



"The Disabled Community Is Still Waiting for Equality": What do Users Have to say About Sexual Reproductive Health of Persons With Disabilities in Online News Comments

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Drawing from the literature of the internet as a public sphere, the present study investigates online news comments related to sexual reproductive health of people with disabilities (PWDs) published in *The New York Times* and *The Guardian*. We analyzed 3,633 online comments published between January 1, 2016, and December 31, 2019, using thematic analysis. The findings revealed eight major themes: economic consequences; gender; stereotypes; awareness and education; independence and autonomy; medical standpoint; media portrayal; and social justice and accommodation. Further, our study found that 47% of online commenters from *The NYT* and 49.3% from *The Guardian* had a positive perception that PWDs should have equal access to sexual reproductive health, compared with non-disabled people. Our study also revealed that comments in *The NYT* were more focused on the legal issues in the United States, while comments in *The Guardian* emphasized positive media representation and human aspects of the issue.

Keywords: persons with disabilities, self-disclosure, sexual reproductive health, sexual health rights, online news comments

INTRODUCTION

Historically, people with disabilities (PWDs) have been subjected to sexual segregation and sexual confinement, prohibited from getting married, and sterilized under the notion of protecting them from pregnancy and sexual abuse (Gomez, 2012; Muncey et al., 2020). Discrimination has emanated from the various misconceptions that exist around PWDs, their sexuality in society, and the media. One of the main reasons for the marginalization of PWDs in society is that they have largely been underrepresented by the mainstream media, and, when shown, they are portrayed as asexual and dependent (Parsons et al., 2017). Different terminologies have been used to describe their sexuality in society and media. For instance, the term *hypersexuality* has been used to refer to men with disability and their sexual behavior. Many of them have been viewed negatively as having an excessive appetite for sex, behaving in a childlike manner, producing children with disabilities, and having sexual relationship with a person without disabilities, their relationship is often viewed negatively due to various stigmas such as the non-disabled person not being able to attract a non-disabled partner or acting out of sympathy (Brodwin and Frederick, 2010).

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Abwao M, Ittefaq M, Baines A and Liu P (2021) "The Disabled Community Is Still Waiting for Equality": What do Users Have to say About Sexual Reproductive Health of Persons With Disabilities in Online News Comments. Front. Commun. 6:667627. doi: 10.3389/fcomm.2021.667627 According to the World Health Organization (2018), an estimated 15% of the global population (over a billion people) live with some form of disability, and about 2–4% of them experience significant disabilities that hinder them from undertaking daily activities. In the United States, 61 million adults have some form of disability (Centers for Disease Control and Prevention, 2019). The Centers for Disease Control and Prevention report suggests that one in three adults aged 18 to 44 with disabilities do not have healthcare providers. One in three adults with disabilities had unmet healthcare needs in 2018 because of expensive healthcare. In the U.K., about 14 million people live with some form of disability (Scope, 2016).

In the past, studies have explored various aspects of PWDs in the media. Two major areas of research have examined how the media can be used as a tool to promote sexual reproductive health (Gabarron and Wynn, 2016; Oronje et al., 2011; Wadham et al., 2019) and media representation of PWDs (Bendukurthi and Raman, 2016; Ciot and Van Hove, 2010). Previously, PWDs have been framed in the media as "sexless and isolated" (Ross, 2001, p. 425) because PWDs are less likely to participate in formal sex education programs than people without disabilities and less likely to advocate for the need to have sexual health information that is tailored to their needs (Campbell, 2017).

Little research has been conducted to understand readers' comments in online newspaper articles related to sexual reproductive health of PWDs (See Hall, 2018). Research in this line indicates that people share their opinion and experiences online and provide feedback to health journalists (Lee and McElroy, 2019). These comments are also a source of health information. Thus, understanding readers' comments is important because a) due to the anonymity, readers express their opinions freely in news forums, b) commenting represents a crucial space for the audience to provide feedback and engage with community issues, and c) news comment sections are a space for self-disclosure on the sexual reproductive health of PWDs (Santana, 2011; Suler, 2004; Wolfgang et al., 2020).

This study aims to understand the public's discussions about sexual reproductive health of PWDs in online publicly available comments in two English-language newspapers, The New York Times and The Guardian. Both newspapers cover national and international issues extensively, have credibility locally and globally, and have influence on global policies (Carvalho, 2007; Leung and Huang, 2007; Mendes, 2011; Vu and Lynn, 2020). Previous research has looked only into news comments in The Guardian (Hall, 2018), but our study added The New York Times to investigate whether there are any differences and similarities in online news comments in both newspapers related to sexual reproductive health of PWDs. Theoretically, this study draws from the extension of Habermas' work that looks at the internet as a public sphere of communication and is also influenced by critical theory (Papacharissi, 2002). Methodologically, we used thematic analysis (Braun and Clarke, 2006) to explore major themes in online discussions, perceptions of commenters, and similarities and differences between the two newspapers' comments on sexual reproductive health of PWDs.

THEORETICAL FRAMEWORK AND RELEVANT LITERATURE

The Internet as a Public Sphere

This study draws from the work of Habermas that looks at the media as a public sphere of political communication and that is also influenced by critical theory. Habermas argues that the media, as a domain of social life, can be a place in which public opinion can form a rational public debate (Papacharissi, 2002). Similarly, the internet has the potential of creating a public sphere where people are able to connect and discuss various issues including sexual health of PWDs. The internet as a Habermasian public sphere has been studied extensively in the past few decades (Gerhards and Schäfer, 2010; Poster, 1997; West, 2013). However, most of the studies have discussed this public sphere in the sense of democracy and related public discussions. The internet can promote free and plural social communications. Sexual health of PWDs is still considered as a taboo topic to be discussed in open spaces. PWDs, thus, may use the internet, including comments sections in online news sources, to express their opinions and concerns (Toepfl and Piwoni, 2015). The health narratives shared through these public spheres can have an impact on health in terms of reproducing or challenging economic and social systems that influence health (Avraham, 2002). Although some may contend that these comments are written only by a small number of people, the comments are read by a broad segment of the population (McCluskey and Hmielowski, 2012).

