Review

Impacts of Sexual and Reproductive Health and Rights Misinformation in Digital Spaces on Human Rights Protection and Promotion: Scoping Review

Tina D Purnat¹, MSc; Elisabeth Wilhelm², MA; David Scales³, MD, PhD; Claire Wardle⁴, PhD; Sheri Bastien⁵, PhD; Bela Ganatra⁵, MD; Antonella Lavelanet⁵, PhD; Gitau Mburu⁵, MPH, MD, PhD; Tigest Tamrat⁵, MPH, PhD; Åsa Nihlén⁵, MSc

Corresponding Author:

Åsa Nihlén, MSc

UNDP (United Nations Development Programme)/UNFPA (United Nations Population Fund)/UNICEF (United Nations Children's Fund)/WHO (World Health Organization)/World Bank Special Programme of Research, Development and Research Training in Human Reproduction

Department of Sexual, Reproductive, Maternal, Child, Adolescent Health and Ageing

World Health Organization

Avenue Appia 20 Geneva, GE, 1211 Switzerland

Phone: 41 22 791 2111 Email: nihlena@who.int

Abstract

Background: Sexual and reproductive health and rights (SRHR) are foundational to both individual autonomy and global well-being. Misinformation in this domain poses serious risks by undermining evidence-based decision-making, weakening systems of accountability, and perpetuating social injustices.

Objective: This scoping review aimed to map and synthesize evidence on the forms, spread, and impacts of misinformation related to SRHR in digital spaces, with a particular focus on implications for the protection and promotion of human rights.

Methods: We conducted a scoping review of scientific papers and gray literature. It was guided by the JBI (Joanna Briggs Institute) population, exposure, and outcomes framework. The extracted information was documented following the PRISMA-ScR (Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews) checklist. Thematic analysis was carried out and mapped against human rights standards: (1) equality and nondiscrimination; (2) Availability, Accessibility, Acceptability, and Quality; (3) informed decision-making; (4) privacy and confidentiality; (5) participation and inclusion; and (6) accountability.

Results: Of the 254 eligible studies and documents, 133 focused on the information ecosystem, 37 on the individual, 32 on service delivery and health system, 31 on law and policy, and 21 on community levels. SRHR misinformation impacts individuals' informed SRHR decisions by shaping their beliefs, attitudes, and health-seeking behaviors. It reinforces harmful and discriminatory social norms at community levels and the exclusion of marginalized voices. SRHR misinformation impacts health systems by shaping provider knowledge and practice, disrupting service delivery, and creating barriers to equitable care. It may function as a legal and policy tool to erode SRHR protections. The design of online platforms, digital marketing strategies, and content moderation policies enables misinformation to spread widely while restricting credible SRHR content.



¹Harvard TH Chan School of Public Health, Boston, MA, United States

²Department of Midwifery, School of Healthcare and Care Sciences, University of West Attica, Athens, Greece

³Weill Cornell Medicine, New York, NY, United States

⁴Department of Communication, Cornell University, Ithaca, NY, United States

⁵UNDP (United Nations Development Programme)/UNFPA (United Nations Population Fund)/UNICEF (United Nations Children's Fund)/WHO (World Health Organization)/World Bank Special Programme of Research, Development and Research Training in Human Reproduction, Department of Sexual, Reproductive, Maternal, Child, Adolescent Health and Ageing, World Health Organization, Geneva, GE, Switzerland

Conclusions: SRHR misinformation in digital spaces is a systemic issue that undermines human rights across multiple levels, highlighting the urgent need for integrated, rights-based approaches to research, policy, and intervention.

(JMIR Infodemiology 2025;5:e83747) doi: 10.2196/83747

KEYWORDS

communication; sexual health; reproductive health; human rights; information science; infodemic; digital spaces; information environment; misinformation; information ecosystem; digital platforms; digital communities

Introduction

Access to accurate, evidence-based information is integral to realizing sexual and reproductive health and rights (SRHR). The ability to make informed decisions across the full spectrum of sexual and reproductive health (SRH)—from the prevention of health-harmful practices to contraception, fertility, pregnancy, and lifelong sexual health and well-being-is fundamental to health, dignity, population resilience, and enables people to thrive into the future [1]. Misinformation [2] in this domain can pose significant risks by undermining evidence-based decision-making, eroding accountability, and perpetuating injustices. Although public health programs have thorough experience and expertise in providing credible, accurate health information to clinicians, patients, and the public, these long-standing approaches have been strained in the past two decades by rapidly changing information ecosystems [3-5]. How people seek and consume health information has changed with the digitization of information exchange and the ubiquity of consumer-centered and device-mediated information consumption. Digital access to health information is particularly critical for adolescents, who rely on online sources for education and support [6].

Misinformation is defined as false, inaccurate, or misleading information shared without intent to deceive [2]. It differs from disinformation, which involves the intentional spread of false or misleading content to profit from, deceive, or manipulate individuals or communities [2]. While these two concepts are distinct in terms of intent, they often operate in overlapping and reinforcing ways within digital environments and leverage the same features of the information ecosystem and vulnerabilities of online users [7]. In practice, the outcomes of both misinformation and disinformation, such as confusion, mistrust, stigmatization, and harm, can be similarly damaging, especially in the context of SRHR. SRHR disinformation is included in this review as a particularly harmful form of misinformation, with the potential to deliberately erode human rights protections and restrict access to evidence-based care.

Both mis- and disinformation spread rapidly in digital spaces, which are online environments where people interact, share content, and consume information. These include social media platforms (eg, Facebook [Meta], X [formerly known as Twitter; X Corp], and Instagram [Instagram from Meta]), websites, forums (eg, Reddit [Reddit, Inc], comment sections under news or blog posts), blogs, messaging apps (eg, WhatsApp [Meta] and Telegram [Telegram Messenger Inc]), and other digital platforms (eg, Alexa [Amazon.com, Inc] and Google Maps [Google Inc]). However, this digital ecosystem is far broader than traditional social media: people also encounter and

negotiate SRHR narratives in the digital information environment within gaming communities, livestreaming platforms, pornography sites, dating apps, and short-form video environments such as TikTok or YouTube Shorts (Google LLC). These varied spaces are not only sites of information transmission, but also of identity formation, social bonding, entertainment, and emotional expression, all of which shape how users interpret and act on health-related messages. For many individuals, particularly youth and marginalized communities, these platforms have become primary sources of SRHR knowledge, community, and meaning-making. Yet, they also enable the amplification of inaccurate or deceptive content, often without adequate moderation or accountability. This can distort individuals' perceptions, influence health-related decisions and behaviors, reinforce harmful norms and stigma, and erode trust in public health guidance and institutions [8,9].

The broader field of misinformation research is rapidly evolving. It is moving beyond static definitions of false content and intentions to spread it to embrace a more dynamic, contextualized understanding of how information and narratives flow through digital spaces and impact social norms and behaviors [3], and learning from specific health contexts such as vaccine demand promotion, science communication, cancer treatment and prevention, and pandemic preparedness and outbreak response [4,10-14]. Scholars and public health leaders increasingly recognize that interventions focused solely on individual knowledge, fact-checking, or improved digital marketing are insufficient in addressing the structural and systemic nature of the problem [3,9,14-17]. Misinformation does not merely reflect gaps in public understanding, but intersects with identity, emotion, prior experience, and the relational dynamics that shape trust and meaning-making [3,8,16,18].

Public health responses to misinformation have often focused on correcting individual behaviors rather than addressing systemic failures in information governance [14,15,17,19]. Public health efforts that continue to emphasize scale through adaptable digital communication and engagement risk replicating limited impact if they do not adapt to the lived realities of how people seek, share, and interpret health information and experience relationships online [15,16,18]. This shift in understanding has catalyzed calls for more equity-centered, interdisciplinary, and reflexive approaches that engage with information ecosystems holistically, recognize user agency and curation, and address power imbalances in how knowledge is produced and accessed [2,3,14-18,20].

The information environment refers to the dynamic set of ecosystems [21] of all the communication channels, platforms, actors, narratives, and interactions that influence how individuals



receive, process, and use information. Often, public health functions do not have strong policies or funded programs designed to address information environment challenges or mitigate their harms to health, and many new efforts were stood down after the pandemic due to a lack of resources and integration into routine programming [5,17,19,22].

In the context of SRHR, the information environment includes not only digital platforms but also how it intersects with traditional media, community networks, health systems, legal frameworks, socially built identities, and social norms that shape the flow and interpretation of SRHR information. Additionally, the World Health Organization (WHO) has identified artificial intelligence (AI)—generated misinformation as a growing threat to SRHR [23], and the United Nations (UN) has recognized the role of digital platforms in shaping the SRHR information landscape and has raised concerns about governance and accountability [24]. Companies that operate these platforms have a responsibility to respect human rights; yet, content moderation policies and advertising models often allow misinformation to proliferate [25,26].

This scoping review maps existing literature on how misinformation related to SRHRs circulates in digital spaces, with the aim of identifying dominant themes, gaps in the literature, and implications for human rights protection (reducing harm) and promotion (enabling autonomy). It introduces human rights standards to an analysis in information science and misinformation studies, and is not an interpretation of existing legal frameworks that are used in international law in relation to SRH and health information. At the same time, it adds a socioecological lens to the analysis of SRH misinformation literature, which enables a more comprehensive discussion of influences and impacts at each of the socioecological levels, as well as interactions between them.

This paper is the first in a series of publications that will emerge from the data collected during the review. This paper examines SRHR misinformation through the levels of the socioecological model and aims to inform future research priorities and guide the development of rights-based, evidence-informed interventions in an increasingly complex and rapidly evolving digital information landscape. While this paper focuses on the human rights impacts of SRHR misinformation, future papers from this review will map, describe, and discuss the drivers and amplifiers of SRHR misinformation, and interventions and recommendations.

Methods

Study Team

The core study team consisted of five members with expertise in health communication, misinformation studies, community engagement, information science and analytics, medicine, sociology, SRH, gender, and human rights. A project advisory group was convened and consulted in defining the scope, distributing a web survey to networks and experts, reviewing findings, and reporting results. Consultations with SRHR practitioners and policy makers, human rights experts, and digital health and health communication specialists were conducted to identify additional sources of gray literature, validate findings, and provide contextual insights on addressing SRHR misinformation.

Study Design

We used the JBI (Joanna Briggs Institute) manual for evidence synthesis for the overall process of review and analysis [27]. We followed the PRISMA-ScR (Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews) checklist [28] (Multimedia Appendix 1).

The objective was to organize and summarize available literature and inform future research on the incidence, types, and influence of SRHR misinformation in digital spaces and its effects at the individual, community, health system, law and policy, and information ecosystem levels, from a human rights perspective.

Identifying Research Questions

The following questions guided the scoping review: (1) What are the common types of SRHR misinformation and narratives in the digital information environment? (2) How is SRHR misinformation amplified in the digital information environment, and why or for what reasons? (3) What kind of effect does SRHR misinformation and narratives in the digital information environment have on individuals, communities, service delivery, laws, and policy?

To effectively answer these questions, we adopted the population, exposure, and outcome framework developed by the JBI [29]. The population, exposure, and outcome criteria were as follows: P (population)—research and gray literature focused on SRHR misinformation in digital information environment affecting individuals, communities, health workers, or policy makers; E (exposure)—misinformation related to SRHR topics such as contraception, fertility, abortion, maternal health, sexual health, and bodily autonomy; and O (outcomes)—impacts on decision-making, health-seeking behavior, health service delivery, community norms, laws, and policies.

The corresponding inclusion and exclusion criteria are summarized in the SRHR misinformation Table 1.



Table 1. Summary of inclusion and exclusion criteria for papers in this scoping review focused on misinformation in digital spaces related to sexual and reproductive health and rights.

	Included	Excluded
Paper type	Original research papers, policy analyses, policy reports, and commentaries published in peer-reviewed research journals and gray literature	Preprints, duplicates, theses, or book chapters
Methodology	Can include any methodology or type of research (qualitative, quantitative, and mixed methods)	N/A ^a
Geography	Any country or region	N/A
Language	English	Not in English
Publication date range	January 1, 2019, and November 23, 2024	Outside of January 1, 2019, and November 23, 2024
Full text available?	Yes	No
Related to topics in sexual and reproductive health and rights (eg, contraception, fertility, abortion, maternal health, and bodily autonomy)	Yes	No
Related to misinformation in digital spaces (eg, includes social media, apps, and the internet)	Yes	No
Related to health information—related outcomes? (eg, decision-making, health-seeking behavior, health service delivery, community norms, laws, and policies)	Yes	No

^aN/A: not applicable.

Search Strategy

We considered qualitative, quantitative, and mixed-methods studies, commentaries, policy analyses, and gray literature in English. We searched PubMed, Scopus, Web of Science, JStor, and HeinOnline databases with a search strategy presented in Multimedia Appendix 2. In addition to more traditionally used databases in information science (PubMed, Scopus, and Web of Science), additional searches were also performed in JStor and HeinOnline. JStor, as Web of Science, covers humanities and social sciences, but it is more expansive, which was deemed useful to locate more papers for this study. HeinOnline covers legal and law-related materials and was included to search for current discussions of SRHR misinformation in digital spaces, as impacts on law were part of the research question.

Search terms were tested and developed iteratively from narrow to the final broader definitions to intentionally capture the diversity of studies that might otherwise not be included because they used diverse keywords and terms in relation to SRH and misinformation. We included studies and documents published and made available in the databases between January 1, 2019, and November 23, 2024.

Information environment dynamics, related regulatory, platform, and consumer protection policies, user trends, and narratives change quickly and are often first described in gray literature before scientific papers. As we wanted to capture the current discussions and evidence, and the SRHR misinformation impacts are often described in gray literature such as relevant government, UN, and nongovernmental organization reports and newspapers, we also searched Google and Google Scholar. In addition, policy and evidence reports were also suggested by key informants via a web survey on the WHO website that was

open for 6 weeks, between November 25, 2024, and January 5, 2025, and advertised through WHO SRHR networks and social media.

Document Screening and Inclusion

Two investigators searched and screened the documents by titles and abstracts, and then reviewed the full texts of potential documents to include. The screening by titles and abstracts focused on excluding and marking as irrelevant the studies that did not relate to SRHR misinformation and digital spaces, were in a language other than English, or that were books, book chapters, or theses. The subsequent full-text review focused on applying all exclusion and inclusion criteria to the remaining studies. Conflicts were resolved through consensus between the two investigators. Records were managed in the Covidence systematic review software [30]. We excluded any documents not in English, reviews and meta-analyses, and those that did not focus on misinformation in the digital information environment or misinformation in SRHR.

Data Extraction

A data extraction form was developed to extract data from included studies. The form included fields to capture information about the study or document (authors, title, journal or publisher, and country or region) and document or study characteristics (study type, digital setting, and human rights standards). It also captured misinformation characteristics (topics and types), underlying drivers and attributions, digital channel, impacts of misinformation, affected populations (by social group, identity, or vulnerability), legal and policy implications, interventions and solutions, and additional notes.



Summarizing and Reporting the Results

We conducted a thematic content analysis using narrative descriptions of the extracted data, and mapped it against categories of human rights standards, namely (1) equality and nondiscrimination, (2) Availability, Accessibility, Acceptability, and Quality (AAAQ), (3) informed decision-making, (4) privacy and confidentiality, (5) participation and inclusion, and (6) accountability. The sources for the human rights standards applied include international and regional human rights treaties, the general comments and recommendations issued by the UN human rights treaty-monitoring bodies, international and regional court decisions, and international and regional consensus documents. The application of these to the area of SRH was made on the basis of WHO guidelines, taking "Ensuring Human Rights in Contraceptive Information and Services: WHO Guidance and Recommendations" (2014) [31] as a key reference and point of departure. We organized the results by levels of the socioecological model: individual, community, service delivery and health system, law and policy, and information ecosystem. The work was performed by two analysts and reviewed by two other reviewers.

Patient and Public Involvement

This study did not involve patients or the general public. Their input was not sought in the scoping review design, interpretation of results, or drafting or editing this document.

Ethical Considerations

This study was a scoping review of publicly available literature and documents, and ethical approval was not required.

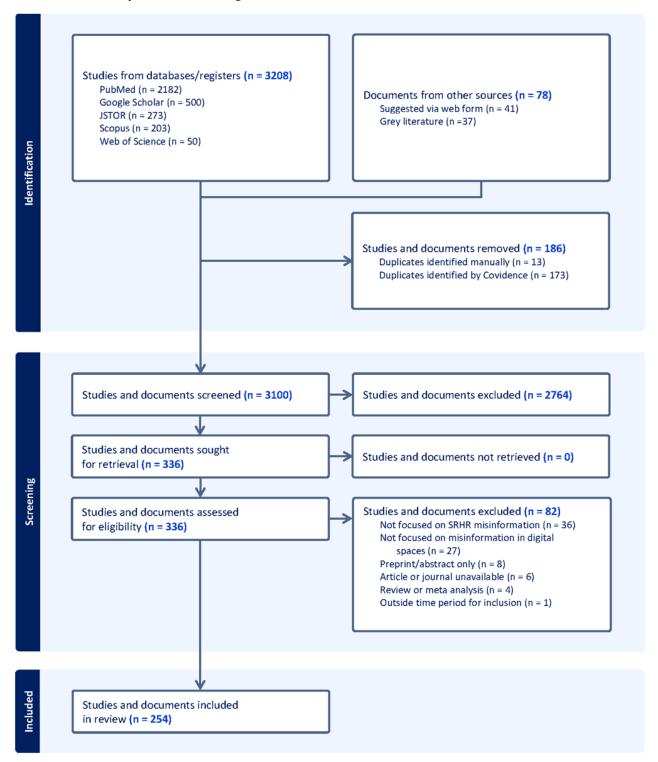
Results

Overview

We retrieved 3208 studies from databases and an additional 78 documents from gray literature sources. After removing duplicates, 3100 records remained for screening of titles and abstracts, of which 336 were retrieved for full-text screening. A total of 82 records were excluded for the following reasons: not focused on SRHR misinformation (n=36), not focused on misinformation in digital spaces (n=27), was a preprint or only had an abstract available (n=8), unavailable to retrieve (n=6), review or meta-analysis (n=4), outside of time period for inclusion (n=1). In total, 254 studies and documents were included in the final review. The study selection process is outlined in the PRISMA-ScR flow diagram in Figure 1.



