











Effects of COVID-19 on sexual and reproductive health services access in the Asia-Pacific region: a qualitative study of expert and policymaker perspectives

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Abstract: *The COVID-19 pandemic has strained health systems globally, with governments imposing strict distancing and movement restrictions. Little is known about the effects of the COVID-19 pandemic on sexual and reproductive health (SRH). This study examined perceived effects of COVID-19 on SRH service provision and use in the Asia-Pacific region. We conducted a qualitative study using semi-structured interviews with 28 purposively sampled SRH experts in 12 Asia-Pacific countries (e.g. United Nations, international and national non-governmental organisations, ministries of health, academia) between November 2020 and January 2021. We analysed data using the six-stage thematic analysis approach proposed by Braun and Clarke (2019). Interviewees reported that COVID-19 mitigation measures, such as transport restrictions and those that decreased the availability of personal protective equipment (PPE), reduced SRH service provision and use in most countries. SRH needs related to service barriers and gender-based violence increased. Systemic challenges included fragmented COVID-19 response plans and insufficient communication and*

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collaboration, particularly between public and private sectors. SRH service-delivery challenges included COVID-19 response prioritisation, e.g. SRH staff task-shifting to COVID-19 screening and contact tracing, and lack of necessary supplies and equipment. Innovative SRH delivery responses included door-to-door antenatal care and family planning provision in the Philippines, online platforms for SRH education and outreach in Viet Nam, and increasing SRH service engagement through social media in Myanmar and Indonesia. To ensure continuation of SRH services during health emergencies, governments should earmark human and financial resources and prioritise frontline health-worker safety; work with communities and the private sector; and develop effective risk communications. DOI: 10.1080/26410397.2023.2247237

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Introduction

The COVID-19 pandemic has strained health systems globally since its appearance in December 2019 in China. All Asia-Pacific countries have taken measures to reduce or prevent person-to-person transmission, including safe-distancing and hygiene measures, closures of public and institutional spaces, full and partial lockdowns, travel restrictions, and border closures.¹ While movement restrictions help reduce COVID-19 transmission, they concurrently limit healthcare access.² Responses to epidemics and pandemics also exacerbate gender-based and other health disparities.³ While previous health emergencies exposed health system weaknesses, including facility-based care, vaccination, and treatment of chronic conditions,⁴ effects on sexual and reproductive health (SRH) were often indirect and under-recognised.⁵

We found minimal published evidence on the health system and SRH effects of COVID-19 in Asia. Evidence from the 2013–2016 Ebola crisis in West Africa demonstrated a disproportionately negative impact on women and girls, particularly adolescent girls, who experienced increased school dropout rates, early marriage, early pregnancy, unsafe abortion, female genital mutilation, and gender-based violence (GBV).⁴ National responses in Ebola-affected countries did not prioritise SRH, resulting in increased maternal mortality and morbidity.⁶ During the Sierra Leone Ebola epidemic, maternal deaths, neonatal deaths, and stillbirths approached the numbers of deaths from Ebola⁷ and adolescent pregnancy rates spiked when schools closed.⁸ In Liberia, access to antenatal care (ANC)⁹ declined by 50% and reported deliveries by skilled attendants and facility-based deliveries declined by 32% and 47%, respectively.¹⁰ Sharp declines in contraceptive use and family planning visits were described in West African countries.¹¹

The Guttmacher Institute estimated a 10% decline in proportions of women receiving SRH services across 132 low and middle-income countries (LMICs) in April 2020, primarily in Africa and Asia, due to COVID-19,⁶ resulting in an estimated 49 million women with unmet needs for contraceptives, 15 million unintended pregnancies within a year, 1.7 million women and 3.6 million newborns experiencing significant complications, and 28,000 maternal deaths and 168,000 new-born deaths.¹² Similarly, the United Nations Population Fund (UNFPA) estimated that a year into the pandemic, 12 million women would have been unable to access family planning services due to COVID-19, with disruption of supplies and services lasting an average of 3.6 months and resulting in approximately 2.7 million unintended pregnancies before services resumed.¹³