Public Perceptions and Attitudes on the Sexuality of PWDs

According to the World Health Organisation (2009), PWDs have the same sexual health and reproductive needs as people without disabilities. Those needs include sexual information and services access, safe relationships, and protection from sexual abuse and diseases (Ganle et al., 2020; Hosseinpoor et al., 2013). However, they often face barriers accessing sexual reproductive health information. The report further divulges that the ignorance and attitudes of society, including health care providers, amplify the problems that PWDs encounter while accessing sexual reproductive health services (SRHS) and information (Ganle et al., 2020; World Health Organisation, 2009).

Stereotypes and attitudes hold that sex and relationships are seen as luxuries that are not available to PWDs as they are perceived too ill to be concerned with sex, a mindset that reflects the stigma associated with disability and sexuality (Campbell, 2017). These attitudes become conceptualized in law, social policies, and public places that result in failure to accommodate the sexual needs of PWDs. Legislation, policies, and institutions tend to create barriers that deny or limit PWD's opportunities for sexual expression and sexual activity (American Association of People with Disabilities, 2020; Campbell, 2017).

Popular culture is key in shaping people's perceptions, and the frames that people use to view the world form an essential part of their opinions. However, Lamb and Layzell (1994) argued that aspects of popular culture such as film, TV sitcoms, and novels

rarely portray people with disabilities as sexually active. In Western societies, "normal" bodies are categorized to be young, abled, muscular and/or with low body fat (Grogan, 2010, p. 759). Deviations from these norms are often regarded as "freaky" or dangerous in numerous TV shows, newspapers, and magazine exposés (Hall, 2018, p. 380). Disabled bodies have been viewed as creating discomfort among society. However, scholars argue that social anxieties about non-normative bodies are prevalent, not because they pose any real threat, but because they highlight the fragility of all bodies (Couser, 1997, p. 178). Although the public lives of people with disabilities are topics of public discussion, their sexual and emotional needs are viewed as taboo topics and are usually not discussed openly (Greenwood and Wilkinson, 2013). Research shows that online news comments are considered a genuine and authentic reaction to the content of media stories due to anonymity (Rosen et al., 2019). Unlike social media, the comments sections for online news articles often require no accounts that might contain identifying elements. Thus, the identity of those who comment remains confidential, ideally allowing more open discussion of taboo topics in this public sphere. It is pertinent to mention that people still do participate in online discussions whether the topic is controversial or not. To gain more understanding in relation to the public discussions that exist about the sexual reproductive health of PWDs, this study examines online news comments published in The New York Times and The Guardian.

Media and Sexual Reproductive Health of PWDs

Although many studies have looked at sexual reproductive health in the media, most of them address traditional media (TV, newspapers, and magazines) (Kinsler et al., 2019; Orozco-Olvera et al., 2019). Also, most studies have looked at sexual reproductive health regarding people without disabilities. Shandra (2018) argued that research has neglected the sexual reproductive health of PWDs. In addition, the majority of past studies have focused on preexisting images that the public has about PWDs (Farnall and Smith, 1999; Zhang and Haller, 2013). These studies have mainly focused on physical appearance, while studies focusing on sexual reproductive health involving PWDs have looked at access to antenatal care or pregnancy outcomes (Mitra et al., 2017). Hall (2018) studied electronic talk by PWDs in a disability-specific online community and found that they use social media in expressing marginalized sexual identities. Online interactions among PWDs revealed that disability may be withheld in order to be treated as able-bodied, particularly when discussing sensitive topics on online platforms (Fraser, 2010). DeHaan et al. (2012) study found added benefits for the community when PWDs had the opportunity to share knowledge and information online, which increases their self-esteem, respect, and status. This exploratory study is the first to look at user-generated comments, in relation to news stories from more than one source, to understand reader's authentic and spontaneous reactions to sexual reproductive health of PWDs online.

Online News Comments and Sexual Reproductive Health of PWDs

Information in the age of digital media no longer flows unidirectionally from the media to the audience. Mass media have shifted to understanding that the audience is increasingly becoming active and engaged online with current issues (Ferrer-Conill and Tandoc, 2018). Audiences currently are featured more prominently in the media through their active participation by posting comments, providing feedback, and engaging with media outlets and journalists. Many news stories are now accompanied by technological "affordances" (Ferrer-Conill and Tandoc, 2018, p. 447) that allow audiences to express their opinions. Although traditional media such as letters to the editor, radio show call-ins, or public forums afforded audiences the opportunity to express their opinion publicly, they did not have affordances such as realtime feedback. Online news comments can be visible instantly especially if left unmoderated, unlike letters to the editor, which are published after a period of time (Craft et al., 2016). However, not all media outlets open the comment section on their websites due to low participation, low quality content, and legal concerns (Wolfgang et al., 2020). Similarly, content moderators often decide which articles should be open for public feedback. In our case, we found that stories related to sexual reproductive health of PWDs received large numbers of comments. For instance, one article in The NYT received 738 public comments.

Analyzing comments on the sexual reproductive health of PWDs can be a way to understand the perspectives that the public has about community issues. According to Darrow and Hairston (2016), research on comments posted on YouTube music videos of musicians with disabilities note that anonymous comments about PWDs are useful for determining current and international perspectives on disability and music participation. Research indicates that online commenters may not be demographically representative but hold similar and diverse socio-cultural views—e.g., regarding a particular health issue such as sexual reproductive health of PWDs (Regan et al., 2014). With the above-mentioned review of the literature and to achieve the objectives of this study, the following research questions are posed:

RQ1. How do online commenters perceive sexual reproductive health of PWDs in *The NYT* and *The Guardian*?

RQ2. What is the tone of the online comments regarding sexual reproductive health of PWDs in *The NYT* and *The Guardian*?

RQ3. What are the similarities and differences in the online comments regarding sexual reproductive health of PWDs in *The NYT* and *The Guardian*?