Figure 1. PRISMA-ScR flow diagram. PRISMA-ScR: Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews; SRHR: sexual and reproductive health and rights.



Description of Included Studies and Documents

Characteristics of Studies and Documents

Of the 254 studies and documents (Multimedia Appendix 3 [23,24,32-278]), 77% (n=195) were from scientific journals and 23% (n=59) from gray literature. Detailed figures describing the studies and documents are listed in Multimedia Appendix 4. All analysis was carried out on the full dataset of studies and documents, and referred to as "studies" for the rest of this paper.

Not all studies referred to specific geographies; 43% (n=40) had a global focus, 39% (n=37) focused solely on the US context, and 18% (n=16) focused on other country contexts.

In total, 45 countries or regions were covered in the studies. The 5 countries included in most studies were the United States (n=80), Canada (n=12), Australia (n=9), Brazil (n=7), and the United Kingdom (n=5), followed by studies of the digital environment spanning the European region (n=5). Only 10% (n=26) of studies and documents specified the language of the



misinformation that was covered; 12 analyzed English content, followed by Spanish (n=4), French (n=4), Portuguese (n=2), Dutch (n=1), Russian (n=1), Malay (n=1), and Ukrainian (n=1).

Among the included studies, 49% (n=125) are qualitative and focused on the description of digital SRH misinformation in specific populations, specific settings, and on specific SRH topics. Other types of studies were quantitative studies (n=27), news or magazine articles (n=25), commentaries (n=24), mixed-methods studies (n=16), reports (n=15), policy analyses (n=8), legal analyses (n=8), advocacy materials (n=2), webinars or podcasts (n=2), and toolkits or tools (n=2).

More than half (n=149, 57%) of the 254 studies described specific challenges or characteristics of online SRHR misinformation but did not make any recommendations or list strategies for action. A total of 86% (128/149) of those were from scientific journals.

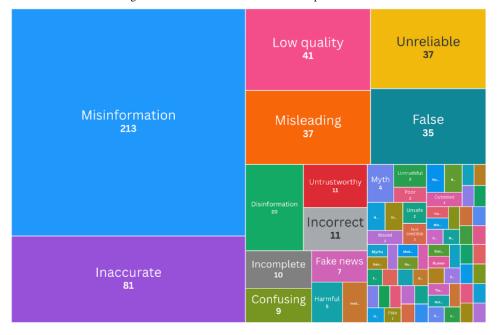
Characteristics of SRHR Misinformation

For each study, terms that were used to describe misinformation were logged. Across all studies, 75 different terms were used

to refer to misinformation, and often multiple terms within the same study. A treemap was generated with the Fourish [279] web tool, where the number of studies (of total 254) that used each term is represented with a proportionally-sized box (Figure 2). Underlying data for the treemap is in Multimedia Appendix 4.

The SRH topics that were covered by the studies were very diverse and are summarized in Multimedia Appendix 4, by topics referred to by authors or communities described in the study. More than 25% (n=72) of all studies discussed SRHR in broad terms, while those focusing on specific topics included maternal and perinatal health (n=36), safe abortion and postabortion care (n=30), fertility, infertility and assisted reproduction (n=20), vaccines (n=19), contraception and family planning (n=17), men's SRH (n=16), adolescent SRH (n=13), LGBTQ+ (Lesbian, Gay, Bisexual, Transgender, Queer, and more) SRH (n=12), gender-based violence and sexual violence (n=6), sexually transmitted infections, including HIV (n=4), menstrual health and hygiene (n=3), cervical cancer and human papillomavirus (HPV) prevention (n=2), and SRHR in public health emergencies (n=1).

Figure 2. A treemap of terms used to refer to SRH misinformation in studies included in the scoping review. The number next to each term represents the count of the studies that used it when referring to misinformation. SRH: sexual and reproductive health.



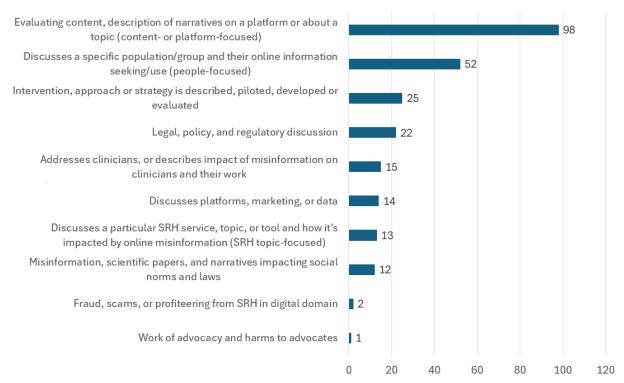
Digital Contexts and Settings

Regarding digital information environment or settings covered, the most commonly discussed were digital platforms in general (n=151, 59%) and social media (n=98, 35%), while far fewer discussed search engines (n=8, 3%), advertising and marketing (n=8, 3%), and online forums (n=6, 2%). If specifically mentioned, 23 different platforms were discussed across all studies and documents, most commonly X (formerly known as Twitter; n=32), Facebook (n=28), YouTube (Google LLC; n=26), and TikTok (n=26).

An exploratory categorization of the studies and documents by topic discussed in relation to misinformation was developed as a preliminary overview, as existing taxonomies are not integrative and omit aspects that would need further coding in this dataset. This exploratory categorization showed that the most common types of study were about content- or platform-focused issues, how specific groups use digital spaces for SRH, descriptions of interventions and strategies, and legal and policy discussions (Figure 3). The exploratory categorization will be discussed in more detail in future papers.



Figure 3. Exploratory categorization of types of misinformation discussion across included studies and documents. SRH: sexual and reproductive health.



Human Rights Impact of SRHR Misinformation by Level of the Socioecological Model

Overview

The results reported below used an analysis framework (Figure 4) that mapped the impacts of SRHR misinformation on human rights standards across the levels of the socioecological model. Organized by the socioecological model, 52% (n=133) studies and documents focused on the information ecosystem, followed by 15% (n=37) at the individual level, 13% (n=32) at the service

delivery and health system level, 12% (n=31) at the law and policy level, and 8% (n=21) at the community level. The following sections present a mapping of the existing literature describing SRHR misinformation impacts on human rights, and reference illustrative examples from the included studies. A detailed mapping of included studies and documents by levels of the socioecological model is presented in Multimedia Appendix 5 [23,24,32-127,129-133,135-170,172-175,177-180, 182-193,195,197-213,215-218,220-236,239-249,251,252, 254-278,280,281].



Figure 4. An analytical framework used in the analysis of misinformation impacts on human rights protection (reducing harms) and promotion (enabling autonomy) in the digital information environment. AAAQ: Availability, Accessibility, Acceptability, and Quality.



Individual Level: Misinformation Disempowers Individual SRHR Decision-Making and Autonomy

Overview

The data collected through this review shows how SRHR misinformation directly undermines individuals' autonomy by distorting health beliefs, shaping attitudes, and disrupting health-seeking behaviors. These effects are mediated by cognitive biases, social influences, and disparities in digital access and literacy. The human rights standard most consistently impacted by SRHR misinformation at the individual level is the right to informed decision-making. Impacts on access to acceptable and quality health services, and equality and nondiscrimination, particularly among youth, people of color, LGBTQ+ individuals, and people in conservative settings, were also documented. While the impact on accountabilities for human rights protection is less directly visible at the individual level, it may arise when platforms and systems fail to protect users from targeted misinformation.

Misleading Information Online Limits Individuals' Ability to Make Autonomous, Informed SRHR Decisions, Exacerbated by Increasing Reliance on Digital Sources for Health Information

Misinformation online undermines individuals' ability to make autonomous, informed SRHR decisions, especially as reliance on digital sources grows. People seeking information about contraception, fertility, abortion, or sexual health frequently encounter misleading content that influences beliefs and behaviors [32-34]. This can cause confusion and anxiety, particularly during public health crises [35]. For example, while 61% of Dutch women use pregnancy and childbirth apps, these were seen as less trustworthy than professional advice [36]. In Brazil, many new mothers use the internet to verify or replace

provider guidance [37], and in Italy, 76% of women with endometriosis reported encountering online misinformation about their condition [38,39]. Similarly, 55% of men surveyed at an outpatient urology clinic in Canada reported searching online for information about men's SRH and expressed concern about the pervasiveness of misinformation in the digital information environment [40]. Exposure to misinformation can also reinforce existing beliefs; one study found that inaccurate beliefs about fetal pain were linked with antiabortion views, shaping attitudes toward access and policy [41].

Misinformation Exacerbates Digital Inequities and Perpetuates Distrust, Fear, Stigma, Discrimination, and False Narratives

Studies show how digital misinformation amplifies stigma and discrimination, particularly for groups experiencing social exclusion, deterring individuals from seeking care. LGBTQ+ individuals, people of color, and those from lower-income backgrounds face higher exposure to misinformation, reinforcing existing disparities in SRHR knowledge and access [42-44]. One study described how misinformation campaigns on social media about Tenofovir-based pre-exposure prophylaxis have contributed to mistrust and hesitancy among Black, Latinx, and multiracial individuals, many of whom began to question the safety of pre-exposure prophylaxis after viewing targeted legal advertisements [44]. Similarly, social media discourse has fueled "hormonophobia" and skepticism toward hormonal contraception, often promoting unsubstantiated claims and emphasizing side effects over benefits—especially among women of color, exacerbating distrust in health care providers, contributing to vaccine hesitancy, skepticism toward contraceptives, and fear-based narratives about SRH [45].

Lack of Digital Access, Insufficient Health, Media, and Digital Literacy, and Lack of Protections Against Online



Abuse and Fraud Make Individuals Vulnerable to Misinformation

Limited digital, information, media, and health literacy and health care access worsen misinformation exposure, leaving individuals vulnerable to scams, misinformation-driven health decisions, and fraudulent SRHR products. Women seeking fertility information online often encounter misinformation, particularly in non-Western digital spaces, leading to confusion and poor health choices [46,47]. Scammers exploit individuals seeking reproductive health solutions, as seen in Nigeria, where fraudulent "miracle fertility treatments" exploit vulnerable women with deceptive promises and financial scams [280].

Community Level: Misinformation Reinforces Stigma, Silencing, and Resistance to SRHR

Overview

The review shows that misinformation at the community level reinforces harmful social norms, perpetuates stigma, and contributes to the exclusion of marginalized voices. Human rights standards related to equality and nondiscrimination are routinely impacted, particularly when gender stereotypes, religious ideologies, or cultural beliefs are used to delegitimize SRHR. Access to quality health services and information and informed decision-making are compromised by peer-driven misinformation, while participation and inclusion are weakened when misinformation silences dissent or misrepresents marginalized populations. Furthermore, impacts on human rights accountability remain an implicit concern where misinformation is amplified by community leaders, influencers, or unregulated local media.

Reinforcement of Harmful Gender and Social Norms

The mapped evidence shows how misinformation perpetuates stigma against SRHR services and marginalized identities, discouraging individuals from seeking care or engaging in public discourse. Worldwide, women and girls report concerns about navigating misleading SRHR information online, in particular in spaces where misogynistic and anti-LGBTQ+ rhetoric thrives [48]. LGBTQ+ individuals face heightened misinformation exposure, particularly regarding fertility, contraception, and HIV prevention, which influences community norms and limits health care access [42-44,49]. For instance, a study in Aotearoa New Zealand found that WSW are significantly less likely to engage in cervical screening due to a legacy of misinformation about their cancer risk, reinforced by heteronormative public health messaging and provider assumptions that exclude their sexual histories [49].

Spread of Misinformation Within Communities Leads to Discriminatory Behaviors or Resistance to Evidence-Based SRHR Practices

Community-based misinformation shapes SRHR choices and can lead to harmful health behaviors. Antivaccine narratives in online parenting communities have influenced vaccine refusal, shaping norms that undermine public health efforts [50]. In South Africa and Southeast Asia, youth report misinformation, stigma, and intergenerational barriers as major obstacles to accessing SRHR services [34,51]. Online misinformation has promoted ineffective fertility-tracking methods [52,53] and also

contributed to declining use of modern contraception among young people [52,53]. In Wales, for instance, uptake of the combined contraceptive pill dropped significantly between 2019 and 2023, with clinicians linking the trend to pervasive "horror stories" on TikTok and Instagram that exaggerate side effects and create fear among young women seeking care [52].

SRHR Advocates Face Online Violence, Exclusion, and Disinformation Campaigns

SRHR misinformation fuels harassment, exclusion, and violence against individuals and organizations advocating for sexual and reproductive rights. Reproductive justice organizations face content suppression, misinformation-driven backlash, and barriers in digital advocacy [54-56]. Antirights groups actively weaponize misinformation to delegitimize SRHR movements, as seen in Kenya and Ethiopia, where foreign-funded campaigns influenced policy decisions and public discourse [57,58]. Gendered disinformation and digital violence disproportionately target women and LGBTQ+ advocates, discouraging their participation in public life [59,60]. Deepfake revenge pornography and manipulated digital content have been used to spread false narratives and intimidate SRHR advocates [60]. Gendered disinformation legitimizes violence against women and LGBTQ+ individuals while distorting discussions on gender and reproductive rights [59].

Service Delivery and Health System Level: Misinformation Degrades Trust, Service Delivery, and Health Worker Roles in SRHR

Overview

Misinformation at the service delivery and health system level undermines the quality and equity of SRHR care. It influences provider knowledge, patient expectations, and institutional practices, compromising the AAAQ of services and information. Informed decision-making is eroded when patients rely on misinformation or when providers themselves disseminate false claims. Equality and nondiscrimination are implicated when misinformation leads to substandard care for marginalized groups. Impacts on privacy and confidentiality are underdiscussed in the literature we reviewed, but are relevant, especially when digital health tools compromise user data.

Health Workers May Disseminate or Be Influenced by Misinformation, Contributing to Biased or Low-Quality Care

Health care providers are increasingly confronted with responding to misinformation from patients, impacting clinical decision-making and patient trust. In Australia and the United States, doctors report an increase in patients not choosing contraception when offered, requesting unnecessary procedures, or expressing concerns about reproductive health due to misinformation spread on social media [52,53,61]. Providers themselves are not immune to misinformation, as seen in deceptive marketing targeting men's health clinics, fertility treatments, and aesthetic gynecological procedures [62-65]. For example, an investigation into direct-to-consumer men's health clinics in the United States found widespread promotion of low testosterone treatments and erectile dysfunction therapies, often unsupported by robust evidence, and noted that clinics rarely



disclosed provider credentials, contributing to potential misinformation and compromised patient safety [65]. Similarly, several studies have shown that fertility clinics routinely market unproven IVF "add-ons," such as embryo glue or endometrial scratching, often presenting them as effective despite limited or no supporting evidence [62,64]. Additionally, some health care professionals share misinformation online, blurring professional boundaries and undermining public trust in medical expertise [66].

Misinformation Can Prevent or Disrupt the Delivery of SRHR Goods and Services

SRHR misinformation creates barriers to the provision of evidence-based services, particularly for contraception, abortion, and vaccines. Misinformation about (HPV) vaccines, abortion safety, and fertility treatments affects patient decision-making and reduces uptake of essential SRH services [33,67,68]. In Wales and the United States, declining contraceptive use has been linked to misinformation on TikTok and Instagram promoting unreliable fertility-tracking methods [52,53]. In a hospital in Canada, internal policies have restricted access to abortion-related websites, limiting providers' ability to offer full referral pathways for patients [69].

Barriers to Equitable and Accessible Service Provision Arise From Misinformation About Health Systems or Workers

Misinformation fosters distrust in health care providers and discourages care-seeking behaviors, particularly among marginalized populations. Pregnant women, individuals with abnormal cervical screening results, and those seeking abortion services report turning to online sources due to fear of provider judgment or legal uncertainty—only to encounter further misinformation that heightens anxiety and confusion [70-72]. Antichoice narratives and misinformation about fetal tissue have shaped patient expectations and fueled clinic harassment, making it harder for providers to deliver compassionate, evidence-based care [73]. Additionally, health workers face online harassment and disinformation campaigns, further discouraging their active engagement in SRHR service provision and public education [74-77].

Law and Policy Level: Misinformation Is a Legal and Policy Tool for Eroding SRHR Protections

Overview

At the law and policy level, the review shows that misinformation can act as a mechanism for institutionalizing discrimination and rolling back SRHR protections. It shapes legal frameworks, drives policy enforcement decisions, and creates ambiguity that undermines informed decision-making and access to acceptable and quality health services. Most findings implicate governments' human rights accountabilities, revealing weak regulation, misuse of science, and institutional complicity in the spread of disinformation. Equality and nondiscrimination and privacy, and confidentiality are routinely compromised through discriminatory laws and digital surveillance. While human rights standards related to participation and inclusion are less emphasized, misinformation suppresses engagement and discussion across differences and stifles civil society advocacy.

Legal Manipulation and Policy Distortion Through Misinformation

Misinformation influences the creation or perpetuation of discriminatory laws. False narratives shape restrictive SRHR policies by misrepresenting scientific evidence and swaying public opinion. In the United States, misinformation about late-term abortions and abortion pills has influenced state-level restrictions, despite FDA (Food and Drug Administration) assurances of their safety [78]. Similarly, Ghana's anti-LGBTQ+bill has been fueled by foreign right-wing disinformation campaigns that mischaracterize reproductive rights and LGBTQ+ advocacy as threats to society [58].

