

The Future of Sexual and Reproductive Health Rights in the Era of Artificial Intelligence: Prospects, Challenges, and Policy Implications

Obasanjo Bolarinwa ^{1,2}, Yusuff Adebayo Adebisi³, Kobi V. Ajayi⁴, Rime Boutahar⁵

¹Department of Public Health, York St John University, London, United Kingdom.

²Department of Demography and Population Studies, University of Witwatersrand, Johannesburg, South Africa.

³College of Social Science, University of Glasgow, Glasgow, United Kingdom

⁴Department of Health Behavior, School of Public Health, Texas A&M University, College Station, TX, United States

⁵Faculty of Medicine and Pharmacy, Mohammed V University of Rabat, Morocco

The World Health Organisation (WHO)'s recent technical brief on the intersection of artificial intelligence (AI) with sexual and reproductive health rights (SRHR) provides a timely exploration into an increasingly digital future of healthcare delivery.¹ This brief underscores the promising role of AI in enhancing service efficiency, a crucial step towards achieving Sustainable Development Goals (SDG) 3.7 and 5.6—ensuring universal access to sexual and reproductive healthcare (SRH) services and upholding SRHR for all.² With increasing SRH needs stemming from diverse ecological drivers, integrating AI into SRH will revolutionise healthcare through personalised medicine and improved diagnostic precision, leading to equitable healthcare access. AI's capacity to analyse vast datasets can uncover existing and new insights into reproductive health issues, tailor treatments to individual needs, and predict health trends, potentially transforming SRH service delivery globally.³

However, the path to integrating AI into SRH is fraught with challenges. Concerns about data privacy and the security of sensitive health information loom large, as do ethical considerations about algorithmic decision-making and biases that could exacerbate existing health inequities. Additionally, the lack of global standards for data protection in healthcare AI applications⁴ raises questions about the consistency of privacy safeguards across borders. Moreover, the digital divide threatens to leave behind those in low-resource settings, with an alarming unmet need for SRH services.⁵ Addressing these challenges requires a systems and comprehensive approach, bringing together key multisectoral stakeholders.

Collaboration is key to navigating the complexities of AI in SRH delivery. Policymakers must work closely with technology developers to create robust regulatory frameworks that ensure AI's ethical use, protect patient data, and promote transparency in algorithmic decision-making. At the same time, health professionals and patients can provide invaluable insights into the practical implications of AI tools in clinical settings. Community advocates play a crucial role in AI's ecosystem, championing individuals' rights to access high-quality,

respectful, and non-discriminatory healthcare services. Furthermore, closing the digital divide requires concerted efforts to improve AI infrastructure and curate socioculturally inclusive health education and accessibility, ensuring that the benefits of AI in healthcare reach all corners of the globe.

Looking ahead, the future of SRH lies in harnessing AI's ability to improve health outcomes and empower individuals with greater autonomy over their SRH. As we venture further into an unprecedented digital age, all stakeholders' dedicated and collective actions are paramount in realising the full potential of AI to advance SRHR. The WHO's technical brief serves as a roadmap and a call to action, urging the global community to embrace the opportunities of AI while vigilantly safeguarding against its risks. Collectively, we can ensure that AI becomes a force for good in the realm of SRH by fostering an environment of innovation, collaboration, and equity.

We declare no competing interests.

References

1. World Health Organization. The role of artificial intelligence in sexual and reproductive health and rights. <https://www.who.int/publications/i/item/9789240090705> Accessed 23 March 2024.
2. United Nations. Transforming our world: the 2030 Agenda for Sustainable Development. United Nations: New York, NY, USA 2015
3. Wasson EJ, Driver K, Hughes M, Bailey J. Sexual reproductive health chatbots: should we be so quick to throw artificial intelligence out with the bathwater?. *BMJ Sex Reprod Health.* 2021;47(1):73. doi:10.1136/bmj-srh-2020-200823
4. Yadav N, Pandey S, Gupta A, Dudani P, Gupta S, Rangarajan K. Data Privacy in Healthcare: In the Era of Artificial Intelligence. *Indian Dermatol Online J.* 2023 Oct 27;14(6):788-792. doi: 10.4103/idoj.idoj_543_23.
5. United Nations Population Fund [UNFPA]. Sexual & reproductive health UNFPA Website: UNFPA; 2022 [Available from: <https://www.unfpa.org/sexual-reproductive-health#readmore-expand> Accessed 23 March 2024.