METHOD

Using thematic analysis (Braun and Clarke, 2006), this study examines public discussions in online news comments related to sexual reproductive health of PWDs from *The NYT* and *The Guardian*. The study focused only on analyzing online comments that were published in the comments section of both newspapers

Sexual Reproductive Health of PWDs

TABLE 1	Summary of	news article and	opinion/editorial	comments for analysis.
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The NYT	Date of publication	Number of comments	The Guardian	Date of publication	Number of comments
Passing My Disability on to My Children	Sept. 7, 2016	402	The taboos around disability and sex put limits on everyone, disabled or not	Mar. 18, 2019	201
Is Sex with a Brain-Damaged Man Assault?	Sept. 6, 2017	70	Treating disabled people as asexual is exasperating and offensive	June 8, 2016	310
Who Is the Victim in the Anna Stubblefield Case?	April 3, 2017	295	Let's take the initiative to start a sexual revolution for people with disabilities	July 14, 2016	33
Longing for the Male Gaze	Sept. 21, 2019	738	'We are sexual beings': why disability advocates want the NDIS to cover sexual services	July 21, 2019	84
Supreme Court Sidesteps Abortion Question in Ruling on Indiana Law	May 28, 2016	733	Disabled dating on Tinder: 'People ask if I can have sex'	Feb 21, 2016	494
Dating with Disability	Dec. 8, 2016	6	If you're a disabled, gay twentysomething, Grindr is a godsend	Dec. 1, 2016	181
			Disability and sex are not mutually exclusive	Oct. 15, 2016	86
Subtotal number of comments: 2244 Total number of Comments: 3633			Subtotal number of comments: 1389		

on articles related to sexual reproductive health of PWDs. All the comments were manually extracted from their original sources and added into a spreadsheet noting the text of each comment and its posting date. To protect the users' privacy, none of the information contained user's identity such as their username (Asokan et al., 2013). After all the comments were collected, the authors cleaned the dataset by deleting simple responses such as "yeah" or "good," and other text fragments that either didn't make semantic sense or couldn't be used to generalize a clear theme related to the research questions. To meet the ethical standards of this study, there was no need to acquire consent from commenters because the selected comments were publicly available (Meyer et al., 2019).

Sampling

The comments selection was made through online newspaper websites of The NYT and The Guardian, where the combination of a list of search terms included "disability" OR "sex" OR "PWDs" OR "person with disabilities" OR "sexual pleasure" OR "sexual health" OR "sex talk" to find news content. We collected data between 2016 and 2019, during which both newspapers published a combined 13 such articles, which received a total of 3,633 comments. The number of comments per story range from 6 to 738 in *The NYT* and from 33 to 494 in The Guardian (See Table 1). This timeframe was chosen because it coincided with the 10th anniversary of the Convention on the Rights of Persons with Disabilities (CRPD), which is one of the most widely ratified international treaties on PWDs put forth by the United Nations (United Nations, 2016). The authors chose these two online newspapers for five reasons: 1) comments availability, 2) users' ability to post comments, 3) published in English, 4) widely circulated newspapers from the United Kingdom and the United States, and 5) impact of these particular newspapers on policymakers and agenda setting for many small news organizations across the globe. Further, these two newspapers also engage audiences in discussions about

social issues such as disability. Therefore, studying these outlets can help create a holistic view of how individuals discuss sexual reproductive health of PWDs. According to Kim et al. (2018), many news organizations disable the user commenting affordances on their webpages because of the general critique that certain comments are irrelevant, abusive, or aggressive, and because of anonymity or pseudonym use. The online articles the authors selected included both news reports and opinion-editorial pieces. The authors aimed to acquire a more rounded picture in terms of user comments regarding the research topic.

Data Analysis

After the dataset was cleaned the authors used an open-coding approach to generate themes and sub-themes emerging from the data to answer RQ1. The qualitative data (users' comments) were analyzed through a thematic analysis approach. Using this approach, data analysis occurs concurrently with data collection. Braun and Clarke (2006) note that thematic analysis is used for identifying, analyzing, and reporting themes within data.

To answer RQ2, we examined the tone of the commenters in regard to sexual reproductive health of PWDs. The tone of the commenters was measured in four categories: 1) in favor of sexual reproductive health of PWDs, 2) not in favor of sexual reproductive health of PWDs, 3) neutral about sexual reproductive health of PWDs, and 4) mixed tone about sexual reproductive health of PWDs (See **Table 3**).

To answer RQ3, which examines the similarities and differences in the online comments regarding sexual reproductive health of PWDs in *The NYT* and *The Guardian*, we examined the emerging themes and perception of the commenters in both newspapers. For instance, we explored whether certain themes were more prevalent in one newspaper than the other. The unit of analysis for this study was each online comment (Ittefaq et al., 2021) from both newspapers. After we reviewed the comments, we developed coding categories based on

TABLE 2 | Tone of commenters regarding sexual reproductive health of PWDs in The NYT and The Guardian.

Tone	Definition	Example
In favor of sexual reproductive health of PWDs	If the tone of the commenter is in favor of PWDs having sexual reproductive health rights without restrictions	The choice to risk passing on a genetic disease to one's childrer should, like abortion, left up to the parents to decide, not the rest or us. Woody Guthrie knew he had a 50% chance of passing on Huntington's to his children, but if he hadn't had children, the world would have been deprived of his amazing and talented son, Arlo. Imagine how much bleaker our world would be without Arlo Guthrie! How do we determine what is a genetic trait, a genetic liability, or a debilitating genetic condition? How does one define what is "debilitating"? My answer: Only the parents can decide that (September 7, 2016, <i>The NYT</i>)
Not in favor of sexual reproductive health of PWDs	If the tone of the commenter is not in favor of PWDs having sexual reproductive health rights	I am a Transgender woman and I know that a lot of being Transgender is genetically influenced. When my doctor asked if I wanted to save sperm so I could have a child, I said no. Today, I am sterile and will never pass on my genes, and I am glad. Being Transgender is one of the hardest ways to live, and I don't want to be the reason my child has gender dysphoria. Instead, I plan on adopting a child who displays gender dysphoria. As a Transgender woman, I believe I can help a child with gender issues much better than the Christian maniacs who adopt most of the children in America today. However, I don't want to bring a person into this world just so I can fulfill a selfish wish to have a child of "my own." If you have a disability, I believe you have a duty to not have biological children. There are literally millions of children in this world that need adoption, and probably more than a few of them have the disability you have. (September 7, 2016, <i>The NYT</i>)
Neutral about sexual reproductive health of PWDs	If the tone of the commenter is neither in favor nor against the sexual reproductive health rights of PWDs	Interesting association of disability with ugliness here, which sort of re-makes her point but in a particularly cruel way. (March 18, 2019) <i>The Guardian</i>)
Mixed tone about sexual reproductive health of PWDs	If the tone of the commenters is in favor of PWDs having sexual reproductive health rights with restrictions or without restrictions	I'm very glad that Grindr has worked so well for you. I feel like congratulating you for it. But my own experience is very different. I'm also disabled. But not all disabilities are the same. I have multiple ones, but I still have enough mobility to get to the gay scene here, in London. For me, living with autism and having good looks makes the gay world a minefield. I'm just not safe unless I have someone trustworthy and morally minded next to me interpreting what's really happening throughout most interactions. Grindr is definitely a not for me. I'm genuinely happy you managed to break your isolation. I find it very difficult indeed. Complex disabilities and emotional/sexual isolation together are quite something I hope you'll keep enjoying it big time!! (December 1, 2016, <i>The Guardian</i>)