Policy decisions based on misinformation also harm equitable SRHR access. Misinformation has justified restrictive SRHR policies that limit access to essential health care. In Nigeria, false claims about how SRHR issues were integrated in the Samoa Agreement led to a national political crisis despite official debunking efforts [79]. Similarly, US laws restricting emergency contraception access have been shaped by misinformation falsely equating the emergency contraception with abortion [80].

Misinformation may also prevent effective implementation of laws and policies designed to promote and protect SRHR through health systems. Legal uncertainty and misinformation discourage providers from delivering SRHR services, even where laws permit them. Unclear abortion laws in the United States have created confusion, leading to provider reluctance to offer legally available care [78]. In Canada, a Catholic hospital restricted provider access to abortion-related websites, limiting their ability to offer comprehensive referrals [69].

In the United States, the Project 2025 playbook outlines strategies to embed misinformation into federal governance by altering agency mandates and rewording policies to stigmatize and delegitimize SRH [81]. These tactics aim to institutionalize SRHR misinformation, making it harder for the public to access accurate and credible information about abortion and related services [81].

Surveillance, Privacy, and Targeting of SRHR Users and Advocates

Private digital user data from tools, platforms, and devices has been used for surveillance, the spread of misinformation, and harassment related to SRH. Digital surveillance tools have been used against individuals seeking SRHR services. Antichoice activists and law enforcement agencies in the United States have used private digital user data, geofencing, and web histories to track abortion seekers and misdirect them to crisis pregnancy centers [82,83]. LGBTQ+ users have also faced privacy risks, as seen when Grindr (Grindr LLC) was labeled a national security threat due to concerns over foreign intelligence misuse of user data, without broader protections for LGBTQ+ digital privacy [84].

Barriers to Advocacy and Accountability

Efforts to counter SRHR misinformation are frequently obstructed by platform restrictions and targeted attacks on reproductive rights advocates. Reproductive justice organizations struggle to promote accurate information due to



advertising restrictions on social media platforms, limiting outreach efforts [55]. Human rights defenders advocating for SRHR face harassment, smear campaigns, and violence, further discouraging public discourse on reproductive rights [85].

Misinformation may distort human rights accountability systems, affecting justice outcomes for those claiming their sexual and reproductive rights. Misinformation undermines evidence-based policymaking and accountability mechanisms. In the United States, flawed research linking abortion to mental health risks—despite being widely discredited—has been cited in legal cases to justify abortion restrictions [86]. Gendered misinformation also weakens legal protections against online violence, as existing laws often fail to address digital threats and harassment effectively [59].

Information Ecosystem Level: Information Ecosystem Design Systemically Undermines SRHR Rights and Equity

Overview

This review reveals that the information ecosystem, comprising social media, search engines, digital ads, algorithms, mobile apps, AI agents, other online spaces, and platform governance, is a key enabler of systemic SRHR misinformation. Platform design choices and business models allow misinformation to flourish while silencing accurate, rights-based content. This results in impacts across all six categories of human rights standards: algorithmic bias reinforces discrimination, censorship of accurate SRHR content limits AAAQ, exposure to misleading content undermines informed decision-making, tracking and surveillance violate privacy, content moderation suppresses participation, and regulatory inaction weakens accountability.

Platform Architecture and Digital Business Models Enable Harm From SRHR Misinformation

Misinformation distorts public discourse, crowds out accurate information, and undermines trust in credible, accurate SRHR information and sources. SRHR misinformation spreads rapidly in high-engagement digital spaces, reinforcing stigma, confusion, and distrust in public health sources. During the 2022 mpox outbreak, social media misinformation fueled stigma against sexual minority men and gender-diverse individuals, reinforcing discrimination [87].

SRH misinformation has been monetized in an unregulated digital information ecosystem, undermining consumers' ability to make informed choices. Platforms, influencers, and wellness brands profit from misleading SRHR narratives, making it harder for individuals to access evidence-based guidance. YouTube, TikTok, and Instagram influencers promote unregulated fertility apps, alternative contraceptive methods, and nonevidence-based treatments for polycystic ovary syndrome and erectile dysfunction [88-92]. Google and Meta profit from deceptive advertising, directing users searching for abortion services to crisis pregnancy centers that provide misleading information [93].

Vague and inconsistently enforced content moderation policies enable misinformation while restricting SRHR advocacy. Social media platforms fail to regulate misinformation effectively while disproportionately censoring SRHR content. Meta restricts advertising by abortion providers while allowing antichoice misinformation to spread unchecked [93]. Google search results for abortion medication often lead to misleading crisis pregnancy centers [94]. Additionally, retail platforms such as Amazon (Amazon.com, Inc) have been reported to restrict or delist vaginal health products—such as therapeutic devices for pelvic pain—labeling them "potentially embarrassing," thereby limiting access to essential women's health products and reinforcing stigma around SRH care [282].

Inequities in SRHR Content Access and Algorithmic Asymmetries and Discrimination

Inequalities in digital access, the design of internet platforms, and digital marketing tools lead to uneven exposure to accurate SRHR information. Algorithmic bias and content moderation disparities create unequal access to accurate SRHR information. Platforms inconsistently apply moderation policies, disproportionately censoring sexual health content while allowing misinformation to flourish, particularly in low-income countries [95-97]. In Egypt and Western Asia, SRHR advocates face content suppression, including blocked ads and limited reach [56].

The quality of SRHR health information online is low, with misinformation incidence rates ranging from 14% to 97% across topics and platforms [98-119]. Studies show 41% of Facebook articles about HPV vaccination contained misinformation [115], 28% of YouTube videos about erectile dysfunction included misleading content [102], and 73% of TikTok videos about gynecological cancers were of poor quality [99].

Global Flow and Amplification Mechanisms of Misinformation

Digital misinformation on SRHR easily transcends national boundaries, affecting global health policies and legislation. Far-right groups in Europe have replicated US misinformation campaigns, targeting LGBTQ+ rights and reproductive health access [120]. In Kenya, a far-right group manipulated X (formerly known as Twitter) discussions to derail support for reproductive health bills [121,122].

Triggers of misinformation surges include public events, sensationalized news, and humor. Misinformation spikes during public health emergencies and policy changes. The reversal of Roe versus Wade triggered an abortion-related infodemic, where evolving laws, social media misinformation, and inadequate content moderation fueled confusion [94,123]. News coverage of contraceptive lawsuits has exaggerated risks, shaping global perceptions and fueling misinformation [124]. Additionally, a rising antirights movement in Ethiopia, aligned with the US Christian Right, is working to dismantle the right to safe and legal abortion, propagating SRH misinformation online, all the while gaining influence in political spaces [57].

Drivers of misinformation amplification in the digital information environment include scams, memes, clickbait, and marketing. SRHR misinformation spreads through viral content, influencer marketing, and deceptive digital campaigns. Scammers posing as fertility experts in Nigeria have exploited vulnerable women with false "miracle treatments" [280].



Another emerging form of online harm involves "Munchausen by internet," where individuals fabricate perinatal illnesses and crises in real time—such as neonatal death—using fake online personas [125]. These cases can emotionally manipulate and mislead health care providers, wasting their time and creating distress when the deception is uncovered [125]. In addition, memes on TikTok are used to evade content moderation while spreading misinformation about contraception and sexual health [126].

Lack of regulation or accountability for digital health misinformation undermines public health efforts. SRHR misinformation remains largely unregulated, enabling bad actors to shape digital discourse. WHO has identified AI-generated misinformation as a growing threat to SRHR, as AI tools produce misleading reproductive health content with little oversight [23]. Efforts to counter misinformation are often obstructed by digital platform policies, limiting reproductive justice advocacy [55].

Discussion

Principal Findings

This scoping review maps and describes existing literature on misinformation in SRHRs, suggesting that it is rarely limited to isolated myths, individual misunderstandings, or politicized topics. Instead, the evidence reviewed points to SRHR misinformation as being entangled with the broader social, political, and digital systems through which health information is searched for, interpreted, shared, and acted upon. Traditional responses to health misinformation have often focused on correcting false beliefs through education, counter-messaging, or fact-checking, which are based on communication frameworks and exclude systems thinking and information environment, approaches, and analysis through human rights standards. The literature reviewed highlights concerns that such approaches may be insufficient, particularly given the disproportionate impacts on underserved communities. Several studies suggest that SRHR misinformation can operate within wider structures of inequality, stigma, and power, and in some cases, may be deliberately used to undermine reproductive autonomy, challenge evidence-based care, or reinforce discriminatory ideologies.

This scoping review focused on the five years since 2019 specifically because the digital information environment, architectures, algorithms, platform moderation policies, as well as socioeconomic dynamics have been changing rapidly, also in relation to how we understand misinformation and the wider impacts of the information environment on health behaviors. Capturing the recent experience of users seeking health information, support, and care in digital spaces more closely reflects the digital realities of today. During this time, users online have experienced a shift to reduced moderation on many large platforms [26,283] and related polarization of conversations in digital spaces [284,285], the impacts of the pandemic on straining health systems health promotion programs and their capacity to address the information environment [20], as well as rapidly evolving ways users seek information, support and companionship through synthetic companions and

AI-powered tools and interfaces. The themes coming out of this review show that this changing sociotechnical landscape is both concentrating harms in groups that seek SRHR-related support and care online, and at the same time, the features of the information environment are used by communities to exercise autonomy in relation to how they access, discuss, and act on health information.

These insights are aligned with the growing shift in the broader health misinformation research and practice field, where scholars have called for moving beyond individual-level interventions to engage with the systemic, emotional, and relational dynamics that shape how people encounter and respond to information. The results of the mapping underscore that SRHR misinformation is not an exception but a critical and often overlooked example of these wider dynamics.

This paper is the first of three planned publications based on this scoping review's dataset and focuses on cross-mapping information science and misinformation research with human rights principles. The overall purpose of this work is to bring the research and advocacy community across different fields together to improve human rights protection and promotion in the context of SRHR misinformation in digital spaces. Future papers will detail the attributes of SRHR misinformation and harm, and interventions reported in the included studies, while the third will be the result of a consultation with human rights scholars and advocates on improving concepts and monitoring frameworks of the harmful impact misinformation has on SRHR protection and promotion.

What Makes SRHR Misinformation Distinct

What makes SRHR misinformation distinct from misinformation in other health areas (such as vaccine-preventable diseases, cancer, or emergency preparedness and response) is its intrinsically gendered and politicized nature. SRHR is deeply connected to individual autonomy, social identity, and cultural norms. Misinformation in this space is not only shaped by stigma and taboo, but it often also reinforces them. It is commonly weaponized to control reproductive choices, restrict access to care, and limit public discourse on gender and sexuality. Unlike many other health domains, SRHR misinformation often targets and impacts people differently based on their gender identity, sexual orientation, reproductive status, or age, reinforcing longstanding power imbalances.

Increasingly in most contexts, the search for SRHR information begins and ends online. Many individuals, particularly those in marginalized or stigmatized communities, seek answers to sensitive questions via the likes of search engines, mobile apps, social media, AI agents and tools, and private messaging platforms. Due to its intimate, gendered, and relational nature, SRHR misinformation does not just distort facts. It also shapes how people understand their rights, identities, and relationships. These characteristics make SRHR topics particularly vulnerable to disinformation, where individuals, influencers, or organizations deliberately spread misleading narratives or promote unproven products and services for financial gain or political influence.



Addressing the harm from SRHR misinformation, therefore, goes beyond correcting content or narratives and requires confronting and transforming the systemic drivers, commercial incentives, and sociopolitical norms that produce and legitimize harmful information about SRHR.

Terminological and Conceptual Inconsistencies

The analysis in Figure 2 reflects what kinds of contextualization and value judgments are placed on the concept of misinformation in the studies included in this review. Importantly, this review reveals a wide diversity in the terminology used to describe SRHR misinformation. While the most common terms used are "misinformation" "inaccurate," the rest of the terms used all point to an attribute or impact of information itself, not merely its accuracy. Terms such as "misleading," "inappropriate," "unreliable," "gendered disinformation," "myths," "incomplete," and "harmful narratives" were used across the studies. This suggests that authors from different disciplines (eg, public health, law, or media studies) and professional groups (eg, clinicians, health educators, policy analysts, or advocates) differently interpret and frame the qualities of information, such as its accuracy, relevance, intent, and social impact. This might stem from the drivers and harms perceived as most relevant to SRHR. These conceptual differences likely shape how misinformation is approached in the literature and by advocates and may present challenges for synthesizing evidence, developing effective interventions, and creating shared standards across health topics and research disciplines. Future research must grapple with this definitional pluralism and embrace cross-disciplinary approaches that can accommodate and bridge these varied perspectives. One approach to acknowledge this diversity is to move from discussing "misinformation" to studying "information environment," as many of the drivers and impacts, including harms, described in this paper are related to social, cognitive, and other drivers of how information is interpreted and meaning is made, rather than the accuracy of a piece of information alone.

These terminological inconsistencies also reflect a deeper fragmentation in the research, beyond language, regarding how the problem of SRHR misinformation is conceptualized and situated within broader systems. This scoping review shows that while there is growing recognition that SRHR misinformation is a public health issue, the literature remains fragmented. Most of the studies identified in this review focus on describing or measuring misinformation in specific domains or platforms (such as abortion or contraception, YouTube or X [formerly known as Twitter]), with fewer addressing the broader political, cultural, and systemic conditions that shape the production, circulation, and impact of misinformation in SRHR. This pattern mirrors wider critiques in the health misinformation research field, which caution against overly narrow, content-focused approaches that overlook the complexity of digital ecologies and information environments. As recent scholarship has argued, health misinformation is not simply a matter of individual belief or factual inaccuracy, but a relational and evolving process shaped by identity, emotion, trust, and social context [2,3,14]. Our findings underscore the need for SRHR misinformation research to engage more fully with these

broader frameworks to inform more effective, equity-oriented responses.

Human Rights Framework and Structural Harms

A key contribution of this review is the application of a human rights framework to map the harms of SRHR misinformation across the socioecological model. We found that misinformation impacts multiple human rights standards, including informed decision-making, equality and nondiscrimination, availability and quality of information, services and goods, privacy, participation, and accountability. These violations occur at different levels, undermining individual autonomy, fueling stigma within communities, disrupting evidence-based service delivery, enabling discriminatory laws and population surveillance, and fostering unregulated information ecosystems that prioritize virality over veracity. This lens clarifies how SRHR misinformation is not merely a matter of faulty information, but rather that it is a matter of human rights, social justice, and systemic inequity.

Notably, this review highlights a gap in current SRHR and human rights literature and practice—while the right to SRH has long emphasized access to accurate information, it has yet to fully grapple with how information ecosystems—including ecosystem architecture, algorithmic governance, and commercial content moderation and marketing tools [24,26]—function as structural determinants of health. Digital environments now shape not only what information is available, but whose voices are amplified, whose experiences are silenced, and whose health is protected or compromised [2,14]. The failure to regulate or even acknowledge these dynamics constitutes a failure of accountability [24,26].

Implications for Research, Policy, and Practice

Understanding misinformation as ecosystemic has major implications for public health, policy, and advocacy. Health systems can no longer treat misinformation solely as a public education issue and must engage with how SRHR information is designed, curated, and circulated across digital infrastructures. This requires a shift from short-term, message-based communication and reactive debunking to proactive governance that supports digital literacy, designs inclusive information pathways, and builds social cohesion and institutional trust. SRHR advocates that communities, especially marginalized communities, must be protected from online harassment and supported to participate meaningfully in digital public spheres.

Policy makers must reaffirm access to accurate, evidence-based health information as a public good and a fundamental human right, rather than a consumer product vulnerable to manipulation. Regulatory frameworks should ensure transparency in platform algorithms, protection of privacy, and equitable access to information. Meanwhile, digital platforms must be held accountable for the role they play in facilitating and profiting from SRHR misinformation. Monitoring and addressing these harms will require collaborative efforts across sectors, including health, education, technology, and law, and must center the voices of those most affected by SRHR misinformation and information injustice.



This therefore points to several research priorities in this space. First, there is a need to move beyond cataloguing misinformation content to studying how SRHR misinformation functions within broader digital ecosystems—not only how it spreads, why it resonates with particular communities, and how trust in different sources is constructed, but also what are the "dark patterns" that propagate vulnerabilities of SRHR, the commercial determinants of SRHR misinformation, and the evolving relationships with information online that discard its tactfulness for relatability. Second, future work should explore how individuals and groups resist, reinterpret, or correct misinformation, particularly in marginalized communities, and what forms of digital literacy and social support strengthen resilience. Third, more research is needed into the interactions between misinformation, digital platform design, and regulatory policies, including how algorithmic amplification works, how the use of private user data has been monetized, and content moderation affect health-related rights. Finally, interdisciplinary inquiry should investigate how to embed human rights frameworks into technology governance, including the development of accountability indicators that assess whether information environments support or hinder the right to SRHR. These research directions are essential to inform rights-based, equity-driven strategies to counter SRHR misinformation at scale.

Limitations

This scoping review has several limitations. First, our inclusion criteria restricted the search to English-language sources, which may have excluded relevant studies published in other languages. Second, by focusing exclusively on the digital information environment, we did not capture insights from offline spaces or additional media channels where SRHR misinformation might also circulate and impact communities. Third, we included only studies and documents explicitly addressing misinformation, and this approach may have overlooked research that does not focus on misinformation but

on other challenges within the information ecosystem that share drivers, amplifiers, and attributes with misinformation, such as questions, concerns, information voids, hate speech, or disinformation (for promoting ideas or products for profit or influence).

