organizations which pushed for such government assistance even though it was mostly insufficient and inconsistent (Grischow & Mfoafo-M'Carthy, 2021). Studies have shown that when PWDs are provided with a safe and conducive environment to express their challenges, they deliberately reflect on their self-awareness of the linkages between policy and sexual reproductive health (SRH) rights and services use to ensure that current laws and policies protect their rights (Mac-Seing et al., 2020). In Ghana, the general awareness of the existence of legislation protecting the rights of PWDs has been observed to be minimal (Akasreku et al., 2018). In fact, both PWDs and those without disabilities had poor information regarding the laws that were passed to protect PWDs. According to Division for Social Policy and Development (2017) state parties are obligated to comply with Article 8 of the UNCRPWD to 'undertake awareness-raising activities that address stereotypes, prejudices and harmful practices relating to persons with disabilities'. This has however received very limited state attention. Akasreku et al. (2018) shows that only 3.5% of the respondents were aware of disability legislation and rights in a study conducted in the Adaklu

District, in the Volta Region of Ghana. The study further showed that negative attitudes and views about pregnant WWDs were linked to lack of knowledge of disability legislation and rights. Ganle et al. (2021) also argue that sexual and reproductive health and rights (SRHR) information and services are insufficient to support WWDs even at the health facility level. While legislature on rights of persons with disability exist very few studies have explored knowledge and awareness of these (Akasreku et al., 2018; Mprah et al., 2014). This study extends our knowledge on this area of research by examining WWDs' awareness of the existence of conventions and laws for PWDs and also, health related legislature under these conventions. The findings from this study will inform government and civil society organizations on the need to strengthen the implementation of policies that increase the awareness of such laws with the aim of improving the wellbeing of WWDs.

## **Methods**

### **Study context and design**

The data for this study was obtained from an on-going intervention study being implemented in Northern Ghana. (See Ganle et al. (2021) for supplementary details of the study protocol and methodology). The region has one of the highest unmet needs for sexual and reproductive health services and the lowest supervised delivery rates in the country (Ghana Statistical Service, Ghana Health Service, & ICF-International, 2015). The project is being implemented in four districts with some of the highest disability rates in the region: Central Gonja (3.6%), West Gonja (3.8%), Savlugu (4.6%), and Bunkprugu-Nankpanduri (5.4%) districts (Ghana Statistical Service, 2013). Respondents are 712 sexually active women with physical disability, visual impairments and albinism/epilepsy in their reproductive ages (15–49 years). The study focused on physical and visual impairments partly because they are the dominant disabilities in Ghana (Ghana Statistical Service, 2021a). Women with disabilities were purposively selected from the four districts. To widen the sample of sexually active

WWDs, the research team again relied on the Ghana Federation of Disability Organisations, local district assemblies, and other disability groups' databases of members for potential eligible respondents. Face-to-face interview method was used to collect data from respondents. Graduate research assistants including some persons with physical disabilities who speak at least one of the local languages (i.e. Dagbaani, Gonja or Moar) in addition to English were recruited and trained to collect the data. A structured questionnaire was developed, translated and was pretested before data collection commenced. The questionnaire gathered information on several validated questions from the Ghana Demographic and Health Survey questionnaire (Ghana Statistical Service et al., 2015), the Ghana Maternal Health Survey questionnaire (Ghana Statistical Service, Ghana Health Service, & The DHS Program, 2018), socio-demographic information, data on awareness and knowledge of health rights and legislature. The questionnaire was imported into the REDCap which was used to design and collect electronic data using tablet computers. The study was approved by Ghana Health Service Ethics Review Committee (Protocol Approval NO: GHS-ERC 010/12/20).

## **Study variables**

### *Outcome variables*

We examined respondents' awareness on Conventions and laws on the rights of PWDs as dependent variables. Respondents were asked if they have ever heard about the UN Convention on the Rights of Persons with Disabilities (UNCRPWD) and the Persons with Disability Act, 2006 (Act 715), and if they were aware of the health-related conventions and laws described thereof in these legislative instruments (Table 1b).

### *Explanatory variables*

The main explanatory variable for the study is disability type. WWDs were grouped into those with 1 “Physical disability”, 2 “Visual disability” and 3 “Albinism/ Epilepsy”. Other covariates include study district, age group, level of education, marital status, employment status, membership of a women's group, frequency of listening to the radio, frequency of watching television, mobile phone ownership and internet access.