Note: All quotes are verbatim and may contain grammatical errors.

user discussions in the online comments. In the final phase, the themes were further refined, modified, and merged following discussion and agreement among the research team (Braun and Clarke, 2006).

RESULTS

A total of 3,633 online comments published between January 1, 2016, and December 31, 2019, in *The NYT* and *The Guardian* were analyzed. The coding process and subsequent analysis revealed eight major themes in the comments which answer RQ1 (See **Table 2**). Any comments that were not coded within the eight major themes (i.e., related to other topics besides PWDs sexual reproductive health) that emerged from repeated examinations of the units of analysis were categorized as "Others." The findings in regard to RQ2 revealed that most comments have a positive tone, generally asserting that PWDs

should have equal access to sexual reproductive health as nondisabled people (See **Table 4**). Findings in regard to RQ3 showed that online comments in *The Guardian* are more focused on the positive media representation and human aspect of PWDs' sexual reproductive health. Comments on *The NYT* emphasized legal issues and the criminal justice system in the U.S.

Themes in Online News Comments (RQ1) Economic Consequences

PWDs and their issues are presented as costly to society and businesses. Haller's disability model 1995) suggests that PWDs are seen as an extra cost and not worthy of investment by business entities and the government. Making accommodations for PWDs is seen as an extra cost to taxpayers, as one commenter said:

 $[\ldots]$ If somebody is unable to find a partner, then I'm not sure the taxpayer should pay for that. Lots of people in society can't find

partners but we don't fund sexual services for them. (June 21, 2016, The Guardian)

One of the sub-themes that emerged from the *economic consequences* theme was that PWDs are seen as lacking economic stability, as the taxpayers are seen as made to pay for their sexual services and other accommodations. Another sub-theme identified is that PWDs are seen as dependent on other individuals in the society and seen as an encumbrance to social welfare budgets. In this regard, one commenter mentioned:

[...] I resent those that knowingly bring people into the world that at some point will have to rely on society for that financial support. You are spending resources that IMHO should not be yours to spend. (September 7, 2016, The NYT)

In the comments, we also noted that self-identified PWDs condemn those that are against the government using taxpayers' money to fund the sexual needs of PWDs. A commenter who happened to be a PWD replied that PWDs want to "have a normal life" just as any other person and their sexual needs should be accommodated:

It's not just about the money. I am a fairly recently disabled person. I am very much in favour of a greater degree of normality in my life. Normality for me has not often included a great sex life. (June 21, 2016, The Guardian)

Gender

Disability has been constructed from a masculine ideology; it tends to focus more on the interests of men with disabilities (i.e., sexuality and employability) as compared with their female counterparts (Oliver, 1990; Santos and Santos, 2018). Some commenters addressed the issue of gender roles in society, specifically in the way the sexual needs of men with disabilities are perceived differently from those of women with disabilities.

[...] I notice that in the image, it is the man who is disabled, and the woman who is able bodied I have noticed that in this type of article or discussion it seems to be the sexual needs of disabled men that are most often raised, and there are fewer conversations about disabled women having sex (June 14, 2016, The Guardian).

Several commenters raised concerns about the social construction of gender in society and how it has contributed to biased judgements for men who have sex with women with disabilities compared to women who have sex with men with disabilities. Some comments mentioned that the female gender is viewed as weak and less sexual and cases of assault on men with disabilities are treated more as consensual sex as opposed to assault.

Is this potentially ethical when the disabled are a man, even though in the reverse (if the disabled were a woman) it would likely be seen as unethical? [...] this provides a particularly notable opportunity to reflect on the manner in which gender has been socially constructed in our society (e.g., women - weak/dependent/ sex-averse, men - strong/capable/sex-driven), as by raising the stakes of vulnerability, the conditions presented here in some sense magnify the constructions already popularly noted amongst the able bodied (September 7, 2017, The NYT).

The sub-theme of gender inequality was also discussed in the comments and they raised the question on how a person's gender

can have adverse effects in the way a person is treated in society. One commenter wrote:

[...] I'm pretty sure if an able-bodied man of sound mind did this to a brain-damaged woman, people would certainly consider him to be a predator and would not be accepting of the situation and he would probably be facing charges. (September 10, 2017, The NYT)

Stereotypes

PWDs are subjected to unfair stereotyping. According to Machingura and Museka (2018), PWDs have been characterized as "incomplete" or "defective" human beings and consequently subjected to mistreatment. Past literature suggested that one of the main stereotypes that affects PWDs is that PWDs "do not experience sexual feelings" or "that they do not have" or "want to have sex" (Siebers, 2012, p. 37). In online comments of both newspapers, we found that commenters discuss the possible reasons why these sexual and other types of stereotypes exist regarding sexual reproductive health of PWDs. For instance, commenters stated that PWDs' sexual desires are not always "acknowledged by the society" and those involved in the "wellbeing of PWDs such as social workers" may feel "uncomfortable to discuss the sexual needs of their clients."

[...] My able-bodied daughter has a disabled foster child. This kid has just hit puberty, but her social worker insists that she is not experiencing sexual feelings because she is disabled! I explained to the social worker that many children with this disability experience early onset puberty, urges and all. It's one of the flags she should have been looking for. Social worker admitted that she wasn't comfortable with this (June 8, 2016, The Guardian).