Conclusions

The consequences of SRHR misinformation in the digital information environment include restricted bodily autonomy, compromised reproductive justice, and distorted policy environments. SRHR misinformation includes a wide spectrum of topics, platforms, and various effects and harms that infringe on human rights principles and standards. This scoping review described the multitudinous social, technological, and regulatory drivers that shape discourse about health online and the many ways individuals' SRH and human rights are affected by it online and offline. No single level of the socioecological model is sufficient to describe the scope and effects of SRHR misinformation in the digital information environment, and solutions are also unlikely to be found at a single level.

Although this scoping review cataloged some of the effects and harms of SRHR misinformation, fuller accounting is needed to understand the cumulative effects and harms of SRHR misinformation in individuals, communities, health systems, and societies. Inspiration can be drawn from more established fields of health misinformation and behavioral science research in vaccines, cancer, and pandemic preparedness, where misinformation is a common risk to health care decisions and behaviors, and has been long studied, and impacts have been well-catalogued.

The internet will only become more ingrained in the day-to-day lives of people and their families and communities, and so, the SRHR field must evolve with this now indispensable source of information, connection, and care to help everyone realize their right to SRHR health care everywhere, including online.

Acknowledgments

The authors would like to thank everyone who submitted gray literature and provided feedback during the online data collection period. TDP used OpenAI's ChatGPT to review the prefinal drafts for structure, readability, English style, and grammar, and edited them to improve them accordingly. The transcript of the ChatGPT conversation used in the preparation of this paper is attached as Multimedia Appendix 6. TDP used Grammarly (Grammarly, Inc) for spellcheck and sentence editing. This paper reflects the views of the named authors, and not necessarily the views of UNDP (United Nations Development Programme)/UNFPA (United Nations Population Fund)/UNICEF (United Nations Children's Fund)/WHO (World Health Organization)/World Bank Special Programme of Research, Development and Research Training in Human Reproduction (HRP) or World Health Organization.

Funding

This work received funding from the UNDP-UNFPA-UNICEF-WHO-World Bank Special Programme of Research, Development and Research Training in Human Reproduction (HRP), a cosponsored program executed by the WHO. The funders had no role in study design, data collection and analysis, decision to publish, or preparation of this paper.

Data Availability

Data is available in supplementary materials and upon reasonable request to the corresponding author.



Authors' Contributions

ÅN, TDP, EW, DS, CW, SB, BG, AL, GM, and TT conceptualized this study. ÅN and TDP supervised this study. ÅN was responsible for project administration. TDP, EW, DS, CW, and ÅN developed the methodology. TDP, EW, DS, CW, and ÅN conducted the investigation and validation of results and wrote the original draft of the paper. TDP prepared the visualizations. TDP, EW, DS, CW, ÅN, SB, BG, AL, GM, and TT critically reviewed and edited this paper. All authors approved the final version of this paper.

Conflicts of Interest

TDP is the associate editor of JMIR Infodemiology and did not participate in the journal's handling or decisions regarding this paper.

Multimedia Appendix 1

PRISMA-ScR checklist.

[DOCX File, 85 KB-Multimedia Appendix 1]

Multimedia Appendix 2

Search strategy and results of search across different databases.

[DOCX File, 1138 KB-Multimedia Appendix 2]

Multimedia Appendix 3

Included studies and documents.

[DOCX File, 40 KB-Multimedia Appendix 3]

Multimedia Appendix 4

Characteristics of included studies and documents.

[DOCX File, 870 KB-Multimedia Appendix 4]

Multimedia Appendix 5

Studies and documents mapped based on impacts of SRHR misinformation on human rights principles by levels of the socioecological model. SRHR: sexual and reproductive health and rights.

[DOCX File, 108 KB-Multimedia Appendix 5]

Multimedia Appendix 6

Transcripts of ChatGPT conversations that were used to solicit editing feedback in the preparation of this manuscript. [DOCX File , 108 KB-Multimedia Appendix 6]

References

- 1. United Nations (Committee on Economic SaCR). CESCR General Comment No. 14: The Right to the Highest Attainable Standard of Health (Art. 12). Adopted at the Twenty-second Session of the Committee on Economic, Social and Cultural Rights, on 11 August 2000 (Contained in Document E/C.12/2000/4). 2000. URL: https://www.ohchr.org/sites/default/files/Documents/Issues/Women/WRGS/Health/GC14.pdf [accessed 2025-11-29]
- 2. Wardle C, Derakhshan H. Information Disorder: Toward an Interdisciplinary Framework for Research and Policy Making. London, United Kingdom. Council of Europe; 2017. URL: https://tverezo.info/wp-content/uploads/2017/11/ PREMS-162317-GBR-2018-Report-desinformation-A4-BAT.pdf [accessed 2025-11-29]
- 3. Wardle C, Scales D. Advocating for a community-centred model for responding to potential information harms. Nat Hum Behav. 2025;9(8):1546-1556. [doi: 10.1038/s41562-025-02233-2] [Medline: 40523957]
- 4. Purnat T, Nguyen T, Briand S. Managing Infodemics in the 21st Century: Addressing New Public Health Challenges in the Information Ecosystem. Cham (CH). Springer; 2023. URL: https://link.springer.com/book/10.1007/978-3-031-27789-4 [accessed 2025-11-29]
- 5. John JN, Gorman S, Scales D. Understanding interventions to address infodemics through epidemiological, socioecological, and environmental health models: framework analysis. JMIR Infodemiology. 2025;5:e67119. [FREE Full text] [doi: 10.2196/67119] [Medline: 40127460]
- 6. General Comment No. 20 (2016) on the Implementation of the Rights of the Child During Adolescence, CRC/C/GC/20. UN Committee on the Rights of the Child. 2016. URL: https://www.ohchr.org/en/documents/general-comments-and-recommendations/general-comment-no-20-2016-implementation-rights [accessed 2025-11-29]



7. Wardle C. Misunderstanding misinformation. Issues in Science and Technology. 2022. URL: https://issues.org/misunderstanding-misinformation-wardle/ [accessed 2025-11-29]

- 8. Wood K, McCarthy S, Pitt H, Randle M, Arnot G, Thomas S. "It's all about the money." Australian women's perspectives about menopause and the commercial determinants of health. Health Promot Int. 2025;40(5):daaf168. [doi: 10.1093/heapro/daaf168] [Medline: 41051430]
- 9. Wood K, McCarthy S, Pitt H, Randle M, Thomas SL. Women's experiences and expectations during the menopause transition: a systematic qualitative narrative review. Health Promot Int. 2025;40(1):daaf005. [doi: 10.1093/heapro/daaf005] [Medline: 40036278]
- 10. Navigating infodemics and building trust during public health emergencies. National Academies of Sciences Engineering, and Medicine. 2023. URL: https://nap.nationalacademies.org/resource/27188/interactive/ [accessed 2025-11-29]
- 11. Understanding and addressing misinformation about science. National Academies of Sciences Engineering, and Medicine. 2025. URL: https://www.nationalacademies.org/projects/DBASSE-BOSE-21-02 [accessed 2025-12-03]
- 12. Swire-Thompson B, Johnson S. Cancer: a model topic for misinformation researchers. Curr Opin Psychol. 2024;56:101775. [FREE Full text] [doi: 10.1016/j.copsyc.2023.101775] [Medline: 38101247]
- 13. How to build an infodemic insights report in six steps. UNICEF, World Health Organization. 2023. URL: https://www.who.int/publications/i/item/9789240075658 [accessed 2025-11-29]
- 14. Krause NM, Freiling I, Scheufele DA. Our changing information ecosystem for science and why it matters for effective science communication. Proc Natl Acad Sci U S A. 2025;122(27):e2400928121. [FREE Full text] [doi: 10.1073/pnas.2400928121] [Medline: 40587798]
- 15. Purnat TD, Clark J. Oversimplified efforts to counter health misinformation are missing the mark. BMJ. 2025;388:r393. [doi: 10.1136/bmj.r393] [Medline: 40015733]
- 16. Social listening in infodemic management for public health emergencies: guidance on ethical considerations. World Health Organization. 2025. URL: https://www.who.int/publications/i/item/9789240108202 [accessed 2025-11-29]
- 17. Ishizumi A, Kolis J, Abad N, Prybylski D, Brookmeyer KA, Voegeli C, et al. Beyond misinformation: developing a public health prevention framework for managing information ecosystems. Lancet Public Health. 2024;9(6):e397-e406. [FREE Full text] [doi: 10.1016/S2468-2667(24)00031-8] [Medline: 38648815]
- 18. Senft TM. Who cares how information feels? A call for digital influence literacy. Asian Bioeth Rev. 2025;17(3):477-493. [doi: 10.1007/s41649-024-00350-0] [Medline: 40741316]
- 19. Palmer A, Gorman S. Misinformation, trust, and health: the case for information environment as a major independent social determinant of health. Soc Sci Med. 2025;381:118272. [FREE Full text] [doi: 10.1016/j.socscimed.2025.118272] [Medline: 40513504]
- 20. Purnat TD, Wilhelm E, White BK, Okan O, Rosario R, Scales D. Health promotion in the algorithmic age: recognizing the information environment as a determinant of health. Health Promot Int. 2025;40(5):daaf166. [doi: 10.1093/heapro/daaf166] [Medline: 40990145]
- 21. Wanless A, Lai S, Hicks J. Assessing national information ecosystems. Carnegie Endowment for International Peace. 2025. URL: https://carnegieendowment.org/research/2025/02/assessing-national-information-ecosystems?lang=en [accessed 2025-11-29]
- 22. Knudsen J, Perlman-Gabel M, Uccelli IG, Jeavons J, Chokshi DA. Combating misinformation as a core function of public health. NEJM Catalyst. 2023;4(2). [doi: 10.1056/cat.22.0198]
- 23. The role of artificial intelligence in sexual and reproductive health and rights. World Health Organization. 2024. URL: https://www.who.int/publications/i/item/9789240090705 [accessed 2025-11-29]
- 24. Information asymmetries in the digital sexual and reproductive health space. United Nations Development Programme. 2021. URL: https://www.undp.org/sites/g/files/zskgke326/files/2021-06/
 UNDP-Information-Asymmetries-in-the-Digital-Sexual-and-Reproductive-Health-Space-EN.pdf [accessed 2025-11-29]
- 25. UN Guiding Principles on Business and Human Rights, HR/PUB/11/04 UN office of the Human Rights High Commissioner (OHCHR). 2011. URL: https://www.ohchr.org/sites/default/files/documents/publications/guidingprinciplesbusinesshr_en.pdf [accessed 2025-11-29]
- 26. Elswah M, Bhatia A, Thakur D. Content moderation in the global south: a comparative study of four low-resource languages. Center for Democracy and Technology. Washington, D.C. Center for Democracy & Technology; 2025. URL: https://cdt.org/insights/content-moderation-in-the-global-south-a-comparative-study-of-four-low-resource-languages/ [accessed 2025-11-29]
- 27. Peters MD, Godfrey C, McInerney P, Munn Z, Tricco AC, Khalil H. Scoping reviews. JBI Manual for Evidence Synthesis. South Australia. JBI; 2024. URL: https://jbi-global-wiki.refined.site/space/MANUAL/355862497/10.+Scoping+reviews [accessed 2025-11-29]
- 28. PRISMA for Scoping Reviews (PRISMA-ScR). PRISMA Statement. 2020. URL: https://www.prisma-statement.org/scoping [accessed 2025-11-29]
- 29. Moola S, Munn Z, Tufanaru C, Aromataris E, Sears K, Sfetc R, et al. Systematic reviews of etiology and risk. In: Aromataris E, Lockwood C, Porritt K, Pilla B, Jordan Z, editors. JBI Manual for Evidence Synthesis. South Australia. JBI; 2024.



30. Covidence systematic review software. VHI, Melbourne, Australia. Veritas Health Innovation. 2024. URL: https://www.covidence.org/ [accessed 2025-11-29]

- 31. Ensuring human rights in the provision of contraceptive information and services: guidance and recommendations. World Health Organization. 2014. URL: https://www.who.int/publications/i/item/9789241506748 [accessed 2025-11-29]
- 32. Snyder K, Pelster AK, Dinkel D. Healthy eating and physical activity among breastfeeding women: the role of misinformation. BMC Pregnancy Childbirth. 2020;20(1):470. [FREE Full text] [doi: 10.1186/s12884-020-03153-x] [Medline: 32807126]
- 33. Diez SL, Fava NM, Fernandez SB, Mendel WE. Sexual health education: the untapped and unmeasured potential of US-based websites. Sex Educ. 2021;22(3):335-347. [doi: 10.1080/14681811.2021.1935227]
- 34. Young people call for increased recognition of their sexual and reproductive health rights. UNICEF. 2024. URL: https://www.unicef.org/southafrica/stories/young-people-call-increased-recognition-their-sexual-and-reproductive-health-rights [accessed 2025-11-29]
- 35. Perez A, Panagiotopoulou E, Curtis P, Roberts R. Barriers and facilitators to mood and confidence in pregnancy and early parenthood during COVID-19 in the UK: mixed-methods synthesis survey. BJPsych Open. 2021;7(4):e107. [FREE Full text] [doi: 10.1192/bjo.2021.925] [Medline: 34059168]
- 36. Vogels-Broeke M, Daemers D, Budé L, de Vries R, Nieuwenhuijze M. Sources of information used by women during pregnancy and the perceived quality. BMC Pregnancy Childbirth. 2022;22(1):109. [FREE Full text] [doi: 10.1186/s12884-022-04422-7] [Medline: 35135487]
- 37. Giacometti CF, Galfano GS, Wajman DS, Cordioli E, Beck APA, Podgaec S. Internet use by pregnant women during prenatal care. Einstein (Sao Paulo). 2024;22:eAO0447. [FREE Full text] [doi: 10.31744/einstein_journal/2024AO0447] [Medline: 38597463]
- 38. Arena A, Degli Esposti E, Orsini B, Verrelli L, Rodondi G, Lenzi J, et al. The social media effect: the impact of fake news on women affected by endometriosis. A prospective observational study. Eur J Obstet Gynecol Reprod Biol. 2022;274:101-105. [doi: 10.1016/j.ejogrb.2022.05.020] [Medline: 35640437]
- 39. Serçekuş P, Değirmenciler B, Özkan S. Internet use by pregnant women seeking childbirth information. J Gynecol Obstet Hum Reprod. 2021;50(8):102144. [doi: 10.1016/j.jogoh.2021.102144] [Medline: 33848646]
- 40. Bal DS, Panchendrabose K, Van Iderstine MG, Patel P. The impact of misinformation on patient perceptions at a men's health clinic: a cross-sectional study. Int J Impot Res. 2024;36(6):636-640. [doi: 10.1038/s41443-023-00790-6] [Medline: 37964007]
- 41. Harcourt E, Bering J, Gullam J. Opposition to abortion related to inaccurate beliefs about fetal pain perception in utero. Aust N Z J Obstet Gynaecol. 2021;61(4):599-603. [doi: 10.1111/ajo.13356] [Medline: 33894010]
- 42. McCarthy H, Adetunji JO. How Mpox anti-vaxx conspiracies target and stigmatise LGBTQ+ people. 2024. URL: https:///https:
- 43. Takenaka BP, Kirklewski SJ, Griffith FJ, Gibbs JJ, Lauckner CK, Nicholson E, et al. "It's another gay disease": an intersectional qualitative approach contextualizing the lived experiences of young gay, bisexual, and other sexual minoritized men in the United States during the mpox outbreak. BMC Public Health. 2024;24(1):1574. [FREE Full text] [doi: 10.1186/s12889-024-19062-z] [Medline: 38862933]
- 44. Grov C, Westmoreland DA, D'Angelo AB, Johnson J, Nash D, Daskalakis DC, et al. Together 5000 team. Marketing of Tenofovir Disoproxil Fumarate (TDF) lawsuits and social media misinformation campaigns' impact on PrEP uptake among gender and sexual minority individuals. AIDS Behav. 2021;25(5):1396-1404. [FREE Full text] [doi: 10.1007/s10461-020-02977-0] [Medline: 32729019]
- 45. Pfender EJ, Fowler LR. Social media is influencing contraceptive choice. J Womens Health (Larchmt). 2024;33(5):563-564. [doi: 10.1089/jwh.2023.1152] [Medline: 38386797]
- 46. Event report: consultation on gendered information disorder in India. Centre for Internet & Society. 2024. URL: https://cis-india.org/internet-governance/event-report-consultation-on-gendered-information-disorder-in-india-pdf [accessed 2025-11-29]
- 47. Topper PS, Bauermeister JA, Golinkoff J. Fertility health information seeking among sexual minority women. Fertil Steril. 2022;117(2):399-407. [FREE Full text] [doi: 10.1016/j.fertnstert.2021.09.023] [Medline: 34674826]
- 48. State of the world's girls 2021: the truth gap. Plan International. Surrey, UK. Plan International; 2021. URL: https://plan-international.org/publications/the-truth-gap/ [accessed 2025-11-29]
- 49. Ellis SJ. Are women-who-have-sex-with-women an 'at-risk' group for cervical cancer? An exploratory study of women in Aotearoa New Zealand. Sex Health. 2024;21(1):SH23145. [doi: 10.1071/SH23145] [Medline: 38043923]
- 50. Bradshaw AS, Shelton SS, Wollney E, Treise D, Auguste K. Pro-vaxxers get out: anti-vaccination advocates influence undecided first-time, pregnant, and new mothers on Facebook. Health Commun. 2021;36(6):693-702. [doi: 10.1080/10410236.2020.1712037] [Medline: 31920115]
- 51. Looking out for adolescents and youth from key populations: formative assessment on the needs of adolescents and youth at risk of HIV: case studies from Indonesia, the Philippines, Thailand and Viet Nam. UNICEF. 2019. URL: https://www.undp.org/publications/looking-out-adolescents-and-youth-key-populations [accessed 2025-11-29]
- 52. Bott S. Fears misinformation behind drop in contraception. BBC. URL: https://www.bbc.com/news/articles/cnvjl27rrjzo [accessed 2025-11-29]