### **Data analyses**

Data analyses were carried out using Stata version 16.0. We used basic descriptive statistical analyses to describe the outcome variables and socio-demographic characteristics of respondents and Chi-square tests of association was performed to examine the association between the independent variables and awareness on health-related Conventions and laws on the rights of PWDs. Moreover, multiple logistic regression models were fitted to examine the relationship between the outcome and independent variables. The analyses were conducted at 95% confidence interval.

### **Results**

#### ***Background characteristics of women with disabilities***

The results show that about equal proportions of respondents were selected from the four districts (see Table 1). In this study disability type was categorised into three groups. About 67.1% of respondents have physical disability, 13.1% have visual disability and nearly one in five live with albinism/epilepsy. Concerning age categorization, about 27.9% of respondents did not know their ages and nearly one in five were aged 25-34 years. More than half of the respondents had no formal education, about 46.5% were currently in a union and more than eight in ten WWDs were unemployed. About one in five respondents indicated that they were members of a women’s group. The results showed that 36.0% listen to the radio more than

once a month, 32.0% watch the television more than once a month, more than half own a phone and less than one in ten indicated that they have ever used the internet.

### **Knowledge on rights of persons with disability**

In this paper we examined women with disabilities' knowledge on rights, conventions and laws that concern their health and general well-being (Table 1b). Specifically, we explore international Conventions such as the United Nations Convention on the Rights of Persons with Disabilities and Ghana's Persons with Disability Act, 2006 (Act 715). The results show that only one in ten WWDs have ever heard about the UNCRPWD. Amongst those who have heard about the UNCRPWD, 87.3% were aware that it guarantees PWDs right to access the same range, quality and standard of free or affordable healthcare and programmes as provided to other persons, including those in the area of sexual and reproductive health and population-based public health programmes. In addition, only 11.8% of respondents have ever heard about the Ghana's PWDs Act. Of this percentage, 78.6% were aware that the Act guarantees PWDs the right to access the same or specialised range, quality and standard of healthcare as provided to other persons, including those in the area of sexual, reproductive and maternal health. Again, of the percentage who has ever heard about the Act, 71.4% were aware that the Act enjoins Ghana's Ministry of Health to make provisions for free general and specialist medical care, rehabilitative treatment and appropriate assistive services for PWDs in Ghana. Also, about seven in ten who have ever heard about the Act were aware that the Act mandates Ghana's Ministry of Health to include the study of disability and related issues in the curricula of training institutions for health professionals also requires the integration of the needs of PWDs into the design, construction and operation of transport network in Ghana.

## **Awareness on health-related Conventions and laws on the rights of persons with disability**

At the bivariate level of analysis, we examined the association between key background characteristics and WWDs' knowledge on UNCRPWD and Ghana's PWDs Act, 2006 using chi square test of association. The results of this analysis are presented in Table 2.

### **Awareness on UNCRPWD**

The results show that disability type, study district, level of education, employment status, membership of women's group, frequency of listening to the radio or watching television, phone ownership and having ever used the internet were significantly associated with having heard about the UNCRPWD. Among respondents who live in Central Gonja about 16.5% have heard about the UNCRPWD. Only 4.35% of women with visual impairment and 12.3% of women with physical disability have ever heard about the Convention. Concerning education, while only 6.6% of women with no formal education have ever heard of UNCRPWD more than one in four (14.2%) of WWDs with some formal education have ( $\chi^2=35.82$ ; p-value=0.000). About 21.9% of those employed have heard about the UNCRPWD. Membership in a women's group was also significantly associated with knowledge of the UNCRPWD ( $\chi^2=20.96$ ; p-value=0.000). As the frequency of listening to the radio decreases, the proportions of WWDs who have ever heard of the UNCRPWD also decrease. With regards to frequency of watching television, about 16.2% who watch television more than once a month have ever heard about the UNCRPWD ( $\chi^2=15.33$ ; p-value=0.000). The results show that 14.0% who own a mobile phone and 25.8% of WWD who have ever used the internet have ever heard about the UNCRPWD.