PWDs are also stereotyped to be "sexually unattractive," and it is perceived to be difficult for them to attract nondisabled sexual partners. One of the commenters with a disability confirmed that they have attracted little attention from the opposite sex:

As someone with a visible disability, I came to accept long ago that my opportunities are pretty limited in the sex/romance area. This isn't something that I think is a social injustice, however. The vast majority of members of the opposite sex are not attracted to me sexually, and that's fine [...]. (March 18, 2019, The Guardian)

Literature showed that if people without disabilities are involved in a sexual relationship with PWDs, they are usually discouraged because they are assumed to be dating out of pity or have a fetish for PWDs. A commenter who has a disability and dated a non-disabled person shared his experience:

Any non-disabled person dating a disabled person has to deal with the puzzlement of others as why they would do so. [...] After I started seeing my present girlfriend two female acquaintances of mine took it upon themselves (on separate occasions) to question her intensely about the relationship. (February 22, 2016, The Guardian)

According to Esmail et al. (2010), stigma can lead PWDs to embrace asexuality, and this may negatively impact their confidence, desire, and ability to find a partner. In our study, commenters shared their experiences that such stereotypes can lead to "extremely awkward situations" surrounding PWDs' sexualities.

TABLE 3 | Overview of themes, sub themes, and examples.

 Relating disability with extra financial costs of businesses Arguing that PWDs are an encumbrance to social welfare apardias 	[] If somebody is unable to find a partner, then I'm not sure the taxpayer should pay for that. Lots of people in society can't find partners but we don't fund sexual services for them. (June 21, 2016, <i>The Guardian</i>)
 Weilare spending Highlighting social constructions of gender in society Discussing gender inequality within sex among PWDs 	Interesting that the question of gender is not really raised in this article, and I notice that in the image, it is the man who is disabled, and the woman who is able bodied have noticed that in this type of article or discussion it seems to be the sexual needs of disabled men that are most often raised, and there are fewer conversations about disabled women having sex. (June 14, 2016, <i>The Guardian</i>)
Asexualizing PWDs	To be viewed as asexual-when it is not a choice-is not only exasperating, but offensive. (June 8, 2016, <i>The Guardian</i>)
Marginalizing PWDsStigmatizing PWDs	People always seem shocked when us cripples turn out to have sex lives - even more so when it's a sex life that's considered unorthodox in any way shape or form. (December 2, 2016, <i>The Guardian</i>)
 Lacking information access about sex Calling for self-education about PWDs Comparison of PWDs' sex lives with those of non-PWDs 	I am not sure what this author, nor Allan Hennessy in his previous piece, want. Other than that people with a disability should have more, or easier access to, sex. Nothing wrong with that. But suggestions for achieving this seem thin on the ground, beyond 'changing society's attitude'. Given there are so many different kinds of disability, of different severities, the opportunities and barriers for individuals will be very different. (June 14, 2016, <i>The Guardian</i>)
 Understanding of personal autonomy within sexual behavior Depriving of sexual rights Debating on PWDs' procreating Discussing consensual sex issues about PWDs 	Unfortunately, your post does not equate with my experience as a disabled person my disabled friends, my able-bodied friends with disabled partners. For instance (just one, I promise) my able-bodied daughter has a disabled foster child. This kid has just hit puberty, but her social worker insists that she is not experiencing sexual feelings because she is disabled! During one of our little chats, I explained to the social worker
	that many children with this disability experience early onset puberty, urges and all. It's one of the flags she should have been looking for. Social worker admitted that she wasn't comfortable with this. Btw, many sjws are thus for a reason. Asexual or not! (June 8, 2016, <i>The Guardian</i>)
 Debating new medical advances 	There is a moral dilemma here, as there always is with new advancements in medica technology, and treatments. Children can't choose their parents. But a person considering parenthood, even with these considered variables does have an obligation to be fully prepared to take it on and help their child do so. Humanity is brilliantly diverse. But those of us who are different where there might be a form or restriction or pain, can teach each of us patience, compassion, empathy and most or all, the creative spirit from which all the comforts for them flow. (September 7, 2016, <i>The NYT</i>)
 Discussing moral and/or ethical issues Debating medicine as the best solution 	Ms. Black's story and that of her children is certainly inspiring for the fact that they seem to lead rich lives in spite of their "disabilities," but it is dangerous to make broad conclusion about prenatal genetic diagnostics, or what Ms. Black pejoratively refers to as "designer babies," based on the story of one monogenic disorder. My wife and have a beautiful 10-month-old baby girl with an autosomal recessive monogenic disease so rare that one certainly would have thought that one of us would have had to have been born in the rickets to pass it on. But lightning struck, and we did. While the rarity of the condition leaves us not knowing exactly what to expect, we have been told by our medical team that our daughter's condition will progress quickly. My wife and I would do anything to extend and improve the quality of our daughter's life, and we are, and we certainly would have engaged in prenatal genetic counseling and diagnosis had we the benefit of knowing that we had a 25% risk of passing this on ther. And if we are fortunate enough to have another child, we will certainly consult a genetic counselor, engage in prenatal genetic diagnostics and do whatever we car to avoid passing the same disease on to that child. And that child will not be a "designer baby," but instead one that will hopefully live a long, fulfilling life free from an
	 businesses Arguing that PWDs are an encumbrance to social welfare spending Highlighting social constructions of gender in society Discussing gender inequality within sex among PWDs Asexualizing PWDs Marginalizing PWDs Stigmatizing PWDs Lacking information access about sex Calling for self-education about PWDs Comparison of PWDs' sex lives with those of non-PWDs Understanding of personal autonomy within sexual behavior Depriving of sexual rights Debating on PWDs' procreating Discussing consensual sex issues about PWDs Debating new medical advances Discussing moral and/or ethical issues

(Continued on following page)

modern medicine. (September 7, 2016, The NYT)