Over-stretched health systems in the Asia-Pacific region have been further challenged by COVID-19, risking disrupted delivery of essential SRH services.¹⁴ Dawson et al. reviewed challenges in delivering SRH care in Pacific Island countries during COVID-19,¹⁵ and found that there were significant gaps in the supply chain as a result of technical skills and lack of logistical management systems. The authors also commented that the risk of GBV was likely to increase as shelters and counselling services were limited or closed entirely. Bar Zeev et al. described UNFPA efforts to support Asia-Pacific midwifery initiatives, stating that these key staff members were being redeployed to address issues arising from the pandemic rather than their usual roles, leading to women being unable to access life-saving care.¹⁶ Zachariah et al. advocated operational research and training of frontline health workers to improve health system resilience to pandemics in Asia, concluding that a key advantage of investing in staff training is having qualified people where they are needed during a health crisis.¹⁷ In

contrast, Mickler et al. noted the importance of supply chain management in Myanmar and proposed the implementation of high impact, evidence-based interventions, including using community health workers as part of the health system; providing women with contraceptive services following childbirth and during routine visits for child immunisation; allowing pharmacies and drug shops to provide information and contraceptives in under-served areas; and provision of mobile service delivery in rural areas.¹⁸ Assessments showed facility-based deliveries and ANC were the most frequently disrupted SRH services during the pandemic.^{14,19} For example, in Bangladesh, District Health Information System data showed decreases of 41% in ANC visits and 31% in institutional deliveries in March-April 2020.²⁰

This study aimed to examine the reported effects of the COVID-19 pandemic on SRH services for women and young people in the Asia-Pacific region to help inform SRH policies and practices in the region during pandemic and recovery periods.

Methods

Study design

We chose a qualitative study design, using a critical realist perspective as described by Maxwell.²¹ Critical realism interrogates the complexity around what we perceive as the “real world” and prompts researchers to consider non-explicit processes that underlie observed behaviours and events. This helped us maintain pragmatic yet critical engagement with interviewee perspectives as “accounts of reality”,²² rather than “constructing reality” as used in more interpretive approaches. A critical realist perspective was chosen for our study as this type of approach encourages questioning of the accepted status quo, which is appropriate when discussing emotive issues that are salient to marginalised members of a community. We conducted semi-structured interviews with SRH experts working in 12 UNFPA Asia-Pacific region countries, i.e. Bangladesh, Cambodia, Indonesia, Laos, Malaysia, Mongolia, Myanmar, Nepal, Pakistan, Philippines, Timor-Leste, and Viet Nam. Countries were selected based on pre-existing SRH needs identified by UNFPA and thus did not include Pacific countries.

Research question

“What are the effects of COVID-19 on sexual and reproductive health needs and access to services in the Asia-Pacific region?”

Sampling and recruitment

Interviewees were sampled and recruited purposefully from United Nations (UN) agencies, international and national non-governmental organisations (NGOs), ministries of health, and academia identified through internet searches and recommendations from other experts. Inclusion criteria were: (i) living and working in SRH in one of 12 Asia-Pacific countries of interest; (ii) aged over 21; and (iii) working English fluency. We identified additional interviewees through snowballing (e.g. each interviewee was asked to suggest another). Many respondents had a primary affiliation (e.g. UN, NGO) and additional clinical responsibilities. We obtained a range of health-system views from them, from service delivery to policymaking.

Data collection

Our topic guide included SRH priorities and challenges, SRH service financing, key actors involved in SRH, national and international policies that affect SRH services, and whether and how these areas were affected by COVID-19. Interviewees working in service delivery were asked additional questions about changes in SRH service access, use, commodity availability, conditions, and clinical responses to the pandemic.

LST, MH, MRK, JC, PN, and NH conducted interviews in English using Zoom software (Zoom Video Communications, Inc) between November 2020 and January 2021. We emailed study information sheets and consent forms to people who responded positively to recruitment emails. We then discussed the study, answered any questions and requested written informed consent before study participation. We recruited at least two interviewees per country, including 28 in total. Given the small number of expert interviewees per country and potential sensitivities of topics, data were anonymised by removing direct links to employing organisations, not recording names, and using ID codes in transcripts and quotes. Confidentiality was ensured by conducting interviews at times of interviewees’ choosing, including outside office hours, to control their environment better and avoid being overheard (e.g. by colleagues), and providing the option of not being quoted in any outputs. Interviews lasted approximately 30-80 minutes, were audio-recorded, and transcribed professionally.