### **Awareness on *Ghana's PWDs Act, 2006 (Act 715)***

Results on the factors associated with WWDs' knowledge on Ghana's PWDs Act, 2006 (Act 715) are presented in Table 2. The results show that 28.6% of WWDs in Central Gonja, 21.1% of WWDs who do not know their ages, 21.9% who were employed, 22.9% of WWDs who were members of a women's group reported that they have heard about Act 715. Additionally, 16.2% of WWDs who watch television once a month and nearly one in five WWDs who have ever used the internet have ever heard about Act 715. Disability types, level of education, marital status, frequency of listening to the radio and phone ownership were not significantly associated with awareness of Persons with Disability Act 715.

***Association between disability type, other predictor variables and WWDs awareness of UNCRPWD and Ghana's Persons with Disability Act***

In Model 1 we examine the association between disability type, other predictor variables and WWDs' awareness of the UNCRPWD. Disability type was not significantly associated with awareness of UNCRPWD. Nonetheless, WWDs in Central Gonja were more likely to have knowledge on the Convention than their counterparts in Savelugu. Having some formal education [AOR=1.93; 95%CI=1.01-3.69], being employed [AOR=1.89; 95%CI=1.01-3.53], and membership of a women's group [AOR=2.12; 95%CI=1.12-4.04] have positive significant association with having ever heard about the UNCRPWD. Again, WWDs who do not listen to the radio at all, [AOR=0.46; 95%CI=0.22-0.94], those who watch television once a month [AOR=0.41; 95%CI=0.17-1.00] and those who have never used the internet [AOR=0.36; 95%CI=0.14-0.91] were significantly less likely to have heard about the UNCRPWD. With regards to having ever heard about Ghana's PWDs Act, 2006 (Act 715), WWDs in Central Gonja [AOR=7.86; 95%CI=3.83-16.12] compared to those in Savelugu,

those who do not know their age [AOR=2.57; 95%CI=1.09-6.04] compared to those 15-24years and those who were members of a women's group [AOR=3.17; 95%CI=1.64-6.15] were significantly more likely to have heard about the Act. Women who do not watch television at all were significantly less likely to have heard about the Act compared to those who watch it more than once a month [AOR=0.46; 95%CI=0.24-0.87].

## **Discussion**

The Sustainable Development Goal (SDG) 3 seeks “to ensure healthy lives and promote well-being for all at all ages” (Johnston, 2016). This suggests that all people regardless of their physical and mental capacities should enjoy basic health rights. Till date, WWDs lack access to basic health services and knowledge of their rights to these services. In this study we examine WWDs’ awareness on health-related Conventions and laws on the rights of persons with disability and the predictors of their knowledge of these rights in selected communities in Northern Ghana. The results show that only 10% and 11.8% of women with disabilities had ever heard about the UNCRPWDs and Ghana’s Persons with Disability Act 715 respectively. These results corroborate findings from other studies that have shown that in Ghana PWDs and those without disabilities are ignorant of these regulations that are to serve as protection for them (Akasreku et al., 2018; Ocran, 2019). For PWDs this affects the way people treat and relate with them daily because they are ill-informed about these rights. PWDs especially WWDs were discriminated against by healthcare practitioners and the public, who frequently question their basic sexual rights and capacity to become pregnant or form intimate relationships also because persons without disability are ill-informed about issues on disabilities (Akasreku et al., 2018; Mac-Seing et al., 2020; Schenk et al., 2020). Their fundamental right under Disability Act 715 (31) to have access to “free general and specialist medical care, rehabilitative operation treatment and appropriate assistive devices” is most often curtailed by the ignorance of the law. Akasreku et al. (2018) in a study found

negative attitudes and views about pregnant women with impairments were linked to poor knowledge of disability legislation and rights. Although Article 8 of the UNCRPWD mandates state entities to ‘to raise awareness throughout society, including at the family level, regarding persons with disabilities, and to foster respect for the rights and dignity of persons with disabilities’ (Lawson, 2018, p. 7), these campaigns have not been as vibrant. It behooves state institutions and civil society organization to take a critical look and identify more innovative, consistent and sustainable ways of increasing awareness through public education with the aim of changing public attitudes and beliefs about PWDs (Grischow, Mfoafo-M’Carthy, Vermeyden, & Cammaert, 2018).

