"The Times They Are A-Changin”: using technology for ASRHR in the 25 years since ICPD

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Introduction

When the ICPD POA was drafted in 1994, technology was presented primarily to meet research needs in sexual and reproductive health, subsumed within a chapter on “Technology, Research and Development”. Technology has since emerged as a means to deliver information and services, generate demand and change behaviour. Today, digital technologies occupy our lives, connect us to people and places, and can capture our choices and preferences as data to design more effective programmes for social and behaviour change.

ICPD laid the foundations for adolescent sexual reproductive health and rights (ASRHR). A profusion of short-term, somewhat successful programmes, implemented in discrete settings, in numbers woefully lower than at-scale, and often disconnected in practice from progressive rights discourses, followed. Learning and evaluations showed that providing adolescents with services was not enough without creating demand, addressing stigma and provider bias, challenging norms, and building movements for intersectional and inclusive services. Since the mid-2000s, the expanding SRHR discourse created higher ambition and scope for programmes to be rights-affirming, intersectional and pleasure-positive, leading to the emergence of new language and movements around SRHR, and specifically ASRHR, with deeper questions around enabling rights and diversity. The same period also saw a parallel trend in “technological explosion”, with the advent of the internet, mass-produced digital devices, and social media, and offering digital technology as a platform for transformative solutions for social impact. The convergence of these trends brings opportunities for engaging young people with much-needed information and services but also reminds us of the stark reality of unfulfilled ICPD promises in the context of an untapped future.

Technology offers scale and can connect adolescents with information, networks, products and services, with privacy and without gatekeeping from community and providers. The content on technology platforms influences how people act, and how they think and feel, connecting them to others who are similar or dissimilar to them. A solution developed in one part of the world can catalyse change in another context. WomenonWeb, a provider of medical abortion services through tele-medicine, potentially to areas with little/no access to safe abortion, is an example. This commentary discusses emerging possibilities for technology to be transformative for ASRHR, interrogating its potential to catalyse behaviour and norm change at scale.

Opportunities

Technology has been used by ASRH programmes to create and curate public opinions and social discourse. Advocacy movements have harnessed this well, through social media, chatbots (software that can conduct a text or audio conversation), hotlines (e.g. Love Matters and Sex Rights Africa), using technology platforms on human rights and social justice issues, to build grassroots constituencies across different settings. Movements like SheDecides, MeToo, Abort the Stigma have used social media to build virtual communities and transfer tools for political organisation, transcending geographical distances to establish pan-global support. While successful in connecting communities in dissimilar contexts, and in publicly debating sensitive issues, its potential is still limited by
structural inequities, and unequal access and capacities to use the technologies.³

Technology-based behaviour change programmes, replacing intensive peer-based approaches, can deliver information virtually, efficiently and at scale. Diverse and pluralistic, technology platforms allow for customisation and personalisation, changing how social norms and behaviour change interventions are designed, and expanding paradigms of what constitutes behaviour change. Technology offers diverse options for engagement and interface to different user segments. This has been exploited by newer ASRHR programmes that use digital technology, with interactive content, to provide granular services that fit with needs and context.⁴

The process of changing attitudes involves the building of empathy through immersive experiences across groups that may have limited understanding of the problems of others, due to differences in race, disability, and so on. For example, healthcare providers can be sensitised and trained using virtual reality.⁵ Large scale behaviour change campaigns show how new media blends offline lived realities with virtual experiences, and this can have strong and compelling influences on knowledge and receptivity to sensitive issues. While the potential is palpable, there are however few evaluations on the impact on sensitive behaviours or rigid norms.⁶

Technology can expand access to SRH services, reaching even the most marginalised and vulnerable hidden and hard to reach populations, and those experiencing subversive healthcare services, or restrictive policies and communities. Initiatives such as The A Project in Lebanon, an online resource that provides information and counselling services around abortion and reproductive health that are otherwise illegal,⁷ exemplifies how technology can address needs of vulnerable populations.

A key attribute of technology is its ability to capture real-time data on users and their engagement, revealing information on acceptance and resonance with the content. For example, Adam’s Love, an HIV testing and counselling platform, is able to capture data on users counseled on HIV, referrals and services sought.⁸ However, limitations remain, with no information on those who do not use the platforms, their unmet needs and preferences.

Evidence from a landscape analysis of mHealth programmes for ASRHR in LMICs underscores prospects for knowledge-driven behaviour change, with the possibility of high acceptance and access among youth participants in digital interventions.⁴ Yet, there is a paucity of rigorous impact evaluations measuring the effect of engagement or use on actual behaviour change.⁴ Global evidence gaps are on the scarcity of evidence on the effects of mass media, mHealth and other information and communication technologies on health outcomes.⁹ The plurality of use in technologies, from interactive voice response systems to artificial intelligence chatbots, is enticing but critical emerging challenges need further consideration in the context of ASRHR.

Challenges

Technology can transform social and gender norms but is also shaped by them. Digital spaces can reflect social hierarchies and regressive norms, and provide fertile ground for the perpetuation of stratifications, targeted harm and discrimination, through invasions of privacy and threats to cybersecurity. The advent of new technology has ushered in novel security threats and responses to these threats, include states’ exercise of power to surveil their populations, often criticised for the negative impact on human rights. Initiatives like Internet Democracy and Associate for Progressive Communication are actively advocating for and enabling democratic and free online spaces, countering surveillance, censorship, and hate speech that permeate these domains, to ensure that security and rights are not mutually exclusive.

Identity, accessibility, ability, literacy and privilege can define and determine an individual’s experiences online, and disadvantages along these spectra could get transferred and further exacerbated in the digital realm. Vulnerable groups, including adolescents and younger people,¹⁰ may also be vulnerable online, and this can lead to societal restrictions on their access and use of the same technology that could bring great benefits to them. The consequent impact may be not only in terms of use but also how technology is being enabled for use. Efforts and campaigns like Feminist Internet and Tactical Tech that demand safety, access and inclusion of all people into the digital realm, promulgate concepts of disability-friendly and accessible technology. Developers of technology-based solutions are often not those who advocate for ASRH issues, so
dialogue on design can prevent the replication of the discrimination that exists offline.

While technology has enabled real-time data capture and analytics, this has also raised ethical concerns. Young people seek information on SRH digitally with hope that their identity and searches remain concealed. However, technology allows a data trail that can be used for analysis. Consent to use such data, assurances of privacy and not causing harm are not straightforward. Despite merging of data and protection, information can be intrusive and implications can result even in localised settings. In highly restrictive contexts, surveillance of the online behaviour of young people can have a backlash on their safety and wellbeing.

**Conclusion**

The realisation of ASRHR can be enabled through technology by its immense reach and ability to camouflage and deliver sensitive information and services. Whether technology can optimally deliver impact, while ethically addressing issues of security, privacy, harm and violence, is still under explored. We need to be cautious and judicious in celebrating the role of technology and also generate evidence about its reach, ability to address needs and affect change in behaviours and norms. There is little consensus around the underlying theories of change for digital interventions' pathways to impact on population-based outcomes, so this emerges as an important research agenda to inform future ARSHR programmes. Technology-based interventions are not a single lever solution and need to work in tandem with offline and conventional programmes on ARSHR, to effectively reach large populations who still do not have access to digital technologies. Technology-based interventions need to be designed to complement and not compete, understanding and harnessing their unique role in bringing about the positive transformations and outcomes envisioned in ICPD, especially in the lives of young people.

**Disclosure statement**

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