53. Berg S. What doctors wish patients knew about birth control. American Medical Association. Chicago, Illinois. American Medical Association; 2024. URL: https://www.ama-assn.org/delivering-care/public-health/ what-doctors-wish-patients-knew-about-birth-control [accessed 2025-11-29]

- 54. Schmall E, Maheshwari S. Abortion groups say tech companies suppress posts and accounts. The New York Times. New York City.; 2024. URL: https://www.nytimes.com/2024/06/11/business/abortion-groups-tech-platforms.html [accessed 2025-11-29]
- 55. Reproductive rights and justice movement leaders respond to 'Big Tech' suppression of accurate abortion information. Reproaction. 2023. URL: https://reproaction.org/wp-content/uploads/2023/10/
 Reproductive-Rights-and-Justice-Movement-Leaders-Respond-to-%E2%80%98Big-Tech-Suppression-of-Accurate-Abortion-Information. pdf [accessed 2025-11-29]
- 56. Elmalky O. Restricting sexual and reproductive health rights (SRHR) in Egypt sparks wave of misinformation. SMEX digital rights fund. 2024. URL: https://smex.org/ restricting-sexual-and-reproductive-health-rights-srhr-in-egypt-sparks-wave-of-disinformation/ [accessed 2025-11-29]
- 57. Rielly B, Betteridge-Moes M, Misikir M. Fertile ground the rising anti-abortion movement in Ethiopia: a threat to women's rights. New Internationalist. Oxford, England.; 2024. URL: https://newint.org/interactives/2024/fertile-ground/index.html [accessed 2025-11-29]
- 58. Kane G, Harrod J, Vernaelde J, Singh M. Out of bounds: foreign and digital influence targeting LGBTI rights in Ghana. Ipas. NC, USA.; 2024. URL: https://www.ipas.org/resource/out-of-bounds-foreign-and-digital-influence-targeting-lgbti-rights-in-ghana/ [accessed 2025-11-29]
- 59. Khan I. A/78/288: gendered disinformation and its implications for the right to freedom of expression report of the special rapporteur on the promotion and protection of the right to freedom of opinion and expression. United Nations. New York City, USA.; 2023. URL: https://www.ohchr.org/en/documents/thematic-reports/a78288-gendered-disinformation-and-its-implications-right-freedom [accessed 2025-11-29]
- 60. Šepec M. Virtual revenge pornography as a new online threat to sexual integrity. Balk Soc Sci Rev. 2020;15:117-135. [doi: 10.46763/BSSR20150118sh]
- 61. Geraets N. So far from science?: GPs desperate to debunk sexual health myths on social media. The Sydney Morning Herald. Sydney, Australia.; 2023. URL: http://smh.com.au/national/so-far-from-science-gps-desperate-to-debunk-sexual-health-myths-on-social-media-20230117-p5cd61.html [accessed 2025-11-29]
- 62. Galiano V, Orvieto R, Machtinger R, Nahum R, Garzia E, Sulpizio P, et al. "Add-Ons" for assisted reproductive technology: do patients get honest information from fertility clinics' websites? Reprod Sci. 2021;28(12):3466-3472. [doi: 10.1007/s43032-021-00601-7] [Medline: 33939166]
- 63. Sormunen T, Niklasson B, Westerbotn M. Information regarding male infertility in the Nordic countries' fertility clinics' websites: an evaluation of readability, suitability, and quality. J Consum Health Internet. 2024;28(4):293-307. [doi: 10.1080/15398285.2024.2408519]
- 64. Zemyarska MS. Is it ethical to provide IVF add-ons when there is no evidence of a benefit if the patient requests it? J Med Ethics. 2019;45(5):346-350. [doi: 10.1136/medethics-2018-104983] [Medline: 30745435]
- 65. Dietrich PN, Doolittle J, Brink S, Hanna D, Fitzgerald J, Dadhich P, et al. An online investigation into direct-to-consumer men's health clinics: the who, what, and where. Urology. 2023;174:135-140. [doi: 10.1016/j.urology.2023.01.026] [Medline: 36736913]
- 66. Green J, Petty J, Whiting L, Orr F, Smart L, Brown A, et al. 'Blurred boundaries': when nurses and midwives give anti-vaccination advice on Facebook. Nurs Ethics. 2022;29(3):552-568. [doi: 10.1177/09697330211041749] [Medline: 35142239]
- 67. Frid G, Bogaert K, Chen KT. Mobile health apps for pregnant women: systematic search, evaluation, and analysis of features. J Med Internet Res. 2021;23(10):e25667. [FREE Full text] [doi: 10.2196/25667] [Medline: 34524100]
- 68. Hohmann-Marriott BE, Williams TA, Girling JE. The role of menstrual apps in healthcare: provider and patient perspectives. N Z Med J. 2023;136(1570):42-53. [doi: 10.26635/6965.5925] [Medline: 36796318]
- 69. Glauser W. Abortion clinic websites blocked at Toronto hospital. CMAJ. 2020;192(36):E1049-E1050. [FREE Full text] [doi: 10.1503/cmaj.1095893] [Medline: 32900770]
- 70. Kohler RE, Hemler J, Wagner RB, Sullivan B, Macenat M, Tagai EK, et al. Confusion and anxiety in between abnormal cervical cancer screening results and colposcopy: "the land of the unknown". Patient Educ Couns. 2023;114:107810. [doi: 10.1016/j.pec.2023.107810] [Medline: 37244133]
- 71. John JN, Kabra R, Cappola AR. Counseling adolescents about intrauterine device insertional pain in the social media era: reproductive justice principles. J Adolesc Health. 2024;75(6):849-850. [doi: 10.1016/j.jadohealth.2024.08.004] [Medline: 39352362]
- 72. Gourounti K, Sarantaki A, Dafnou M, Hadjigeorgiou E, Lykeridou A, Middleton N. A qualitative study of assessing learning needs and digital health literacy in pregnancy: baby buddy forward Greek findings. Eur J Midwifery. 2022;6:55. [FREE Full text] [doi: 10.18332/ejm/150770] [Medline: 36119404]



73. Hann LR, Becker A. The option to look: patient-centred pregnancy tissue viewing at independent abortion clinics in the United States. Sex Reprod Health Matters. 2020;28(1):1730122. [FREE Full text] [doi: 10.1080/26410397.2020.1730122] [Medline: 32188353]

- 74. Anderer S. Patients are turning to TikTok for health information-here's what clinicians need to know. JAMA. 2024;331(15):1262-1264. [doi: 10.1001/jama.2024.1280] [Medline: 38517434]
- 75. Good MM, Tanouye S. Social media superpowers in obstetrics and gynecology. Obstet Gynecol Clin North Am. 2021;48(4):787-800. [doi: 10.1016/j.ogc.2021.07.007] [Medline: 34756297]
- 76. Truong MD, Abbott JA. #thehorsehasbolted #canwecatchit? #isitworthit? J Minim Invasive Gynecol. 2021;28(10):1687-1688. [doi: 10.1016/j.jmig.2021.08.012] [Medline: 34438044]
- 77. Nimbi FM, Ricciardi L, Galizia R, Lingiardi V. Using social media for male sexual health: what do we miss? A perspective article on good practices and missing evidence. Int J Impot Res. 2024;36(7):679-683. [doi: 10.1038/s41443-024-00854-1] [Medline: 38443554]
- 78. Washington I, Yilma H. How abortion misinformation gives rise to restrictive abortion laws. KFF Health Misinformation Monitor [Internet]. 2024. URL: https://www.kff.org/health-misinformation-monitor/ how-abortion-misinformation-gives-rise-to-restrictive-abortion-laws/ [accessed 2025-11-29]
- 79. INSIGHT: how misinformation about Samoa Agreement caused uproar in Nigeria. African Digital Democracy Observatory. 2024. URL: https://disinfo.africa/insight-how-misinformation-about-samoa-agreement-caused-uproar-in-nigeria-c85c6f079752 [accessed 2025-11-29]
- 80. Frank R. Miss-conceptions: abortifacients, regulatory failure, and political opportunity. Yale Law J. 2019;129(1):208-250. [FREE Full text]
- 81. Bernstein A, Friedrich-Karnik A, Damavandi S. How Project 2025 seeks to obliterate sexual and reproductive health and rights. Ms. Magazine. 2025. URL: https://msmagazine.com/2024/10/16/
 https://msmagazine.com/2024/10/16/
 https://msmagazine.com/2024/10/16/
 https://msmagazine.com/2024/10/16/
 https://msmagazine.com/2024/10/16/
 https://msmagazine.com/2024/10/16/
 https://msmagazine.com/
 https://msmagazine.com/
 https://msmagazine.com/
 <a href=
- 82. Marrinan C. Geofencing: the overlooked barrier to reproductive freedom. Council on Foreign Relations. 2024. URL: https://www.cfr.org/blog/geofencing-overlooked-barrier-reproductive-freedom [accessed 2025-11-29]
- 83. Tech and reproductive rights. Amnesty International. 2024. URL: https://www.amnestyusa.org/issues/technology/tech-and-repro/ [accessed 2025-11-29]
- 84. Myles D. Grindr? it's a "Blackmailer's goldmine"! The weaponization of queer data publics amid the US-China trade conflict. Sexualities. 2024;27(7):1205-1224. [doi: 10.1177/13634607221148137] [Medline: 39386057]
- 85. Lamačková A, Yoshida K, Gervais C, Hoctor L, Mirahver L, Thomasen K. Sexual and reproductive health and rights in Europe: progress and challenges. Council of Europe. Strasbourg, France.; 2024. URL: https://rm.coe.int/follow-up-report-on-the-2017-ip-on-srhr-sexual-and-reproductice-health/1680aea9b4 [accessed 2025-11-29]
- 86. Davies M. Row over medical journal's refusal to retract paper used to restrict abortion in US legal cases. BMJ. 2023;382:1576. [doi: 10.1136/bmj.p1576] [Medline: 37474199]
- 87. Wang Y, O'Connor K, Flores I, Berdahl CT, Urbanowicz RJ, Stevens R, et al. Health activism, vaccine, and mpox discourse: BERTopic based mixed-method analyses of tweets from sexual minority men and gender diverse (SMMGD) individuals in the U.S. medRxiv. Preprint posted online on March 19, 2024. [FREE Full text] [doi: 10.1101/2024.03.19.24304519] [Medline: 38562836]
- 88. Malhotra K, Kempegowda P. Appraising unmet needs and misinformation spread about polycystic ovary syndrome in 85,872 YouTube comments over 12 years: big data infodemiology study. J Med Internet Res. 2023;25:e49220. [FREE Full text] [doi: 10.2196/49220] [Medline: 37695666]
- 89. Hu MY, Ho DR, Weinberger JM, Osadchiy V, Mills JN, Eleswarapu SV. Guideline-nonconformant investigational treatments for erectile dysfunction: what are patients learning? Urology. 2023;173:111-118. [FREE Full text] [doi: 10.1016/j.urology.2022.11.044] [Medline: 36584789]
- 90. Miller NS. How influencers and content creators discuss birth control on social media: what research shows. The Journalist's Resource. 2024. URL: https://journalistsresource.org/health/how-birth-control-is-discussed-on-social-media/ [accessed 2025-11-29]
- 91. Laestadius LI, Van Hoorn K, Wahl M, Witt A, Carlyle KE, Guidry JPD. Promotion of an algorithm-based tool for pregnancy prevention by instagram influencers. J Womens Health (Larchmt). 2024;33(2):141-151. [doi: 10.1089/jwh.2023.0251] [Medline: 37976205]
- 92. Pfender EJ, Devlin MM. What do social media influencers say about birth control? A content analysis of YouTube vlogs about birth control. Health Commun. 2023;38(14):3336-3345. [doi: 10.1080/10410236.2022.2149091] [Medline: 36642835]
- 93. Center FCDH. Profiting from deceit: how Google profits from anti-choice ads distorting searches for reproductive healthcare. Center for Countering Digital Hate. URL: https://counterhate.com/research/google-profiting-from-fake-abortion-clinics-ads/facessed 2025-11-29
- 94. Pagoto SL, Palmer L, Horwitz-Willis N. The next infodemic: abortion misinformation. J Med Internet Res. 2023;25:e42582. [FREE Full text] [doi: 10.2196/42582] [Medline: 37140975]



95. Digital disparities: the global battle for reproductive rights on social media. MSI Reproductive Choices. 2024. URL: https://www.msichoices.org/latest/digital-disparities-the-global-battle-for-reproductive-rights-on-social-media/ [accessed 2025-11-29]

- 96. Chinogwenya W. The fight for reproductive rights has gone digital platforms like Meta and Google must pick a side. The Telegraph. 2024. URL: https://www.telegraph.co.uk/global-health/women-and-girls/reproductive-rights-south-africa-misinformation-meta-google/ [accessed 2025-11-29]
- 97. Simmons C, Martiny C. Networks of dissuasion: mapping online attacks on reproductive rights in France. Institute for Strategic Dialogue. London, England.; 2024. URL: https://www.isdglobal.org/isd-publications/ networks-of-dissuasion-mapping-online-attacks-on-reproductive-rights-in-france/ [accessed 2025-11-29]
- 98. Brissette V, Alnaki A, Garfinkle R, Lloyd M, Demian M, Vasilevsky C, et al. The quality, suitability, content and readability of online health-related information regarding sexual dysfunction after rectal cancer surgery. Colorectal Dis. 2021;23(2):376-383. [doi: 10.1111/codi.15514] [Medline: 33404140]
- 99. COMMENTARY: combatting misinformation in women's health. Canadian Medical Association. 2024. URL: https://www.cma.ca/about-us/what-we-do/press-room/commentary-combatting-misinformation-womens-health [accessed 2025-11-29]
- 100. D'Souza RS, D'Souza S, Sharpe EE. YouTube as a source of medical information about epidural analgesia for labor pain. Int J Obstet Anesth. 2021;45:133-137. [doi: 10.1016/j.ijoa.2020.11.005] [Medline: 33339713]
- 101. Di Spirito F, Amato A, D'Ambrosio F, Cannatà D, Di Palo MP, Coppola N, et al. HPV-related oral lesions: YouTube videos suitability for preventive interventions including mass-reach health communication and promotion of HPV vaccination. Int J Environ Res Public Health. 2023;20(11):5972. [FREE Full text] [doi: 10.3390/ijerph20115972] [Medline: 37297576]
- 102. Fode M, Nolsøe AB, Jacobsen FM, Russo GI, Østergren PB, Jensen CFS, et al. EAU YAU Men's Health Working Group. Quality of information in YouTube videos on erectile dysfunction. Sex Med. 2020;8(3):408-413. [FREE Full text] [doi: 10.1016/j.esxm.2020.05.007] [Medline: 32593674]
- 103. Jahnke H, Henrich N, Salem W, Shah N. Evaluating the evidence base for TikTok videos on strategies for becoming pregnant. O&G Open. 2024;1(4):038. [doi: 10.1097/og9.0000000000000038] [Medline: 41001600]
- 104. Kedzior SGE, Bianco-Miotto T, Breen J, Diener KR, Donnelley M, Dunning KR, et al. It takes a community to conceive: an analysis of the scope, nature and accuracy of online sources of health information for couples trying to conceive. Reprod Biomed Soc Online. 2019;9:48-63. [FREE Full text] [doi: 10.1016/j.rbms.2019.08.004] [Medline: 32021914]
- 105. Levy MS, Hunt KN, Rinehart S, Brown AD, Kelly AG, Sundaram P, et al. COVID-19 vaccine information and infertility posts on X: insights on a misinformation pandemic. Perm J. 2024;28(2):47-54. [FREE Full text] [doi: 10.7812/TPP/23.142] [Medline: 38698715]
- 106. Martin S, Kilich E, Dada S, Kummervold PE, Denny C, Paterson P, et al. "Vaccines for pregnant women...?! Absurd" mapping maternal vaccination discourse and stance on social media over six months. Vaccine. 2020;38(42):6627-6637. [doi: 10.1016/j.vaccine.2020.07.072] [Medline: 32788136]
- 107. McMahon E, Fetters T, Jive NL, Mpoyi M. Perils and promise providing information on sexual and reproductive health via the Nurse Nisa WhatsApp chatbot in the Democratic Republic of the Congo. Sex Reprod Health Matters. 2023;31(4):2235796. [FREE Full text] [doi: 10.1080/26410397.2023.2235796] [Medline: 37548472]
- 108. Onder CE, Koc G, Gokbulut P, Taskaldiran I, Kuskonmaz SM. Evaluation of the reliability and readability of ChatGPT-4 responses regarding hypothyroidism during pregnancy. Sci Rep. 2024;14(1):243. [FREE Full text] [doi: 10.1038/s41598-023-50884-w] [Medline: 38167988]
- 109. Pecoriello J, Yoder N, Smith MB, Blakemore JK. Keeping you posted: analysis of fertility-related social media posts after introduction of the COVID-19 vaccine. Eur J Contracept Reprod Health Care. 2023;28(3):168-172. [doi: 10.1080/13625187.2023.2189501] [Medline: 36995737]
- 110. Pereira CG, Santos RF, Faria APV, Silva TPRD, Pena ÉD, Matozinhos FP. Reliability of information available on popular websites about vaccination of pregnant women. Rev Esc Enferm USP. 2021;55:e20200517. [FREE Full text] [doi: 10.1590/1980-220X-REEUSP-2020-0517] [Medline: 34498661]
- 111. Rasouli MA, Sagun BK, Verma K, Duke CM. Black infertility and social media engagement: a mixed methodology analysis. F S Rep. 2022;3(2 Suppl):55-61. [FREE Full text] [doi: 10.1016/j.xfre.2021.11.005] [Medline: 35937449]
- 112. Şahin MF, Keleş A, Özcan R, Doğan Ç, Topkaç EC, Akgül M, et al. Evaluation of information accuracy and clarity: ChatGPT responses to the most frequently asked questions about premature ejaculation. Sex Med. 2024;12(3):qfae036. [FREE Full text] [doi: 10.1093/sexmed/qfae036] [Medline: 38832125]
- 113. Sajjadi NB, Nowlin W, Nowlin R, Wenger D, Beal JM, Vassar M, et al. United States internet searches for "infertility" following COVID-19 vaccine misinformation. J Osteopath Med. 2021;121(6):583-587. [FREE Full text] [doi: 10.1515/jom-2021-0059] [Medline: 33838086]
- 114. Shao Y, Tulandi T, Abenhaim HA. Evaluating the quality and reliability of online information on social fertility preservation. J Obstet Gynaecol Can. 2020;42(5):561-567. [doi: 10.1016/j.jogc.2019.10.029] [Medline: 31883752]
- 115. Shay LA, McKenzie A, Avshman E, Savas LS, Shegog R. HPV vaccine-related articles shared on Facebook from 2019 to 2021: did COVID make a difference? PEC Innov. 2024;4:100301. [FREE Full text] [doi: 10.1016/j.pecinn.2024.100301] [Medline: 38962500]