Furthermore, the current study shows that about 70% to 80% of the WWDs who have ever heard about the UNCRPWDs and Ghana’s Persons with Disability Act 715 are aware of the various health related rights understated in these legislative instruments. This suggests that being aware of the UNCRPWDs and Persons with Disability Act 715 to a large extent exposes WWDs to also understand deeper the health-related rights associated with the Convention and Act. While Article 6 of the UNCRPWD states that “States Parties shall take all appropriate measures to ensure the full development, advancement and empowerment of women, for the purpose of guaranteeing them the exercise and enjoyment of the human rights and fundamental freedoms set out in the present Convention”, (Lawson, 2018, p. 6) a review of the Persons with Disability Act 715 Act shows there is not a portion dedicated to WWDs although they constitute a vulnerable population in Ghana (Asante & Sasu, 2015). This suggests that specific health needs of WWDs may not be given the right consideration in the Act.

Although Act 715 Article 32 mandates Ghana’s Ministry of Health to include the study of disability and related issues in the curricula of training institutions for health professionals to develop appropriate human resources to provide general and specialised rehabilitation

services to Persons with Disabilities in Ghana till date, studies suggest that health professionals lack the necessary sign language skills, accessible mobility aids, poor infrastructure, and many more institutional barriers that prevent WWDs from realizing their full SRH rights (Abodey et al., 2020; Dassah et al., 2018; Ganle, Baatiema, et al., 2020). It is important that beyond enacting these laws, government and state institutions must commit financially to building human resource capacity and disability friendly infrastructure that allow WWDs to have access to quality health services.

Also, the study shows that women who had some formal education were more likely to have heard about the UNCRPWD. Previous studies suggest that WWDs have lower levels of education compared to their counterparts without disability and further, women with disabilities are less likely to be educated compared to their male counterparts with disabilities (Mitra et al., 2013). Providing WWDs more educational opportunities potentially exposes them to better knowledge of their rights and also better economic opportunities. It is particularly important that government improves its efforts of making formal education more accessible to women especially women in Northern Ghana where women have the lowest rates of education in the country (Ghana Statistical Service, 2021b).

WWDs who were members of a women's group were significantly more likely to have ever heard of UNCRPWDs and Ghana's Persons with Disability Act 715. Belonging to a self-help group, a women's group or a disability group such as the Ghana Federation of Disabilities provides some opportunity to connect with other women or groups and discuss issues that affect WWDs with the aim of finding solutions to their challenges (Kumaran, 2011). The Ghana Federation of Disability, other disability groups, the District Assembly Common Fund for persons with disability desk and the Social Welfare Department in the various districts should intensify efforts to collate and encourage women with disabilities to join or form groups with the aim of spearheading the knowledge of rights of WWDs and developing

strategies to better demand these rights. Past studies have shown that when WWDs are provided with a conducive environment to express their challenges, they are more likely to demand for their rights (Mac-Seing et al., 2020). WWDs who do not have access to mass media such as the radio, television and internet were less likely to have heard about UNCRPWDs and Ghana's Persons with Disability Act 715. Access to mass media will provide WWDs information if any on issues concerning PWDs. The current study found that 45% of the respondents do not listen to the radio at all, more than half do not watch television at all and 90% have ever used the internet. These suggest poor penetration of mass media communication or access in the study areas; consequently, limiting women's access to vital health rights, information and services.

## **Conclusion**

Our findings suggest that women with disabilities are not aware of their rights and very little effort is being made to raise awareness of disability related rights that promote the welfare of WWDs. It is important that the Government of Ghana and the various state institutions work audaciously to execute their mandates as prescribed in the laws and conventions. Beyond enacting laws, government and stakeholders should make sustainable efforts to raise public awareness of disability health related rights through the use mass media outlets (radio, television and internet) to eliminate prejudice, improve disability health training and education for health providers to pay particular attention to the health needs WWDs and expand access to education for WWDs. Forming self-help groups and being members of disability groups present or create opportunities for knowledge and information sharing among members.