TABLE 3 | (Continued) Overview of themes, sub themes, and examples

Themes	Subthemes	Examples
Media Portrayal	 Discussing media portrayal of PWDs 	I would also submit the possibility that, as well the constant hammering home by mass media of a constricted and distorted view of what is supposed to be physically attractive, there is the problem that disabled people often experience low self-esteem in a culture which barely includes them in any meaningful way within those representations. Please don't hammer me if you think my comment is a reflection of my own prejudice, it really is not, and the reality is that a disabled person will ultimately face more barriers in overcoming cultural taboos which we are all complicit in propagating. (March 18, 2019, <i>The Guardian</i>)
	 Noting the limited representation of PWDs in the media (TV, films, etc.) 	I suppose the argument is that "we as a society" deny disabled people full humanity by not <i>portraying</i> them as fully sexual beingsand therefore if we only change the representation in advertising and the media then individual choices will follow as night follows day. This sort of almost Borgesian magical thinking is fully endorsed by the BBC and the manufacturers of Maltesers but I've yet to see any research on whether their actions have any positive effects. (March 18, 2019, <i>The Guardian</i>)
Social Justice and Accommodation	 Emphasizing the lack of justice and legal help Calling for health accommodations for PWDs 	The disabled community is still waiting for equality []. (July 26, 2016, <i>The Guardian</i>) Let me get this straight. The case hinged on consent. If he is incapable of giving consent, it was molestation. If he can, it is love, and a terrible tragedy. I fail to see why equipment like that used with Stephen Hawking cannot be set up to find out if he is cognitively impaired, and if so, how much. If he can move at all of his own volition, this should be done. It is a disgusting travesty of justice that Judge Siobhan Teare did not insist on making the prosecutors provide evidence that would have made the outcome clear and unquestionable. If the family or their lawyers refused, the judge should have ruled against, since it then is not a provable case. Or did I get innocent until proven guilty? After years of seeing rapists get off completely or be minimally sentenced, it is horrifying that she got 12°years and hit with all those damages without anyone knowing if anything the family alleged was actually true. It is up to prosecutors to produce evidence that the harm actually occurred, which they still have not done. I was waiting for this to go to trial because I wanted to know. Apparently, truth and the law are not so important to Judge Teare. Shame on her monumental lack of vigilance and moral fortitude. (April 3, 2017, <i>The NYT</i>)

Awareness and Education

Several commenters noted that there is limited access to information about sex education for PWDs. Commenters expressed the need of having sexual awareness and education among PWDs. For example, commenters raised concern that parents, government departments, caregivers, and health institutions withhold information about sex among PWDs. Further, commenters lamented that an information shortage exists for young disabled people, who often do not receive information or get irrelevant information that is not applicable or beneficial to their situations:

Everyone has the right to one - i.e., the state should not take or keep something from you without due process. So disabled young people are let down when it comes to sex education, often receiving none at all, or nothing appropriate to their needs (March 18, 2019, The Guardian).

Commenters also compared PWDs' situations with those people without disabilities when it comes to sex education and awareness:

[...] It's truly shocking in this day and age that young people and children with disabilities aren't getting the sex and relationships education they need as much as those without disabilities. (March 18, 2019, The Guardian)

Contrary sentiments were raised on the same issue. Commenters suggested that it is important to have access to useful sex education, but failure of the government to provide it does not interfere with people's sex lives. Some commenters stated that sex education is not that important as individuals can still figure out how to have sex although they may not take health precautionary measures.

Another commenter echoed that there is a need for people without disabilities to be self-educated about all the possible disabilities that exist, and that awareness would lead to better treatment of PWDs.

[...] I am embarrassed to say I never knew exactly what cerebral palsy was before -- I wonder if a bit of education about various types of disabilities in high school biology classes would make the general public more rational and sensitive in how they relate to people different than themselves? [...] (September 21, 2016, The NYT).

Independence and Autonomy

Under this theme, we found four sub-themes (See **Table 2**). In many cases PWDs are left with a limited choice to decide what is good for them regarding their sexual reproductive health. Commenters mentioned that PWDs are usually controlled or seen as incapable of making their own decisions when it comes to their sexual lives:

Sex might be a very big deal to a Disabled person who has never had the opportunity to see for themself whether it is or not. They might also have been "protected" from it by parents who still see them as children or haven't been encouraged to explore life's possibilities (June 8, 2016, The Guardian). Concerning the sexual deprivation of PWDs, commenters stated that infantilization of PWDs is a "systemic attempt to disempower and deprive PWDs of their sexual rights." For example:

[...] In my experience it's one of the most significant aspects of their humanity which is most often threatened, sabotaged, lied about and denied outright despite being clearly supported in some state's legal and ethical framework. This abrogation of human rights is systemic: from "carers" claiming to be "offended" through to management at large which fails to enforce and support sexuality policies. Or to punish clear violations. How do you best infantilize a person? Deny them sexuality [...]. (June 21, 2016, The Guardian)

Whether PWDs should or should not have children was another discussion point among online commenters in both *The NYT* and *The Guardian*. This was a result of some of the commenters' fears of PWDs passing their conditions to their children. Another issue was raised about consensual sex among PWDs. The commenters noted that PWDs are discouraged from engaging in sex to avoid cases of abuse, as disability may make it hard to ascertain their consent, especially for those with mental cognitive disorders. However, some commenters highlighted that this is starting to change as those with cognitive disabilities are educated on how to determine their "boundaries" and how to navigate sexual relationships:

[...] Paradoxically this makes them more vulnerable to abuse, not less. Thankfully this is starting to change, and learningdisabled people are being taught to assert their boundaries and negotiate sexual relationships. [...] They think of it as child abuse, when no such comparison is remotely logical. (June 8, 2016, The Guardian)

Medical Standpoint

Within this theme, three sub-themes emerged from the online comments (See **Table 2**). According to Kaplan's disability model, disability is seen as an illness that must be treated through medical intervention (Kaplan, 2000). Similarly, commenters discussed medical advancements that could help people avoid passing on disabilities and improve a person's genetic makeup.

I have two children with different neurological conditions that the scientific community is starting to suspect (although the research is not yet conclusive) are genetic. Would I have had biological children if I had known? Maybe, as their conditions are non-degenerative and not physically painful, and the odds of independent adult lives look good. But of course, it's a factor to weigh in the decision to have children, or to utilize medical techniques to reduce the risk of passing a harmful trait (September 7, 2016, The NYT).

Another issue that was discussed in both newspapers was moral and ethical considerations on whether parents who have disabilities or who are likely to pass on a trait should have children.

It's a 50/50 chance, depending on the choice of genetic partnership.