116. Shoureshi PS, Rajasegaran A, Kokorowski P, Sparks SS, Seideman CA. Social media engagement, perpetuating selected information, and accuracy regarding CA SB-201: treatment or intervention on the sex characteristics of a minor. J Pediatr Urol. 2021;17(3):372-377. [doi: 10.1016/j.jpurol.2021.01.047] [Medline: 33663998]

- 117. Sidnell A, Nestel P. UK internet antenatal dietary advice: a content accuracy and readability analysis. Br J Nutr. 2020;124(10):1061-1068. [doi: 10.1017/S0007114520002135] [Medline: 32536348]
- 118. Stephan AP, Hauc SC, Marks VA, Bercik R, Rickey L. TikTok misinformation and user engagement in female pelvic floor conditions. Neurourol Urodyn. 2024;43(8):1956-1961. [doi: 10.1002/nau.25519] [Medline: 38828831]
- 119. Vågenes H, Pranić SM. Analysis of the quality, accuracy, and readability of patient information on polycystic ovarian syndrome (PCOS) on the internet available in English: a cross-sectional study. Reprod Biol Endocrinol. 2023;21(1):44. [FREE Full text] [doi: 10.1186/s12958-023-01100-x] [Medline: 37189154]
- 120. Biino M. Anti-transgender campaigns bussed across the Atlantic transform European politics. .coda. New York, NC.; 2024. URL: https://www.codastory.com/polarization/transatlantic-migration-of-far-right-agendas/ [accessed 2025-11-29]
- 121. Madung O. Exporting disinformation: how foreign groups peddle influence in Kenya through Twitter. Mozilla Foundation. San Francisco, California.; 2023. URL: https://www.mozillafoundation.org/en/campaigns/ exporting-disinformation-how-foreign-groups-peddle-influence-in-kenya-through-twitter/ [accessed 2025-11-29]
- 122. Norris S. Kenya's pro-choice movement faces emboldened threats in a post-Roe world. Byline Times. London.; 2022. URL: https://bylinetimes.com/2022/07/22/kenyas-pro-choice-movement-faces-emboldened-threats-in-a-post-roe-world/ [accessed 2025-11-29]
- 123. Hlavinka E. TikTok is being flooded with birth control misinformation. Is it stopping women from taking it? Salon. 2024. URL: https://www.salon.com/2024/11/25/ tiktok-is-being-flooded-with-birth-control-misinformation-is-it-stopping-women-from-taking-it/ [accessed 2025-11-29]
- 124. Foran T. Contraception and the media: lessons past, present and future. Eur J Contracept Reprod Health Care. 2019;24(1):80-82. [doi: 10.1080/13625187.2018.1563067] [Medline: 30676116]
- 125. Newns KVJ, Feldman MD. Munchausen by internet and false perinatal crises. Ann Clin Psychiatry. 2021;33(2):e8-e12. [doi: 10.12788/acp.0024] [Medline: 33878290]
- 126. Weckend EF, Chandra P. Viral transmissions: memes as strategies for destignatizing taboos around sexual health on TikTok. 2024. Presented at: DIS '24 Companion: Companion Publication of the 2024 ACM Designing Interactive Systems Conference; July 01, 2024:271-274; Singapore, Singapore.
- 127. Acero N, Herrero E, Foncham J, McIlvaine J, Kayaalp E, Figueora M, et al. Accuracy, quality, and misinformation of YouTube abortion procedural videos: cross-sectional study. J Med Internet Res. 2024;26:e50099. [FREE Full text] [doi: 10.2196/50099] [Medline: 39437380]
- 128. ACOG. Ethical issues with vaccination in obstetrics and gynecology: ACOG committee opinion summary, number 829. Obstet Gynecol. 2021;138(1):162-163. [doi: 10.1097/AOG.000000000004427] [Medline: 34259486]
- 129. Agrawal S, Irwin C, Dhillon-Smith RK. An evaluation of the quality of online information on emergency contraception. Eur J Contracept Reprod Health Care. 2021;26(4):343-348. [doi: 10.1080/13625187.2021.1887476] [Medline: 33688778]
- 130. Digital Health And Rights Project Consortium. The digital transformation and the right to health of young adults in Bangladesh and Colombia: a community-engaged study. Health Hum Rights. 2024;26(2):45-60. [Medline: 39742200]
- 131. AlHefdhi HA, Mahmood SE, Alsaeedi MAI, Alwabel HHA, Alshahrani MS, Alshehri EY, et al. COVID-19 vaccine uptake and hesitancy among pregnant and lactating women in Saudi Arabia. Vaccines (Basel). 2023;11(2):361. [FREE Full text] [doi: 10.3390/vaccines11020361] [Medline: 36851239]
- 132. Allison BA, Vear K, Hoopes AJ, Maslowsky J. The perceived impact of a post-Dobbs landscape on U.S. adolescents and young adults. Contraception. 2024;138:110513. [doi: 10.1016/j.contraception.2024.110513] [Medline: 38879071]
- 133. Selvi AA, Arulchelvan S. Decoding global reproductive health discourse on Reddit: themes, regions, and misinformation challenges. Afr J Reprod Health. 2024;28(1):22-30. [doi: 10.29063/ajrh2024/v28i1.3] [Medline: 38308522]
- 134. Basinger ED, Delaney AL, Williams C. Uncertainty management in online sexual health forums. Health Commun. 2023;38(5):875-884. [doi: 10.1080/10410236.2021.1980253] [Medline: 34605355]
- 135. Beilby K, Hammarberg K. ChatGPT: a reliable fertility decision-making tool? Hum Reprod. 2024;39(3):443-447. [FREE Full text] [doi: 10.1093/humrep/dead272] [Medline: 38199794]
- 136. Berendes S, Mounier-Jack S, Ojo-Aromokudu O, Ivory A, Tucker JD, Larson HJ, et al. "Figuring stuff out myself" a qualitative study on maternal vaccination in socially and ethnically diverse areas in England. BMC Public Health. 2023;23(1):1408. [FREE Full text] [doi: 10.1186/s12889-023-16317-z] [Medline: 37480010]
- 137. Berger MN, Taba M, Marino JL, Lim MSC, Cooper SC, Lewis L, et al. Social media's role in support networks among LGBTQ adolescents: a qualitative study. Sex Health. 2021;18(5):421-431. [doi: 10.1071/SH21110] [Medline: 34706814]
- 138. Berkowitz HE, Vann JCJ. Strategies to address COVID-19 vaccine and pregnancy myths. MCN Am J Matern Child Nurs. 2023;48(4):215-223. [FREE Full text] [doi: 10.1097/NMC.00000000000926] [Medline: 36943837]
- 139. Blackburn NA, Dong W, Threats M, Barry M, LeGrand S, Hightow-Weidman LB, et al. Building community in the HIV online intervention space: lessons from the HealthMPowerment intervention. Health Educ Behav. 2021;48(5):604-614. [FREE Full text] [doi: 10.1177/10901981211003859] [Medline: 33834892]



140. Boatman D, Starkey A, Acciavatti L, Jarrett Z, Allen A, Kennedy-Rea S. Using social listening for digital public health surveillance of human papillomavirus vaccine misinformation online: exploratory study. JMIR Infodemiology. 2024;4:e54000. [FREE Full text] [doi: 10.2196/54000] [Medline: 38457224]

- 141. Pérez PB. Facebook doesn't sexual health or sexual pleasure: Big Tech's ambiguous content moderation policies and their impact on the sexual and reproductive health of the youth. Int J Sex Health. 2021;33(4):550-554. [FREE Full text] [doi: 10.1080/19317611.2021.2005732] [Medline: 38595779]
- 142. Burns C, Bakaj A, Berishaj A, Hristidis V, Deak P, Equils O. Use of generative AI for improving health literacy in reproductive health: case study. JMIR Form Res. 2024;8:e59434. [FREE Full text] [doi: 10.2196/59434] [Medline: 38986153]
- 143. Caddy C, Cheong M, Lim MSC, Power R, Vogel JP, Bradfield Z, et al. "Tell us what's going on": exploring the information needs of pregnant and post-partum women in Australia during the pandemic with 'Tweets', 'Threads', and women's views. PLoS One. 2023;18(1):e0279990. [FREE Full text] [doi: 10.1371/journal.pone.0279990] [Medline: 36638130]
- 144. Capece M, Di Giovanni A, Cirigliano L, Napolitano L, La Rocca R, Creta M, et al. YouTube as a source of information on penile prosthesis. Andrologia. 2022;54(1):e14246. [doi: 10.1111/and.14246] [Medline: 34519075]
- 145. Çardakcı Bahar Ş, Özarslantürk S, Özcan E. Does YouTubeTM provide adequate information on oral health during pregnancy? Cureus. 2024;16(4):e57887. [FREE Full text] [doi: 10.7759/cureus.57887] [Medline: 38725784]
- 146. Cartmell KB, Mzik CR, Sundstrom BL, Luque JS, White A, Young-Pierce J. HPV vaccination communication messages, messengers, and messaging strategies. J Cancer Educ. 2019;34(5):1014-1023. [FREE Full text] [doi: 10.1007/s13187-018-1405-x] [Medline: 30054900]
- 147. Carvalho de Sousa R, Lima da Silva MJ, Fialho do Nascimento MR, da Cruz Silveira M, de Paula Fernandes F, Quaresma TC, et al. Influences on COVID-19 vaccine adherence among pregnant women: the role of internet access and pre-vaccination emotions. Int J Environ Res Public Health. 2024;21(6):719. [FREE Full text] [doi: 10.3390/ijerph21060719] [Medline: 38928965]
- 148. Chaiken SR, Han L, Darney BG, Han L. Factors associated with perceived trust of false abortion websites: cross-sectional online survey. J Med Internet Res. 2021;23(4):e25323. [FREE Full text] [doi: 10.2196/25323] [Medline: 33871378]
- 149. Chee RM, Capper TS, Muurlink OT. Social media influencers' impact during pregnancy and parenting: a qualitative descriptive study. Res Nurs Health. 2024;47(1):7-16. [doi: 10.1002/nur.22350] [Medline: 37845594]
- 150. Wang X. Reporting online aggression: a transnational comparative interface analysis of sina weibo and Twitter. Tech Commun. 2023;70(4):42-59. [doi: 10.55177/tc934647]
- 151. Cheng JW, Fernandez N, Shnorhavorian M, Merguerian PA, Kieran K. Engagement of common pediatric urologic conditions on social media. J Pediatr Urol. 2022;18(2):236.e1-236.e7. [doi: 10.1016/j.jpurol.2021.12.003] [Medline: 35125286]
- 152. Chervenak J, Lieman H, Blanco-Breindel M, Jindal S. The promise and peril of using a large language model to obtain clinical information: ChatGPT performs strongly as a fertility counseling tool with limitations. Fertil Steril. 2023;120(3 Pt 2):575-583. [FREE Full text] [doi: 10.1016/j.fertnstert.2023.05.151] [Medline: 37217092]
- 153. Cilio S, Collà Ruvolo C, Turco C, Creta M, Capece M, La Rocca R, et al. Analysis of quality information provided by "Dr. YouTube" on Phimosis. Int J Impot Res. 2023;35(4):398-403. [FREE Full text] [doi: 10.1038/s41443-022-00557-5] [Medline: 35332276]
- 154. Cohen C, Serrano L. Anti-abortion centers in California in 2023: number, state licensure, location, and false medical claims online. UCLA Center on Reproductive Health, Law, and Policy. 2024. URL: https://law.ucla.edu/sites/default/files/PDFs/Center on Reproductive Health/2407% 20AAC% 20FINAL.pdf [accessed 2025-11-29]
- 155. Collà Ruvolo C, Califano G, Tuccillo A, Tolentino S, Cancelliere E, Di Bello F, et al. "YouTube™ as a source of information on placenta accreta: a quality analysis". Eur J Obstet Gynecol Reprod Biol. 2022;272:82-87. [doi: 10.1016/j.ejogrb.2022.03.015] [Medline: 35290877]
- 156. Cooke-Jackson A, Rubinsky V, Gunning JN. "Wish i would have known that before i started using it": contraceptive messages and information seeking among young women. Health Commun. 2023;38(4):834-843. [doi: 10.1080/10410236.2021.1980249] [Medline: 34544296]
- 157. Côté EJM, Benton M, Gardner R, Tribe R. Balancing benefits and risks of exercise in pregnancy: a qualitative analysis of social media discussion. BMJ Open Sport Exerc Med. 2024;10(4):e002176. [FREE Full text] [doi: 10.1136/bmjsem-2024-002176] [Medline: 39415883]
- 158. D'Angelo SM, Marcus R, Khan A, Homonchuk O. Whose hands on our education? Identifying and countering gender-restrictive backlash. Align Platform. London, UK.; 2024. URL: https://www.alignplatform.org/sites/default/files/2024-09/education-backlash-full-report.pdf [accessed 2025-11-29]
- 159. Dalton ME, Duffy R, Quinn E, Larsen K, Peters C, Brenner D, et al. A qualitative review of social media sharing and the 2022 monkeypox outbreak: did early labelling help to curb misinformation or fuel the fire? Sex Health. 2024;21:SH23158. [doi: 10.1071/SH23158] [Medline: 38295805]
- 160. Davey M. Companies marketing useless health products to women using feminist wellbeing messages. The Guardian. 2024. URL: https://www.theguardian.com/australia-news/2024/feb/15/ companies-marketing-useless-health-products-to-women-using-feminist-wellbeing-messages [accessed 2025-11-29]



161. Dawson AC, Fitzpatrick AK, Matthews JM, Nguyen AAK, Papanaoum K, Smith JR. Characterisation of social media conversations on syphilis: an unobtrusive observational study. Sex Health. 2024;21:SH23114. [doi: 10.1071/SH23114] [Medline: 38522475]