## References

- Abodey, E., Vanderpuye, I., Mensah, I., & Badu, E. (2020). In search of universal health coverage - Highlighting the accessibility of health care to students with disabilities in Ghana: A qualitative study. *BMC Health Services Research*, 20(1), 1–12.  
<https://doi.org/10.1186/s12913-020-05138-0>
- Abraham, A. Y., Agyei-Baffour, P., & Yarfifi, C. (2018). Utilisation and satisfaction with health services among persons with disabilities in Accra, Ghana. *Disability, CBR and Inclusive Development*, 1(1), 47–59. <https://doi.org/10.5463/DCID.v29i1.685>
- Akasreku, B. Dela, Habib, H., & Ankomah, A. (2018). Pregnancy in Disability: Community Perceptions and Personal Experiences in a Rural Setting in Ghana. *Journal of Pregnancy*, 2018.
- Asante, L. A., & Sasu, A. (2015). The Persons with Disability Act , 2006 ( Act 715 ) of the Republic of Ghana : The Law , Omissions and Recommendations. *Journal of Law, Policy and Globalization*, 36(Act 715), 62–69.
- Badu, E., Mensah, I., Gyamfi, N., Agyei-Okyere, E., Eric, A., & Adusei-Nkrumah, J. (2019). Knowledge and sources of accessing sexual and reproductive health information among visually impaired women in Ghana. *BMC Research Notes*, 12(1), 1–8.  
<https://doi.org/10.1186/s13104-019-4568-6>
- Bassoumah, B., & Mohammed, A. A. (2020). The socio-cultural challenges to maternal and neonatal care: The views of women with disabilities receiving maternity care in the Chereponi district of the Northern Ghana. *Scientific African*, 7.  
<https://doi.org/10.1016/j.sciaf.2019.e00258>
- Bourgeois, A. M. (2011). Contested perspectives of “marvel” and “mockery” in disability and sport: Accra, Ghana. In *In Disability in the Global Sport Arena* (Vol. 14, pp. 179–192). Routledge. <https://doi.org/10.1080/17430437.2011.614781>
- Dassah, E., Aldersey, H. M., McColl, M. A., & Davison, C. (2018). ‘When I don’t have money to buy the drugs, I just manage.’—Exploring the lived experience of persons with physical disabilities in accessing primary health care services in rural Ghana. *Social Science and Medicine*, 214(July), 83–90.  
<https://doi.org/10.1016/j.socscimed.2018.08.023>

- Division for Social Policy and Development, (DSPD). (2017). *Culture, beliefs, and disability. Toolkit On Disability For Africa.*
- Ganle, J. K., Apolot, R. R., Rugoho, T., & Sumankuuro, J. (2020). “They are my future”: Childbearing desires and motivations among women with disabilities in Ghana-implications for reproductive healthcare. *Reproductive Health*, *17*(1), 1–12. <https://doi.org/10.1186/s12978-020-01000-y>
- Ganle, J. K., Baatiema, L., Quansah, R., & Danso-Appiah, A. (2020). Barriers facing persons with disability in accessing sexual and reproductive health services in sub-Saharan Africa : A systematic review. *PLoS ONE*, *15*(10), 1–19. <https://doi.org/10.1371/journal.pone.0238585>
- Ganle, J. K., Ofori, C., & Dery, S. (2021). Testing the effect of an integrated-intervention to promote access to sexual and reproductive healthcare and rights among women with disabilities in Ghana: a quasi-experimental study protocol. *Reproductive Health*, *18*(206), 1–11. <https://doi.org/10.1186/s12978-021-01253-1>
- Ganle, J. K., Otopiri, E., Obeng, B., & Edusie, A. K. (2016). Challenges women with disability Face in accessing and using maternal healthcare services in Ghana: A qualitative study. *PLoS ONE*, *11*(6), 1–13. <https://doi.org/10.1371/journal.pone.0158361>
- Ghana Statistical Service, (GSS). (2013). *Population and housing census, 2010*. Accra, Ghana.
- Ghana Statistical Service, (GSS)., Ghana Health Service, (GHS)., & ICF-International. (2015). *Ghana Demographic and Health Survey, 2014*. Rockville, Maryland, USA:GSS,GHS, and ICF International.
- Ghana Statistical Service, (GSS)., Ghana Health Service, (GHS)., & The DHS Program, (ICF). (2018). *Ghana Maternal Health Survey, 2017*. Accra, Ghana: GSS, GHS, and ICF.
- Ghana Statistical Service, (GSS). (2021a). *2021 Population and Housing Census-General Report. Difficulty In Performing Activities (Vol. 3F)*. Accra.
- Ghana Statistical Service, (GSS). (2021b). *2021 Population and Housing Census-General Report. Literacy and Education (Vol 3D)*. Accra.