Analysis

We analysed data using Braun & Clarke's six-stage thematic analysis approach in NVivo 12 software (QSR International, v12, 2018).²³ First, MM and ADB read and familiarised themselves with the data. Second, they independently generated initial inductive codes to complement the deductive codes already defined through team discussion and interview guide topics (i.e. effects of COVID-19 on SRH needs, SRH access, and SRH service delivery). Third, they developed a coding structure iteratively, collating codes related to study objectives and examining relationships between codes and research questions. NH reviewed initial themes, guided prioritisation, and resolved discrepancies. Fourth, they mapped themes. Fifth, all investigators refined and defined independent themes through discussion and further integration. Finally, all investigators reviewed and refined themes during reporting. To protect participant privacy and anonymity, we assigned identification codes (i.e. [country ISO Alpha-2 code] + [interviewee number]).

Ethics

We received ethics approval from the National University of Singapore (NUS) Saw Swee Hock School of Public Health Departmental Ethics Review Committee (reference SSHSPH-093-1) on 4 December 2020. Audio files were destroyed after transcription, per NUS data management policy, and consent forms and anonymised transcripts were stored separately on encrypted NUS institutional servers only accessible to the study team.

Findings

Interviewee characteristics and analytical themes

Table 1 presents interviewee characteristics. We interviewed 28 participants, two each from Bangladesh, Cambodia, Indonesia, Malaysia, Myanmar, Pakistan, Timor-Leste, and Viet Nam, and three each from Laos, Mongolia, Nepal, and the Philippines. Over half¹⁷ were women, and 11 were men. Most¹⁷ worked for various UN agencies, six for international NGOs, two for national NGOs, two for national health ministries, and one for the Department of Health.

We present findings under four themes (i) pre-COVID health-sector challenges impacting SRH

service provision during the COVID-19 pandemic; (ii) effects of COVID-19 on SRH needs and access; (iii) effects of COVID-19 on SRH service delivery; and (iv) COVID-19-related innovations. Table 2 summarises key SRH challenges before and during COVID-19 as discussed by participants.

Pre-COVID health-sector challenges impacting SRH service provision during the COVID-19 pandemic

The main SRH services provision challenges during the pandemic, identified by interviewees as pre-existing COVID-19, are related to SRH funding, governance mechanisms and religio-cultural barriers.

SRH funding

Interviewees described weak SRH funding sustainability. While some governments (e.g. Viet Nam) invested in SRH social protection mechanisms, such as the introduction of community-based health insurance, funding was not sufficiently sustainable and was vulnerable to COVID-19 diversions.

“For 30 years, the government subsidised 100% for family planning, but currently, 2 or 3 years, the government only grants subsidy for ethnic minorities, population with disadvantages, living conditions [...], but all this innovation dies immediately after the project ends, right. No funding, no running because it's very expensive.” (VN1)

SRH governance and policy

Weak SRH governance and leadership were highlighted in most countries, including the lack of engagement between governments and the private sector, e.g. the exclusion of the private sector from distribution of personal protective equipment (PPE) – particularly initially – despite it being a major SRH service provider in many Asia-Pacific countries.²⁴ This lack of engagement, which pre-dated the pandemic, directly affected the pandemic response.