- 162. Demirci A, Başar H. Youtube is an unreliable source of information about delayed ejaculation treatment. Urologia. 2024;91(2):403-412. [doi: 10.1177/03915603231204077] [Medline: 37818833]
- 163. Dodge LE, Aguayo R, Dutton C, Hacker MR. The influence of advertising policy on information available online for abortion self-referral. Contraception. 2022;114:61-66. [doi: 10.1016/j.contraception.2022.05.012] [Medline: 35671842]
- 164. Dong Y, Zhang L, Lam C, Huang Z. Counteracting sexual and reproductive health misperceptions: investigating the roles of stigma, misinformation exposure, and information overload. Patient Educ Couns. 2024;120:108098. [doi: 10.1016/j.pec.2023.108098] [Medline: 38101090]
- 165. Dubin JM, Aguiar JA, Lin JS, Greenberg DR, Keeter MK, Fantus RJ, et al. The broad reach and inaccuracy of men's health information on social media: analysis of TikTok and Instagram. Int J Impot Res. 2024;36(3):256-260. [FREE Full text] [doi: 10.1038/s41443-022-00645-6] [Medline: 36402921]
- 166. Duggan J. Using TikTok to teach about abortion: combatting stigma and miseducation in the United States and beyond. Sex Educ. 2022;23(1):81-95. [doi: 10.1080/14681811.2022.2028614]
- 167. Edinger A, Valdez D, Walsh-Buhi E, Trueblood JS, Lorenzo-Luaces L, Rutter LA, et al. Misinformation and public health messaging in the early stages of the mpox outbreak: mapping the Twitter narrative with deep learning. J Med Internet Res. 2023;25:e43841. [FREE Full text] [doi: 10.2196/43841] [Medline: 37163694]
- 168. Ennab F, Babar MS, Khan AR, Mittal RJ, Nawaz FA, Essar MY, et al. Implications of social media misinformation on COVID-19 vaccine confidence among pregnant women in Africa. Clin Epidemiol Glob Health. 2022;14:100981. [FREE Full text] [doi: 10.1016/j.cegh.2022.100981] [Medline: 35187292]
- 169. Fairchild R, Price M, Craig A, Dotters-Katz SK. Reliability and comprehensiveness of YouTube videos about the COVID-19 vaccine in pregnancy. Am J Infect Control. 2023;51(11):1282-1284. [doi: 10.1016/j.ajic.2023.07.004] [Medline: 37487971]
- 170. Farrugia A, Waling A, Pienaar K, Fraser S. The "be all and end all"? Young people, online sexual health information, science and skepticism. Qual Health Res. 2021;31(11):2097-2110. [doi: 10.1177/10497323211003543] [Medline: 33880977]
- 171. Dos Santos Faustino GP, da Silva MO, de Almeida Filho AJ, de Assunção Ferreira M. Outline of a project for nursing health education on the Instagram social network. Rev Bras Enferm. 2023;76(2):e20220301. [FREE Full text] [doi: 10.1590/0034-7167-2022-0301] [Medline: 36995823]
- 172. Felix M, Sobel L, Salganicoff A. The right to contraception: state and federal actions, misinformation, and the courts: Keiser Family Foundation. KFF. URL: https://www.kff.org/womens-health-policy/issue-brief/ the-right-to-contraception-state-and-federal-actions-misinformation-and-the-courts/ [accessed 2025-11-29]
- 173. Fitzgerald MP, Langenderfer J, Renzelli-Cain R, Critch EA. Marketing and public policy implications of Dobbs v. Jackson Women's Health Organization. J Publ Policy Mark. 2023;42(4):303-325. [doi: 10.1177/07439156231179641]
- 174. Flanders CE, Dinh RN, Pragg L, Dobinson C, Logie CH. Young sexual minority women's evaluation processes of online and digital sexual health information. Health Commun. 2021;36(10):1286-1294. [doi: 10.1080/10410236.2020.1751381] [Medline: 32323570]
- 175. Fleming M, Dehlendorf C, Bell AJ. Misinformation around birth control online is a form of contraception coercion. Scientific American. New York, NY.; 2024. URL: https://www.scientificamerican.com/article/misinformation-around-birth-control-online-is-a-form-of-contraception/ [accessed 2025-11-29]
- 176. Flew T, Humphry J, Gray J, Hutchinson J, Page Jeffrey C, Johnson M, et al. Submission to the Joint Select Committee on Social Media and Australian Society. The University of Sydney. Australia.; 2024. URL: https://ses.library.usyd.edu.au/bitstream/handle/2123/32826/Sub154 USyd.pdf?sequence=1&isAllowed=y [accessed 2025-11-29]
- 177. Foster J, Sarlashkar P, Abraham O, Negris O, Lanthier J, Krapf J, et al. TikTok as a source of education and misinformation in lichen sclerosus. J Low Genit Tract Dis. 2025;29(1):68-71. [doi: 10.1097/LGT.000000000000846] [Medline: 39466157]
- 178. Gantt-Shafer J. "They just went after us:" reproductive justice advocacy at an abortion fund. Front Commun. 2020;5:501276. [doi: 10.3389/fcomm.2020.501276]
- 179. Garcia-Iglesias J, Heaphy B, Mowlabocus S, Yodovich N, Nagington M, Patton K, et al. Dating apps as health allies? Examining the opportunities and challenges of dating apps as partners in public health. Med Humanit. 2024;50(3):594-597. [doi: 10.1136/medhum-2024-012901] [Medline: 38754966]
- 180. Geskin S, Mangaldas L, Philpot A, Modi EK. Battling misinformation and disinformation: sexual and reproductive health and rights in the digital age. USC Institute on Inequalities in Global Health. 2024. URL: https://globalhealth.usc.edu/2024/02/06/can-reparations-help-to-end-racial-disparities-in-health-2/ [accessed 2025-11-29]
- 181. Gilbert SF. "When does human life begin?" teaching human embryology in the context of the American abortion debate. Dev Biol. 2024;515:102-111. [FREE Full text] [doi: 10.1016/j.ydbio.2024.07.003] [Medline: 39004200]
- 182. Golder S, McRobbie-Johnson ACE, Klein A, Polite FG, Gonzalez Hernandez G. Social media and COVID-19 vaccination hesitancy during pregnancy: a mixed methods analysis. BJOG. 2023;130(7):750-758. [FREE Full text] [doi: 10.1111/1471-0528.17481] [Medline: 37078279]
- 183. Grünebaum A, Chervenak J, Pollet SL, Katz A, Chervenak FA. The exciting potential for ChatGPT in obstetrics and gynecology. Am J Obstet Gynecol. 2023;228(6):696-705. [doi: 10.1016/j.ajog.2023.03.009] [Medline: 36924907]



184. Gunnarsson L, Wemrell M. Assessing the validity of counter-authority knowledge: the case of Swedish women's epistemic patchworking around the risks of copper IUD use. J Crit Realism. 2024;23(1):1-23. [doi: 10.1080/14767430.2024.2413831]

- 185. Harlow AF, Willis SK, Smith ML, Rothman EF. Bystander prevention for sexual violence: #HowIWillChange and gaps in Twitter discourse. J Interpers Violence. 2021;36(11-12):NP5753-NP5771. [doi: 10.1177/0886260518808854] [Medline: 30379107]
- 186. Harris R. Green scarves and data harvesting: how the abortion battle has gone digital. Harvard International Review. 2021. URL: https://hir.harvard.edu/abortion-digital/ #:~:text=Green%20Scarves%20and%20Data%20Harvesting%3A%20How%20the%20Abortion%20Battle%20has%20Gone%20Digital_-03. May. 2021&text=Carrying%20signs%20reading%20%E2%80%9CThe%20revolution,newly%20enforced%20restrictions%20on%20abortions [accessed 2025-11-29]
- 187. Hayman M, Keppel M, Stanton R, Thwaite TL, Alfrey K-L, Alley S, et al. A mixed-methods exploration of attitudes towards pregnant Facebook fitness influencers. BMC Public Health. 2023;23(1):569. [FREE Full text] [doi: 10.1186/s12889-023-15457-6] [Medline: 36973705]
- 188. Herbenick D, Guerra-Reyes L, Patterson C, Wilson J, Rosenstock Gonzalez YR, Voorheis E, et al. #ChokeMeDaddy: a content analysis of memes related to choking/strangulation during sex. Arch Sex Behav. 2023;52(3):1299-1315. [FREE Full text] [doi: 10.1007/s10508-022-02502-5] [Medline: 36526942]
- 189. Herbenick D, Patterson C, Khan S, Voorheis E, Sullivan A, Wright P, et al. "Don't just randomly grab someone's neck during intercourse!" an analysis of internet articles about choking/strangulation during sex. J Sex Marital Ther. 2023;49(1):41-55. [doi: 10.1080/0092623X.2022.2065392] [Medline: 35570586]
- 190. Holly L. Health in the digital age: where do children's rights fit in? Health Hum Rights. 2020;22(2):49-54. [FREE Full text] [Medline: 33390692]
- 191. Hong C. Mpox on reddit: a thematic analysis of online posts on mpox on a social media platform among key populations. J Urban Health. 2023;100(6):1264-1273. [FREE Full text] [doi: 10.1007/s11524-023-00773-4] [Medline: 37580545]
- 192. Ishida JH, Zhang AJ, Steigerwald S, Cohen BE, Vali M, Keyhani S. Sources of information and beliefs about the health effects of marijuana. J Gen Intern Med. 2020;35(1):153-159. [FREE Full text] [doi: 10.1007/s11606-019-05335-6] [Medline: 31637640]
- 193. Kawchuk G, Hartvigsen J, Innes S, Simpson JK, Gushaty B. The use of internet analytics by a Canadian provincial chiropractic regulator to monitor, evaluate and remediate misleading claims regarding specific health conditions, pregnancy, and COVID-19. Chiropr Man Therap. 2020;28(1):24. [FREE Full text] [doi: 10.1186/s12998-020-00314-9] [Medline: 32393394]
- 194. Khosla R, Mishra V, Singh S. Sexual and reproductive health and rights and bodily autonomy in a digital world. Sex Reprod Health Matters. 2023;31(4):2269003. [FREE Full text] [doi: 10.1080/26410397.2023.2269003] [Medline: 37930349]
- 195. Kim SJ, Schiffelbein JE, Imset I, Olson AL. Countering antivax misinformation via social media: message-testing randomized experiment for human papillomavirus vaccination uptake. J Med Internet Res. 2022;24(11):e37559. [FREE Full text] [doi: 10.2196/37559] [Medline: 36422887]
- 196. Kirana P-S, Gudeloglu A, Sansone A, Fode M, Reisman Y, Corona G, et al. E-sexual health: a position statement of the european society for sexual medicine. J Sex Med. 2020;17(7):1246-1253. [doi: 10.1016/j.jsxm.2020.03.009] [Medline: 32340920]
- 197. Lahti H, Kokkonen M, Hietajärvi L, Lyyra N, Paakkari L. Social media threats and health among adolescents: evidence from the health behaviour in school-aged children study. Child Adolesc Psychiatry Ment Health. 2024;18(1):62. [FREE Full text] [doi: 10.1186/s13034-024-00754-8] [Medline: 38812043]
- 198. Lang JJ, Giffen Z, Hong S, Demeter J, El-Zawahry A, Sindhwani P, et al. Assessing vasectomy-related information on youtube: an analysis of the quality, understandability, and actionability of information. Am J Mens Health. 2022;16(2):15579883221094716. [FREE Full text] [doi: 10.1177/15579883221094716] [Medline: 35491867]
- 199. Lee K-N, Joo YJ, Choi SY, Park ST, Lee K-Y, Kim Y, et al. Content analysis and quality evaluation of cesarean delivery-related videos on YouTube: cross-sectional study. J Med Internet Res. 2021;23(7):e24994. [FREE Full text] [doi: 10.2196/24994] [Medline: 34328422]
- 200. Lee S-Y, Lee S. Quality of online information regarding high-risk pregnancies. Comput Inform Nurs. 2021;39(12):974-983. [doi: 10.1097/CIN.00000000000000068] [Medline: 34145205]
- 201. Li M, Li G, Yang S. Correction by distraction: how high-tempo music enhances medical experts' debunking TikTok videos. J Comput-Mediat Commun. 2024;29(5):15. [doi: 10.1093/jcmc/zmae007]
- 202. Liang OS, Chen Y, Bennett DS, Yang CC. Identifying self-management support needs for pregnant women with opioid misuse in online health communities: mixed methods analysis of web posts. J Med Internet Res. 2021;23(2):e18296. [FREE Full text] [doi: 10.2196/18296] [Medline: 33538695]
- 203. Libretti A, Vitale SG, Saponara S, Corsini C, Aquino CI, Savasta F, et al. Hysteroscopy in the new media: quality and reliability analysis of hysteroscopy procedures on YouTubeTM. Arch Gynecol Obstet. 2023;308(5):1515-1524. [FREE Full text] [doi: 10.1007/s00404-023-07172-9] [Medline: 37568070]



204. Loeb S, Sanchez Nolasco T, Byrne N, Allen L, Langford AT, Ravenell JE, et al. Qualitative study on internet use and care impact for black men with prostate cancer. Health Educ Behav. 2024;51(3):359-366. [doi: 10.1177/10901981241228226] [Medline: 38366884]

- 205. TikTok and Instagram are full of misleading information about birth control and wellness influencers are helping drive these narratives. City St George's, University of London. URL: https://www.city.ac.uk/news-and-events/news/2024/april/social-media-birth-control-misinformation [accessed 2025-11-29]
- 206. Looi MK. The grey area of "fertility tech" being mis-sold as contraception. BMJ. 2024;384:q54. [doi: 10.1136/bmj.q54] [Medline: 38365285]
- 207. Lovett J, Gordon C, Patton S, Chen CX. Online information on dysmenorrhoea: an evaluation of readability, credibility, quality and usability. J Clin Nurs. 2019;28(19-20):3590-3598. [FREE Full text] [doi: 10.1111/jocn.14954] [Medline: 31162870]
- 208. Malcolm HE. Pregnancy centers and the limits of mandated disclosure. C Law Rev. 2019;119(4):1133-1168. [FREE Full text]
- 209. The dangers of birth control misinformation post-Roe. Think Global Health. URL: https://www.thinkglobalhealth.org/article/dangers-birth-control-misinformation-post-roe [accessed 2025-11-29]
- 210. Martins-Filho PR. Increase in interest in sexually transmitted infections on YouTube during the monkeypox outbreak in 2022: a global infodemiology study. Int J Surg. 2022;107:106970. [FREE Full text] [doi: 10.1016/j.ijsu.2022.106970] [Medline: 36341759]
- 211. Matos C. Community engagement with health messages on reproductive health in an age of misinformation and political polarisation: a case study of the US NGO open arms in Florida. In: Amaral I, de Simões RB, Flores AMM, editors. Young Adulthood Across Digital Platforms: Digitally Constructing Gender and Sexualities. United Kingdom. Emerald Publishing Limited; 2024:145-164.
- 212. Matos C. Making sense of reproductive health messages in the Global South: a case study of Brazil's NGO Reprolatina. Int J Media Cult Polit. 2023;19(2-3):237-254. [doi: 10.1386/macp 00085 1]
- 213. McCammon H. A war of words over abortion: the legal-framing contest over the undue burden standard. Justice Syst J. 2022;43(4):623-644. [doi: 10.1080/0098261X.2022.2151388]
- 214. McCarthy R, Byrne G, Brettle A, Choucri L, Ormandy P, Chatwin J. Midwife-moderated social media groups as a validated information source for women during pregnancy. Midwifery. 2020;88:102710. [doi: 10.1016/j.midw.2020.102710] [Medline: 32485501]
- 215. McInroy L, McCloskey R, Craig S, Eaton A. LGBTQ+ youths' community engagement and resource seeking online versus offline. J Technol Hum Serv. 2019;37(4):315-333. [doi: 10.1080/15228835.2019.1617823]
- 216. McMahon HV, McMahon BD. Automating untruths: ChatGPT, self-managed medication abortion, and the threat of misinformation in a post- world. Front Digit Health. 2024;6:1287186. [FREE Full text] [doi: 10.3389/fdgth.2024.1287186] [Medline: 38419805]
- 217. Morra S, Napolitano L, Collà Ruvolo C, Celentano G, La Rocca R, Capece M, et al. Could YouTubeTM encourage men on prostate checks? A contemporary analysis. Arch Ital Urol Androl. 2022;94(3):285-290. [FREE Full text] [doi: 10.4081/aiua.2022.3.285] [Medline: 36165471]
- 218. Movahedi Nia Z, Bragazzi N, Asgary A, Orbinski J, Wu J, Kong J. Mpox panic, infodemic, and stigmatization of the two-spirit, lesbian, gay, bisexual, transgender, queer or questioning, intersex, asexual community: geospatial analysis, topic modeling, and sentiment analysis of a large, multilingual social media database. J Med Internet Res. 2023;25:e45108. [FREE Full text] [doi: 10.2196/45108] [Medline: 37126377]
- 219. Murciano-Gamborino C, Diez-Domingo J, Fons-Martinez J, PROTECT-EUROPE Consortium. Healthcare professionals' perspectives on HPV recommendations: themes of interest to different population groups and strategies for approaching them. Vaccines (Basel). 2024;12(7):748. [FREE Full text] [doi: 10.3390/vaccines12070748] [Medline: 39066386]
- 220. Neigh S. Podcast: challenging mis- and disinformation about sexual health and rights. Talking Radical. URL: https://talkingradical.ca/2023/02/07/radio-challenging-mis-and-disinformation-about-sexual-health-and-rights/?utm_source=chatgpt.com [accessed 2025-11-29]
- 221. Nicolla S, Lazard AJ. Social media communication about sexual violence may backfire: online experiment with young men. J Health Commun. 2023;28(1):28-37. [doi: 10.1080/10810730.2023.2174214] [Medline: 36782407]
- 222. Nörby U, Noël-Cuppers B, Hristoskova S, Desai M, Härmark L, Steel M, et al. Online information discrepancies regarding safety of medicine use during pregnancy and lactation: an IMI ConcePTION study. Expert Opin Drug Saf. 2021;20(9):1117-1124. [FREE Full text] [doi: 10.1080/14740338.2021.1935865] [Medline: 34080506]
- 223. Obstacles to autonomy: post-Roe removal of abortion information online. Amnesty International. 2024. URL: https://www.amnesty.org/en/documents/amr51/7756/2024/en/ [accessed 2025-12-03]
- 224. Olamijuwon E, Clifford O, Adjiwanou V. Understanding how young African adults interact with peer-generated sexual health information on Facebook and uncovering strategies for successful organic engagement. BMC Public Health. 2021;21(1):2153. [FREE Full text] [doi: 10.1186/s12889-021-12165-x] [Medline: 34819036]
- 225. Ontiveros ST, Qozi M, Cantrell FL. A concerning internet trend that might result in unintended pregnancy. Am J Med. 2020;133(8):e427. [doi: 10.1016/j.amjmed.2020.02.013] [Medline: 32147447]



226. Pandian T, Maraimalai N. Understanding cybercrime's impact on women's physical and psychological well-being. Afr J Reprod Health. 2024;28(5):103-112. [doi: 10.29063/ajrh2024/v28i5.13] [Medline: 38920349]