- Grischow, J., & Mfoafo-M'carthy, M. (2021). The lived experience of disability rights in Ghana: A case study from the Eastern Region. *Journal of Social Inclusion, 12*(1), 37–50.
- Grischow, J., Mfoafo-M'carthy, M., Vermeijden, A., & Cammaert, J. (2018). Physical disability, rights and stigma in Ghana: A review of literature. *Disability, CBR and Inclusive Development, 29*(4), 5–24. <https://doi.org/10.5463/dcid.v29i4.752>
- Johnston, R. B. (2016). Arsenic and the 2030 Agenda for sustainable development. *Arsen Res Glob Sustain-Proc 6th Int Congr Arsen Environ AS, 12–14*.  
<https://doi.org/10.1201/b20466-7>
- Kumaran, K. P. (2011). Role of self-help groups in promoting inclusion and rights of persons with disabilities. *Asia Pacific Disability Rehabilitation Journal, 22*(2), 105–113.  
<https://doi.org/10.5463/DCID.v22i2.78>
- Laur, A. (2018). Healthcare access for deaf patients - The legal and ethical perspectives. *The Medico-Legal Journal, 86*(1), 36–41. <https://doi.org/10.1177/0025817217743416>
- Lawson, A. (2018). United Nations Convention on the Rights of Persons with Disabilities (CRPD). *International and European Labour Law, (December)*, 455–461.  
<https://doi.org/10.5771/9783845266190-471>
- Mac-Seing, M., Zinszer, K., Eryong, B., Ajok, E., Ferlatte, O., & Zarowsky, C. (2020). The intersectional jeopardy of disability, gender and sexual and reproductive health: experiences and recommendations of women and men with disabilities in Northern Uganda. *Sexual and Reproductive Health Matters, 28*(2).  
<https://doi.org/10.1080/26410397.2020.1772654>
- MacKay, D. (2006). The United Nations Convention on the Rights of Persons with Disabilities. *34 Syracuse J. INT'L L. & COM, 34, 323*.
- Mfoafo-M'Carthy, M., Grischow, J. D., & Stocco, N. (2020). Cloak of invisibility: A literature review of physical disability in Ghana. *SAGE Open, 10*(1).  
<https://doi.org/10.1177/2158244019900567>
- Mitra, S., Posarac, A., & Vick, B. (2013). Disability and poverty in developing countries: A multidimensional study. *World Development, 41*, 1–18.  
<https://doi.org/10.1016/j.worlddev.2012.05.024>

- Mprah, W. K., Anafi, P., & Sekyere, F. O. (2014). Does disability matter? Disability in sexual and reproductive health policies and research in Ghana. *International Quarterly of Community Health Education*, 35(1), 21–35. <https://doi.org/10.2190/IQ.35.1.c>
- Mulumba, M., Nantaba, J., Brolan, C. E., Ruano, A. L., Brooker, K., & Hammonds, R. (2014). Perceptions and experiences of access to public healthcare by people with disabilities and older people in Uganda. *International Journal for Equity in Health*, 13(1), 1–9. <https://doi.org/10.1186/s12939-014-0076-4>
- Naami, A. (2015). Disability, gender, and employment relationships in Africa: The case of Ghana. *African Journal of Disability*, 41(1), 1–11. <https://doi.org/10.4102/ajod.v4i1.95>
- Ocran, J. (2019). Exposing the protected: Ghana’s disability laws and the rights of disabled people. *Disability and Society*, 34(4), 663–668. <https://doi.org/10.1080/09687599.2018.1556491>
- Rohwerder, B. (2018). *Disability stigma in developing countries*.
- Schenk, K. D., Tun, W., Sheehy, M., Okal, J., Kuffour, E., Moono, G., ... Leclerc-madlala, S. (2020). “Even the fowl has feelings”: access to HIV information and services among persons with disabilities in Ghana, Uganda, and Zambia. *Disability and Rehabilitation*, 42(3), 335–348. <https://doi.org/10.1080/09638288.2018.1498138>
- Senayah, E. A., Mprah, W. K., Opoku, M. P., Edusei, A. K., & Torgbenu, E. L. (2019). The accessibility of health services to young deaf adolescents in Ghana. *International Journal of Health Planning and Management*, 34(1), e634–e645. <https://doi.org/10.1002/hpm.2679>
- Stern, E., Heijden, I. Van Der, & Dunkle, K. (2020). How people with disabilities experience programs to prevent intimate partner violence across four countries. *Evaluation and Program Planning*, 79(November 2019), 101770. <https://doi.org/10.1016/j.evalprogplan.2019.101770>