There is a moral dilemma here, as there always is with new advancements in medical technology, and treatments. Children can't choose their parents.

But a person considering parenthood, even with these considered variables does have an obligation to being fully prepared to take it on and help their child do so (September 7, 2017, The NYT).

Media Portrayal

Commenters shared their thoughts about the lack of media portrayal or misrepresentation of PWDs' sexuality in the media (i.e., films and TV shows). In certain instances, when PWDs' sexuality and sex lives are shown in the media, they overcome their disability and lead a "normal" life. Interestingly, commenters also critically reflected that the depiction of sexual scenes of people without disabilities in the media and specifically in the entertainment industry does not reflect reality:

Able bodied couples are almost always shown to have amazing sex on screen with the inevitable simultaneous orgasms, and this is extremely unrealistic and untrue. Meanwhile, disabled people, as the writer says, are almost always shown to be asexual, which is also extremely unrealistic and untrue (June 8, 2016, The Guardian).

Further, online commenters in both newspapers acknowledged how the media shape societal narratives regarding PWDs' sexual reproductive health:

The media is very powerful in shaping the way that people view and judge others [...] It is really no fun being treated as pitiful and childlike. I get treated like a child by complete strangers [...] I wouldn't get spoken to like that if I wasn't in a wheelchair- people pick their attitudes up from the media. (June 8, 2016, The Guardian)

Commenters also indicated that the portrayal of PWDs' sexuality in the media is "always that of being asexual." They emphasized the ethical issues of advertisements and media in regard to PWDs:

I suppose the argument is that "we as a society" deny disabled people full humanity by not portraying them as fully sexual beings--and therefore if we only change the representation in advertising and the media then individual choices will follow (March 18, 2019, The Guardian).

Social Justice and Health Accommodations

Most of the commenters highlighted the need for social justice in the case of sexual abuse when PWDs are involved, or they need legal help related to consensual sex. A majority of the commenters raised serious concerns about the legal system in the U.S. and highlighted the complexity of financial settlements and the number of years of incarceration of those involved in sexual acts with PWDs. From the online comments, it became evident that people have difficulties understanding the clear differences between legal terms such as "consent" and "sexual assault" regarding the sexual involvement of PWDs:

Whether or not this constitutes assault depends on more precise individual facts which were not revealed. Reminds me of the case of the female professor from Rutgers who was convicted of assault after her sexual relationship with a man who was cognitively disabled. What constitutes 'consent' is usually a legal analysis performed by a court (September 7, 2017, The NYT).

Tone	The NYT	The Guardian
In favor of sexual reproductive health of PWDs	1,055 (47%)	685 (49.3%)
Not in favor of sexual reproductive health of PWDs	390 (17.3%)	204 (14.7%)
Neutral about sexual reproductive health of PWDs	690 (30.7%)	185 (10.7%)
Mixed tone about sexual reproductive health of PWDs	109 (4.8%)	315 (22.6%)
Total	2244 (100%)	1389 (100%)

In addition, some of the commenters who self-identify as PWDs called out the need for the medical sector to make health accommodations for PWDs. The commenters shared their personal experiences that medical experts or medical doctors tend to treat them differently compared with non-disabled people's experiences visiting a medical professional, especially when the issue of sexual health is discussed:

I was struggling with insomnia and she told me that she could make a fortune if she could solve two problems: insomnia and female loss of libido. I replied that at least I didn't have a problem with libido and that we had an amazing sex life. She got really embarrassed and cut short the appointment. I changed doctors after that (March 18, 2019, The Guardian).

Tone of Online Comments Regarding Sexual Reproductive Health of PWDs (RQ2)

Findings showed that the number of positive, favorable, neutral, and mixed views outweighed the purely negative views toward the access of sexual reproductive health of PWDs. **Table 3** presents examples regarding commenters' tone toward equal access to sexual reproductive health of PWDs in both newspapers.

Similarities and Differences in the NYT and the Guardian (RQ3)

The researchers noted similarities in the way online commenters in the two newspapers addressed the issue of sexual reproductive health of PWDs. In both newspapers, most of the commenters had a favorable outlook toward issues concerning PWDs and their sexual reproductive health. Commenters advocated for the need of society to champion the sexual reproductive health of PWDs, especially in creating awareness about PWDs and educating society on PWDs' issues. Similarities were noted in both newspapers' commenters regarding being in favor of sexual reproductive health of PWDs (47% in *The NYT* and 49.3% in *The Guardian*, See **Table 4**). Almost a similar number of commenters from both newspapers were not in favor of PWDs having sexual reproductive health rights (17.3% in *The NYT* and 14.7% in *The Guardian*).

In terms of the differences, *The NYT* received more comments (n = 2,244) than *The Guardian* (n = 1,389). Further, 22.6% of the online comments in *The Guardian* showed mixed tone compared to 4.8% in *The NYT* (See **Table 4**). The commenters in *The Guardian* often discussed sexual reproductive health of PWDs from a political ideology and mainly promoted the need for

medical interventions as a solution to end disability inequalities. The commenters in *The NYT* stories often focused on legal issues about sexual reproductive rights of PWDs. Our analysis posited that commenters viewed the sexual reproductive health of PWDs as a social issue by sharing personal stories that had a human connection. Most of the commenters in *The Guardian* self-identified as PWDs, and the conversations did not deviate to other topics, compared with *The NYT* where commenters discussed unrelated topics of PWDs' sexual reproductive health. Commenters in *The NYT* discussed topics related to the legal system in the U.S, while commenters in *The Guardian* tended to discuss negative media portrayals of PWDs.

DISCUSSION AND CONCLUSION

The findings of this research are consistent with the discourse that disability is framed in the media as a burden to society based on the business/economic consequence. In our study, we also found that PWDs are sometimes seen as a burden to the taxpayers and an encumbrance to society. The business/economic consequence is a traditional frame that was quantified by Haller (1995) to understand disability and PWDs in the media. The Americans with Disabilities Act coverage in the mainstream media in the 1990s showed that the U.S. business community associated the Act with the stereotype that PWDs cost society money. However, the Act aimed to make the society more accessible to the disabled on every level.