- 227. Pang RD, Dormanesh A, Hoang Y, Chu M, Allem J-P. Twitter posts about cannabis use during pregnancy and postpartum: a content analysis. Subst Use Misuse. 2021;56(7):1074-1077. [doi: 10.1080/10826084.2021.1906277] [Medline: 33821757]
- 228. Park HJ. The rise of generative artificial intelligence and the threat of fake news and disinformation online: perspectives from sexual medicine. Investig Clin Urol. 2024;65(3):199-201. [FREE Full text] [doi: 10.4111/icu.20240015] [Medline: 38714510]
- 229. Pereira-Kotze C, Horwood C, Haskins L, Kingston G, Luthuli S, Doherty T. Exploring women's exposure to marketing of commercial formula products: a qualitative marketing study from two sites in South Africa. Glob Health Action. 2022;15(1):2074663. [FREE Full text] [doi: 10.1080/16549716.2022.2074663] [Medline: 35946213]
- 230. Pfender E. Social media misinformation is scaring women about birth control. STAT news. 2024. URL: https://www.statnews.com/2024/11/05/social-media-misinformation-is-scaring-women-about-birth-control [accessed 2025-11-29]
- 231. Pfender EJ, Caplan SE. The effect of social media influencer warranting cues on intentions to use non-hormonal contraception. Health Commun. 2025;40(8):1428-1442. [doi: 10.1080/10410236.2024.2402161] [Medline: 39258763]
- 232. Pfender EJ, Kuijpers KL, Wanzer CV, Bleakley A. Cycle syncing and TikTok's digital landscape: a reasoned action elicitation through a critical feminist lens. Qual Health Res. 2025;35(10-11):1191-1203. [FREE Full text] [doi: 10.1177/10497323241297683] [Medline: 39576887]
- 233. Berro Pizzarossa L, Nandagiri R. Self-managed abortion: a constellation of actors, a cacophony of laws? Sex Reprod Health Matters. 2021;29(1):1899764. [FREE Full text] [doi: 10.1080/26410397.2021.1899764] [Medline: 33764856]
- 234. Pleasants E, Guendelman S, Weidert K, Prata N. Quality of top webpages providing abortion pill information for Google searches in the USA: an evidence-based webpage quality assessment. PLoS One. 2021;16(1):e0240664. [doi: 10.1371/journal.pone.0240664] [Medline: 33476340]
- 235. Pleasure ZH, Becker A, Johnson DM, Broussard K, Lindberg L. How TikTok is being used to talk about abortion post-Roe: a content analysis of the most liked abortion TikToks. Contraception. 2024;133:110384. [doi: 10.1016/j.contraception.2024.110384] [Medline: 38253250]
- 236. Ranney ML, Gostin LO. State medical board sanctions for misinformation should be rare. JAMA Netw Open. 2024;7(11):e2443878. [doi: 10.1001/jamanetworkopen.2024.43878] [Medline: 39531238]
- 237. Blueprint for sexual and reproductive health, rights, and justice policy agenda. Reproductive Blueprint. URL: https://reproblueprint.org [accessed 2025-11-29]
- 238. Restrepo NJ, Illari L, Leahy R, Sear RF, Lupu Y, Johnson NF. How social media machinery pulled mainstream parenting communities closer to extremes and their misinformation during COVID-19. IEEE Access. 2022;10:2330-2344. [doi: 10.1109/ACCESS.2021.3138982]
- 239. Government takes action to combat anti-choice misinformation. Action Canada for Sexual Health & Rights. 2024. URL: https://www.actioncanadashr.org/news/2024-10-29-government-takes-action-combat-anti-choice-misinformation [accessed 2025-11-29]
- 240. Report on freedom of expression and the gender dimensions of disinformation. United Nations. 2023. URL: https://www.ohchr.org/en/calls-for-input/2023/report-freedom-expression-and-gender-dimensions-disinformation [accessed 2025-11-29]
- 241. Society for Adolescent Health and Medicine and the North American Society for Pediatric and Adolescent Gynecology. Crisis pregnancy centers in the U.S.: lack of adherence to medical and ethical practice standards: a joint position statement of the society for adolescent health and medicine and the North American Society for Pediatric and Adolescent Gynecology. J Adolesc Health. 2019;65(6):821-824. [doi: 10.1016/j.jadohealth.2019.08.008] [Medline: 31672521]
- 242. Sandset T, Pham T, Dong DD, Davis SLM. Sexual and reproductive health and digital human rights: a study with people living with HIV and key populations in Vietnam. Cult Health Sex. 2025;27(11):1377-1392. [FREE Full text] [doi: 10.1080/13691058.2024.2411406] [Medline: 39402802]
- 243. Understanding common rumors that emerge during public health emergencies. Center for Health Security. 2023. URL: https://centerforhealthsecurity.org/our-work/research-projects/trust-in-public-health/tackling-rumors/trust-common-rumors-during-phes [accessed 2025-11-29]
- 244. Shackleford M, Horvath A, Repetto M, Thi A, Twells R, Sanders M, et al. An analysis of oral contraceptive related videos on TikTok. AJOG Glob Rep. 2024;4(3):100364. [FREE Full text] [doi: 10.1016/j.xagr.2024.100364] [Medline: 39077679]
- 245. Sherman J. How abortion misinformation and disinformation spread online. Scientific American. 2022. URL: https://www.scientificamerican.com/article/how-abortion-misinformation-and-disinformation-spread-online/ [accessed 2025-11-29]
- 246. Silva M, Anaba U, Jani Tulsani N, Sripad P, Walker J, Aisiri A. Gender-based violence narratives in internet-based conversations in Nigeria: social listening study. J Med Internet Res. 2023;25:e46814. [FREE Full text] [doi: 10.2196/46814] [Medline: 37713260]
- 247. Simas C, Larson HJ, Paterson P. "Saint Google, now we have information!": a qualitative study on narratives of trust and attitudes towards maternal vaccination in Mexico City and Toluca. BMC Public Health. 2021;21(1):1170. [FREE Full text] [doi: 10.1186/s12889-021-11184-y] [Medline: 34144703]
- 248. Smith AM, Mucedola AS, Ausness-Ayres A. My video, my choice: a quantitative content analysis of U.S. OBGYN TikTok videos in the post-Roe era. Women's Reproductive Health. 2024. [doi: 10.1080/23293691.2024.2377969]



249. Social media toolkit. Action Canada for Sexual Health and Rights. 2024. URL: https://www.actioncanadashr.org/sexual-health-hub/social-media-toolkit [accessed 2025-11-28]

- 250. Southerton C, Clark M. OBGYNs of TikTok and the role of misinformation in diffractive knowledge production. J Sociol. 2023;59(3):610-627. [doi: 10.1177/14407833221135209]
- 251. Strzyżyńska W. Meta and Google accused of restricting reproductive health information. The Guardian. 2024. URL: https://www.theguardian.com/global-development/2024/mar/27/meta-and-google-accused-of-restricting-reproductive-health-information [accessed 2025-11-29]
- 252. Sundstrom B, Cartmell KB, White AA, Russo N, Well H, Pierce JY, et al. HPV vaccination champions: evaluating a technology-mediated intervention for parents. Front Digit Health. 2021;3:636161. [FREE Full text] [doi: 10.3389/fdgth.2021.636161] [Medline: 34713108]
- 253. Sundstrom B, Cartmell KB, White AA, Well H, Pierce JY, Brandt HM. Correcting HPV vaccination misinformation online: evaluating the HPV Vaccination NOW social media campaign. Vaccines (Basel). 2021;9(4):352. [FREE Full text] [doi: 10.3390/vaccines9040352] [Medline: 33917512]
- 254. Swartz JJ, Rowe C, Morse JE, Bryant AG, Stuart GS. Women's knowledge of their state's abortion regulations. A national survey. Contraception. 2020;102(5):318-326. [FREE Full text] [doi: 10.1016/j.contraception.2020.08.001] [Medline: 32771370]
- 255. Sweeney L, Carroll K, Noble-Carr D, Waldby C. Lactation after infant death: an analysis of Australian healthcare agencies' online health information. Health Sociol Rev. 2020;29(1):45-61. [doi: 10.1080/14461242.2019.1708206] [Medline: 33411662]
- 256. Szwarc L, Sánchez-Antelo V, Paolino M, Arrossi S. "You are always left with doubts": information access among HPV-positive women in Greater Buenos Aires. Rev Salud Publica (Bogota). 2023;25(2):102896. [FREE Full text] [doi: 10.15446/rsap.V25n2.102896] [Medline: 40099120]
- 257. Unfried K, Priebe J. Who shares fake news on social media? Evidence from vaccines and infertility claims in sub-Saharan Africa. PLoS One. 2024;19(4):e0301818. [FREE Full text] [doi: 10.1371/journal.pone.0301818] [Medline: 38593132]
- 258. Digital misinformation/disinformation and children. UNICEF. URL: https://www.unicef.org/innocenti/media/856/file/UNICEF-Global-Insight-Digital-Mis-Disinformation-and-Children-2021.pdf [accessed 2025-12-03]
- 259. Valente PK, Morin C, Roy M, Mercier A, Atlani-Duault L. Sexual transmission of Zika virus on Twitter: a depoliticised epidemic. Glob Public Health. 2020;15(11):1689-1701. [FREE Full text] [doi: 10.1080/17441692.2020.1768275] [Medline: 32436470]
- 260. van Dijk MR, van der Marel A-F, van Rheenen-Flach LE, Ganzevoort W, Moll E, Scheele F, et al. YouTube as a source of patient information on external cephalic version: cross-sectional study. JMIR Form Res. 2024;8:e50087. [FREE Full text] [doi: 10.2196/50087] [Medline: 38843520]
- 261. Vazquez Corona M, Betrán AP, Bohren MA. The portrayal and perceptions of cesarean section in Mexican media Facebook pages: a mixed-methods study. Reprod Health. 2022;19(1):49. [FREE Full text] [doi: 10.1186/s12978-022-01351-8] [Medline: 35193590]
- 262. Verma K, Sagun BK, Rasouli MA, Duke CM. Social media engagement with transgender fertility content. F&S Rep. 2022;3(2 Suppl):100-105. [FREE Full text] [doi: 10.1016/j.xfre.2021.12.005] [Medline: 35937448]
- 263. Vicente-Neira A, Prieto-Gómez V, Navarro-Brazález B, Lirio-Romero C, Bailón-Cerezo J, Torres-Lacomba M. Online information on painful sexual dysfunction in women: quality analysis of websites in spanish about dyspareunia, vaginismus and vulvodynia. Int J Environ Res Public Health. 2022;19(3):1506. [FREE Full text] [doi: 10.3390/ijerph19031506] [Medline: 35162525]
- 264. Viera A, van den Berg JJ, Sosnowy CD, Mehta NA, Edelman EJ, Kershaw T, et al. Barriers and facilitators to HIV pre-exposure prophylaxis uptake among men who have sex with men who use stimulants: a qualitative study. AIDS Behav. 2022;26(9):3016-3028. [FREE Full text] [doi: 10.1007/s10461-022-03633-5] [Medline: 35303188]
- 265. Voets A, Wang B, Maslen C, Orza L, Chawla R, Birgin R. Advancing the sexual and reproductive health and rights of women who use drugs. Frontline AIDS. 2020. URL: https://frontlineaids.org/wp-content/uploads/2020/02/Guide-for-harm-reduction-programmes-FINAL-24Feb-WEB.pdf [accessed 2025-11-29]
- 266. Wahab MSA, Abd Hamid NN, Yassen AO, Naim MJ, Ahamad J, Zulkifli NW, et al. How internet websites portray herbal vitality products containing: an evaluation of the quality and risks of online information. Int J Environ Res Public Health. 2022;19(19):11853. [FREE Full text] [doi: 10.3390/ijerph191911853] [Medline: 36231154]
- 267. Waser M, Heiss R, Borena W. Factors affecting children's HPV vaccination in Austria: evidence from a parent survey. Hum Vaccin Immunother. 2022;18(6):2126251. [FREE Full text] [doi: 10.1080/21645515.2022.2126251] [Medline: 36251011]
- 268. Report an Incident Donate. Repro Uncensored. 2024. URL: https://www.reprouncensored.org/report-incident [accessed 2025-12-03]
- 269. Weber L, Malhi S. Women are getting off birth control amid misinformation explosion. Washington Post. 2024. URL: https://www.washingtonpost.com/health/2024/03/21/stopping-birth-control-misinformation/ [accessed 2025-11-29]



270. Wexler A, Davoudi A, Weissenbacher D, Choi R, O'Connor K, Cummings H, et al. Pregnancy and health in the age of the internet: a content analysis of online "birth club" forums. PLoS One. 2020;15(4):e0230947. [FREE Full text] [doi: 10.1371/journal.pone.0230947] [Medline: 32287266]

- 271. Willburger B, Chen Z, Mansfield KJ. Investigation of the quality and health literacy demand of online information on pelvic floor exercises to reduce stress urinary incontinence. Aust N Z J Obstet Gynaecol. 2024;64(6):542-547. [doi: 10.1111/ajo.13830] [Medline: 38686657]
- 272. Wilson-Lowe RV, Purcell C, Lewis R, McDaid L. Seeking support for abortion online: a qualitative study of women's experiences. BMJ Sex Reprod Health. 2024;50(3):172-177. [doi: 10.1136/bmjsrh-2023-202083] [Medline: 38336468]
- 273. Wu J, Greene M, Happ M, Trahair E, Montoya M, Swartz JJ. Medication abortion on TikTok: misinformation or reliable resource? Am J Obstet Gynecol. 2023;228(6):749-751. [FREE Full text] [doi: 10.1016/j.ajog.2023.01.023] [Medline: 36736679]
- 274. Yagiz B, Coskun BN, Halil EY, Dalkilic E, Pehlivan Y. The efficacy and reliability of English YouTube videos as a source of information for pregnant rheumatoid arthritis patients. Clin Rheumatol. 2023;42(12):3311-3320. [doi: 10.1007/s10067-023-06780-9] [Medline: 37814092]
- 275. Yuksel B, Cakmak K. Healthcare information on YouTube: pregnancy and COVID-19. Int J Gynaecol Obstet. 2020;150(2):189-193. [FREE Full text] [doi: 10.1002/ijgo.13246] [Medline: 32471005]
- 276. Zaila KE, Osadchiy V, Shahinyan RH, Mills JN, Eleswarapu SV. Social media sensationalism in the male infertility space: a mixed methodology analysis. World J Mens Health. 2020;38(4):591-598. [FREE Full text] [doi: 10.5534/wjmh.200009] [Medline: 32378368]
- 277. Zhang L, Dong Y, Lam C, Huang Z. Engaging and (the Illusion of) learning? Examining the relationship between different social media activities and reproductive health knowledge. J Health Commun. 2024;29(5):327-339. [doi: 10.1080/10810730.2024.2339261] [Medline: 38597612]
- 278. Zhang L, Liu PL, Lam C, Huang Z. Well-informed or misinformed? News-Finds-Me perception in shaping sexual and reproductive health knowledge and behavioral intentions among Chinese women. Soc Sci Med. 2024;359:117271. [doi: 10.1016/j.socscimed.2024.117271] [Medline: 39216428]
- 279. Flourish. URL: https://app.flourish.studio/ [accessed 2025-12-03]
- 280. Adegoke Y, Nwonwu C, Shaikhouni L. 'Pregnant' for 15 months: inside the 'miracle' fertility scam. BBC. 2024. URL: https://www.bbc.com/news/articles/c78dyryreyxo [accessed 2025-11-29]
- 281. Malki LM, Patel D, Singh A. A mixed-methods analysis of women's health misinformation on social media. In: Human-Computer Interaction INTERACT 2023. INTERACT 2023. Lecture Notes in Computer Science, vol 14144. Cham. Springer; 2023. Presented at: Human-Computer Interaction INTERACT 2023; August 28 September 1, 2023; York, UK.
- 282. Dave P. Amazon restricted vaginal health products for being 'potentially embarrassing'. WIRED. 2025. URL: https://www.wired.com/story/sexual-health-advertising-bias-ecommerce/ [accessed 2025-11-29]
- 283. Grant N, Mickle T. YouTube loosens rules guiding the moderation of videos. The New York Times. URL: https://www.nytimes.com/2025/06/09/technology/youtube-videos-content-moderation.html [accessed 2025-11-29]
- 284. Robertson CE, Del Rosario KS, Van Bavel JJ. Inside the funhouse mirror factory: how social media distorts perceptions of norms. Curr Opin Psychol. 2024;60:101918. [doi: 10.1016/j.copsyc.2024.101918] [Medline: 39369456]
- 285. Rathje S, Van Bavel JJ. The psychology of virality. Trends Cogn Sci. 2025;29(10):914-927. [doi: 10.1016/j.tics.2025.06.014] [Medline: 40675888]

Abbreviations

AAAQ: Availability, Accessibility, Acceptability, and Quality

AI: artificial intelligence

FDA: Food and Drug Administration

HPV: human papillomavirus **JBI:** Joanna Briggs Institute

LGBTQ+: Lesbian, Gay, Bisexual, Transgender, Queer, and more

PRISMA-ScR: Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping

Reviews

SRH: sexual and reproductive health

SRHR: sexual and reproductive health and rights

UN: United Nations

WHO: World Health Organization



Edited by A Mavragani; submitted 08.Sep.2025; peer-reviewed by A Ely Yamin, Y Jiang; comments to author 23.Sep.2025; revised version received 17.Oct.2025; accepted 10.Nov.2025; published 30.Dec.2025

Please cite as:

Purnat TD, Wilhelm E, Scales D, Wardle C, Bastien S, Ganatra B, Lavelanet A, Mburu G, Tamrat T, Nihlén Å

 $Impacts\ of\ Sexual\ and\ Reproductive\ Health\ and\ Rights\ Misinformation\ in\ Digital\ Spaces\ on\ Human\ Rights\ Protection\ and\ Promotion:\ Scoping\ Review$

JMIR Infodemiology 2025;5:e83747

URL: https://infodemiology.jmir.org/2025/1/e83747

doi: 10.2196/83747

PMID:

©Tina D Purnat, Elisabeth Wilhelm, David Scales, Claire Wardle, Sheri Bastien, Bela Ganatra, Antonella Lavelanet, Gitau Mburu, Tigest Tamrat, Åsa Nihlén. Originally published in JMIR Infodemiology (https://infodemiology.jmir.org), 30.Dec.2025. This is an open-access article distributed under the terms of the Creative Commons Attribution License (https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work, first published in JMIR Infodemiology, is properly cited. The complete bibliographic information, a link to the original publication on https://infodemiology.jmir.org/, as well as this copyright and license information must be included.