**Table 1a: Background characteristics**

<b>Characteristics</b>	<b>Number</b>	<b>Percent</b>
<b>Disability type</b>		
Physical disability	478	67.1
Visual disability	93	13.1
Albinism/ epilepsy	141	19.8
<b>Study district</b>		
Savelugu	178	25.0
Central Gonja	182	25.6
West Gonja	187	26.3
Bunkpurugu	165	23.2
<b>Age group</b>		
15-24years	166	23.6
25-34years	140	19.9
35-44years	125	17.7
45-49years	77	10.9
Don't know	197	27.9
<b>Level of education</b>		
Not educated	394	55.3
Educated	318	44.7
<b>Marital status</b>		
In union	331	46.5
Not in union	381	53.5
<b>Employment status</b>		
Unemployed	598	84.0
Employed	114	16.0
<b>Membership of a women's group</b>		
No	568	79.8
Yes	144	20.2
<b>Frequency of listening to the radio</b>		
More than once a month	256	36.0
Once a month	135	19.0
Not at all	321	45.1
<b>Frequency of watching television</b>		
More than once a month	228	32.0
Once a month	111	15.6
Not at all/visually impaired	373	52.4
<b>Phone ownership</b>		
Yes	394	55.3
No	318	44.7
<b>Ever used the internet</b>		
Yes	66	9.3
No	646	90.7

**Table 2b: Background characteristics- Knowledge on Conventions and laws on the rights of persons with disability**

<b>Characteristics</b>	<b>Number</b>	<b>Percent</b>
<b>Ever Heard about the UN Convention on the Rights of Persons with Disabilities (UNCRPWD)</b>		
No	641	90.0
Yes	71	10.0
<b>Knows that UNCRPWD guarantees PWDs right to access the same range, quality and standard of free or affordable healthcare and programmes as provided to other persons, including those in the area of sexual and reproductive health and population-based public health programmes?</b>		
No	9	12.7
Yes	62	87.3
<b>Ever heard about Ghana’s Persons with Disability Act, 2006 (Act 715)</b>		
No	628	88.2
Yes	84	11.8
<b>Knows that Ghana’s Persons with Disability Act guarantees People with Disability the right to access the same or specialised range, quality and standard of healthcare as provided to other persons, including those in the area of sexual, reproductive and maternal health</b>		
No	18	21.4
Yes	66	78.6
<b>Knows that Ghana’s Persons with Disability Act enjoins Ghana’s Ministry of Health to make provisions for free general and specialist medical care, rehabilitative treatment and appropriate assistive services for Persons with Disabilities in Ghana</b>		
No	24	28.6
Yes	60	71.4
<b>Knows that Ghana’s Persons with Disability Act mandates Ghana’s Ministry of Health to include the study of disability and related issues in the curricula of training institutions for health professionals to develop appropriate human resources to provide general and specialised rehabilitation services to Persons with Disabilities in Ghana</b>		
No	25	29.8
Yes	59	70.2
<b>Knows that Ghana’s Persons with Disability Act requires the integration of the needs of people with disability into the design, construction and operation of transport network in Ghana</b>		
No	25	29.8
Yes	59	70.2

**Table 3: Factors associated with Awareness on health-related Conventions and laws on the rights of persons with disability**