Gender has been discussed heavily in online comments and is seen as an underlying factor when it comes to sexuality among PWDs. Our findings reflect how Western societies view gender differences when it comes sexual health issues. Commenters tend to view women with disabilities as asexual and vulnerable and men with disabilities as hypersexualized. For example, a legal case involving a man with disability (ies) and a woman without disabilities was discussed in *The NYT*. Commenters noted that if the genders had been reversed (i.e., an assault case involving a woman with disability (ies) and a non-disabled man), it would be termed as assault or rape.

Lack of information access was also discussed in the online comments. Literature shows that there is a need for sexual health information to be inclusive of PWDs (Shandra, 2018). Our findings suggested that PWDs have limited access to information regarding sexual reproductive health. Our study demonstrates that PWDs not only have limited access to information, but that the available information is not relevant to many of them.

Our study suggests that PWDs' sexual independence and autonomy is mainly curtailed by their health caregivers, family members or medical professionals (i.e., doctors and nurses) who may feel uncomfortable talking about sexual health with their patients. Commenters discussed that disability is avoidable through medical advancements such as eugenics to avoid having disabled children. Although previous research looked at how disability can be cured through medical interventions (Hahn and Belt, 2004), the possibilities of PWDs passing their traits could be avoided with abortion and sterilization. Studies in the past have looked at general media representations of PWDs (Ghajarieh, 2012); however, the media portrayal of sexual reproductive health of PWDs is scant. Some commenters criticized PWDs for having sexual relations that would most likely lead them to having children with disabilities while others condemned the society for its unfair treatment of PWDs.

In general, the discussions in online comment sections on the sexual reproductive health of PWDs revolved around the need of society to be cognizant that PWDs also have "sexual desires" and are not "asexual." The commenters shared their lived experiences and those of their loved ones who are PWDs and the challenges they encounter such as not being able to find sexual partners. However, the discussions in the comments attested that the constraints faced by PWDs in terms of their sexual reproductive needs are mainly due to society not acknowledging these needs. Hall (2018) study findings were similar in noting that PWDs want the same sexual relationships as non-disabled individuals. Furthermore, in the online comment sections of the two newspapers, the stereotypes discussed reflected how the sexual lives of PWDs are impacted by the stereotypes. The commenters noted that stereotypes about PWDs such as asexuality, being sexually unattractive, and being unable to maintain relationships tend to propagate the negative and limiting perceptions that society has about PWDs and their sexuality.

Our results revealed that commenters in the The NYT and The Guardian discussed sexual reproductive health of PWDs in generally similar ways. Most commenters have a positive perception in regard to PWDs' equal access to sexual reproductive health, and they criticize societal behavior (e.g., treatment, attitude, failure, and lack of inclusivity) toward sexual reproductive health of PWDs. Our findings align with existing research, which suggests that discussions in The Guardian are typically civil, coherent, and critical (Collins and Nerlich, 2015; Graham and Wright, 2015). This seemed to suggest that commenters in both newspapers may be well informed, liberal leaning, and have close relationship with this community due to their lived experiences. This suggests that positive tone may influence others who have prejudice against sexual reproductive health rights of PWDs. Research indicates that online commenters influence not only one another but also those who read the comments and do not leave any feedback (Anderson et al., 2014; Walter et al., 2010).

Our study found that *The NYT* received more comments than *The Guardian*. However (without knowing comment

moderation policies for both newspapers), we cannot deduce what are the reasons behind it. Future research of comment sections might address such questions as whether some readerships are more open than others to the discussion of sensitive topics; whether some readerships have better access than others to communication technologies; and the impact of differences among socio-political and economic cultures. Surprisingly, *The Guardian* had more articles but received fewer comments than *The NYT*. To make sense of online comments on sensitive topics, future studies should focus on what type of content receives more audience engagement under news articles.

Theoretically, we used the internet as a Habermasian public sphere to examine user-generated comments about sexual reproductive health of PWDs. It is important to note that we do not extend our findings to broad social conclusions; rather, we present them as a guide to understand users' comments from both newspapers. Users' opinions toward sexual reproductive health of PWDs were generally open and civil. These characteristics note that online news comments do operate as public sphere. In terms of people's understanding these issues, conversations were mostly homogeneous and inclusive on both newspapers.

The study can help to advocate for better health care services for PWDs by presenting some evidence that they lack access to information relevant to their sexual health. In addition, the study suggests a need to educate the normally abled members of the public about PWDs having the same sexual needs as they do. This study suggests that positive media coverage of disability issues might help curb the stereotypes that PWDs do not engage, or desire to engage, in sex. This may ensure that PWDs have access to services such as sexual assistance and health services. However, it is important to note that not all news websites have an accessible interface, which can hinder certain people (i.e., those with visual disabilities) from taking part, voicing their opinions, and getting information from these forums. Therefore, our study has not captured the response of those individuals.

The issue of sexual reproductive health of PWDs remains a complex topic that is difficult to study due to the stereotypes and the sometimes taboo aspect surrounding sex among PWDs. To better understand the complexity of the topic, and to ensure that online comments accurately reflect the views of the commenters, future studies could interview the commenters, if such access and permission could be gained, and use a computational sciences approach to understand PWDs sexual reproductive health issues on the internet and online comments. The present study did not take demographic information of commenters into account. Future studies could consider including demographic information such as gender, race, political affiliation, and education to explore online news commenters' perceptions related to sexual reproductive health of PWDs.

Relatively few scholarly studies look at sexual reproductive health of PWDs in online comments. Our study contributes to the growing body of literature in this important area of research. Future scholars in media and communication science and public health could further explore online discussions regarding PWDs' sexual reproductive health. Regarding the scope of the present study, our findings may not be equally applicable in non-Western contexts due to several reasons. First, people may view and understand disability and sexual reproductive health differently than Western countries. Second, not all newspapers allow their users to post comments under news stories. Third, internet access and penetration may vary across countries and people may not have equal opportunities to use digital platforms to express themselves. Future research should investigate what motivates online readers to comment on social issues such as sexual reproductive health of PWDs.

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DATA AVAILABILITY STATEMENT

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

AUTHOR CONTRIBUTIONS

All authors contributed to the conceptualization and design of the study. MA and MI led the development and writing of this manuscript. PL and AB contributed to the data analysis, revising, and finalizing of the manuscript.

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Conflict of Interest: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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