	Ever Heard about UNCRPWD			Ever heard about Ghana's PWDs Act, 2006 (Act 715)		
	Percent	Number	$\chi^2$ (p-value)	Percent	Number	$\chi^2$ (p-value)
<b>Disability type</b>						4.57
Physical disability	12.3	478	9.23*	13.6	478	
Visual disability	4.3	93		8.6	93	
Albinism/ Epilepsy	5.7	141		7.8	141	
<b>Study district</b>			14.85**			66.69***
Savelugu	9.0	178		5.3	343	
Central Gonja	16.5	182		28.6	182	
West Gonja	9.6	187		7.5	187	
Bunpurugu	4.2	165		-	-	
<b>Age group</b>			7.27			24.99***
15-24years	7.2	166		7.2	166	
25-34years	13.6	140		10.7	140	
35-44years	7.2	125		7.2	125	
45-49years	6.5	77		6.5	77	
Don't know	12.8	204		21.1	204	
<b>Level of education</b>			11.18**			2.30
Not educated	6.6	394		10.2	394	
Educated	14.2	318		13.8	318	
<b>Marital status</b>			0.00			0.47
In union	10.0	331		12.7	331	
Not in union	10.0	381		11.0	381	
<b>Employment status</b>			21.62***			13.39***
Unemployed	7.7	598		9.9	598	
Employed	21.9	114		21.9	114	
<b>Membership of a women's group</b>			20.78***			21.45***
No	7.4	568		9.0	568	
Yes	20.1	144		22.9	144	
<b>Frequency of listening to the radio</b>			7.67*			4.68
More than once a month	12.9	256		9.8	256	
Once a month	12.6	135		17.0	135	
Not at all	6.5	321		11.2	321	
<b>Frequency of watching television</b>			15.25***			10.63**
More than once a month	16.2	228		15.8	228	
Once a month	9.0	111		16.2	111	
Not at all/visually impaired	6.4	373		8.0	373	
<b>Phone ownership</b>			15.62***			1.11
Yes	14.0	394		12.9	394	
No	5.0	318		10.4	318	
<b>Ever used the internet</b>			20.19***			4.36*
Yes	25.8	66		19.7	66	
No	8.4	646		11.0	646	

**Table 4: Multivariate models showing the association between disability type other predictor variables and Awareness of UNCRPWD and Ghana's PWDs Act, 2006**

Characteristics	Ever Heard about UNCRPWD			Ever heard about Ghana's PWDs Act, 2006 (Act 715)		
	AOR	p-value	95% CI	AOR	p-value	95% CI
<b>Type of disability</b>						
Physical disability						
Visual disability	0.40	0.143	0.12-1.37	0.83	0.7	0.32-2.13
Albinism/ epilepsy	0.86	0.725	0.38-1.94	1.13	0.736	0.55-2.35
<b>Study district</b>						
Savelugu						
Central Gonja	3.41	<b>0.006</b>	1.42-8.16	7.86	<b>0.000</b>	3.83-16.12
West Gonja	0.87	0.757	0.35-2.16	0.97	0.951	0.42-2.28
Bunkpurugu	0.85	0.762	0.29-2.47	-	-	
<b>Age group</b>						
15-24years						
25-34years	1.28	0.596	0.51-3.21	1.10	0.854	0.40-2.98
35-44years	1.04	0.941	0.38-2.80	1.20	0.723	0.44-3.25
45-49years	1.92	0.329	0.52-7.10	1.68	0.457	0.43-6.61
Don't know	2.23	0.076	0.92-5.43	2.57	<b>0.03</b>	1.09-6.04
<b>Level of education</b>						
No educated						
Educated	1.93	<b>0.045</b>	1.01-3.69	1.56	0.159	0.84-2.91
<b>Marital status</b>						
In union						
Not in union	1.05	0.893	0.55-2.00	0.97	0.923	0.53-1.78
<b>Employment status</b>						
Unemployed						
Employed	1.89	0.046	1.01-3.53	1.90	0.055	0.99-3.66
<b>Membership of a women's group</b>						
No						
Yes	2.12	<b>0.022</b>	1.12-4.04	3.17	<b>0.001</b>	1.64-6.15
<b>Frequency of listening to the radio</b>						
More than once a month						
Once a month	0.77	0.536	0.35-1.74	0.86	0.721	0.36-2.01
Not at all	0.46	<b>0.034</b>	0.22-0.94	0.80	0.542	0.39-1.64
<b>Frequency of watching television</b>						
More than once a month						
Once a month	0.41	<b>0.049</b>	0.17-1.00	0.48	0.069	0.22-1.06
Not at all/visually impaired	0.59	0.109	0.31-1.13	0.46	<b>0.018</b>	0.24-0.87
<b>Phone ownership</b>						
Yes						
No	0.62	0.185	0.31-1.25	1.22	0.526	0.66-2.24
<b>Ever used the internet</b>						
Yes						
No	0.36	<b>0.031</b>	0.14-0.91	0.37	0.061	0.13-1.05
<b>Constant</b>	<b>0.16</b>	<b>0.012</b>	<b>0.04-0.67</b>	<b>0.08</b>	<b>0.001</b>	<b>0.02-0.35</b>