Neglect of private providers in pandemic response planning is problematic in Asia-Pacific countries where universal health coverage is at an early stage. Primary healthcare services in Asia-Pacific are reportedly fragmented, with many countries relying on non-state providers to deliver healthcare, especially in rural areas.²⁵ Approximately 35% of regional populations

Table 1. Interviewee characteristics

| ID | Country | Sector | Professional role | Gender |
|-----|-------------|---------------|--------------------------------|--------|
| BG1 | Bangladesh | Int'l partner | Mid-level Technical Specialist | Male |
| BG2 | Bangladesh | INGO | Senior Management | Male |
| KH1 | Cambodia | Int'l partner | Senior Management | Male |
| KH2 | Cambodia | NGO | Senior Management | Male |
| ID1 | Indonesia | Int'l partner | Mid-level Technical Specialist | Female |
| ID2 | Indonesia | Int'l partner | Mid-level Technical Specialist | Female |
| LA1 | Laos | Int'l partner | Senior Management | Female |
| LA2 | Laos | Int'l partner | Mid-level Technical Specialist | Female |
| LA3 | Laos | INGO | Mid-level Technical Specialist | Female |
| MY1 | Malaysia | Int'l partner | Senior Management | Female |
| MY2 | Malaysia | INGO | Senior Management | Male |
| MN1 | Mongolia | Int'l partner | Senior Management | Female |
| MN2 | Mongolia | Int'l partner | Senior Management | Female |
| MN3 | Mongolia | Int'l partner | Mid-level Technical Specialist | Male |
| MM1 | Myanmar | Int'l partner | Mid-level Technical Specialist | Male |
| MM2 | Myanmar | Int'l partner | Senior Management | Male |
| NP1 | Nepal | Int'l partner | Senior Management | Female |
| NP2 | Nepal | Int'l partner | Senior Management | Female |
| NP3 | Nepal | MOH | External Technical Specialist | Female |
| PK1 | Pakistan | MOH | Mid-level Technical Specialist | Female |
| PK2 | Pakistan | Int'l partner | Mid-level Technical Specialist | Male |
| PH1 | Philippines | Int'l partner | Senior Management | Female |
| PH2 | Philippines | INGO | Mid-level Technical Specialist | Female |
| PH3 | Philippines | DOH | Middle Management | Female |
| TL1 | Timor-Leste | INGO | Senior Management | Female |
| TL2 | Timor-Leste | INGO | Middle Management | Male |
| VN1 | Viet Nam | NGO | Senior Management | Female |
| VN2 | Viet Nam | Int'l partner | Mid-level Technical Specialist | Male |

| Key SRH challenges | Pre COVID-19 | During COVID-19 pandemic |
|----------------------------|---|--|
| Governance | <ul style="list-style-type: none"> Poor coordination with the private sector and other health actors Poor strategic planning Top-down health governance and leadership | <ul style="list-style-type: none"> Lack of engagement with the public and SRH actors on COVID-19 response plan Top-down governance during emergency situation |
| Policy | <ul style="list-style-type: none"> Reluctance to change sensitive SRH policy | <ul style="list-style-type: none"> Diversion of political attention and resources to combat COVID-19 Other SRH priorities kept on hold indefinitely |
| Human resources | <ul style="list-style-type: none"> Task shifting Multi-tasking Depleted health resources (no entitlement for sick leave) | <ul style="list-style-type: none"> Lack of PPE especially for practitioners in the private sector Poor PPE supply and lack of COVID-19 testing |
| Services delivery | <ul style="list-style-type: none"> Inequities in SRH services distribution | <ul style="list-style-type: none"> Reduced physical access due to COVID-19 movement restrictions |
| Information/ Communication | <ul style="list-style-type: none"> Delay in communication with the public and poor management of misinformation and perceptions Lack of innovation in reaching vulnerable groups and non-internet users Lack of engagement with administrative staff such as police and security personnel | <ul style="list-style-type: none"> Fear and lack of trust in public health services |
| Supplies | <ul style="list-style-type: none"> Poor capacity of local authorities at separated provinces on procurement and purchase of health services Lack of clarity of the supply pathway, which discourage external donors | <ul style="list-style-type: none"> Delay in PPE supply for private sector Restrictions on movement and travel bans resulted in decrease of SRH essential medication supply |
| Financing | <ul style="list-style-type: none"> Poor capacity of separated provinces on management of donation | <ul style="list-style-type: none"> Divert the SRH budget into COVID-19 response |

primarily use private-sector SRH services, reaching 76% in Myanmar.²⁶

Interviewees in Indonesia highlighted that PPE supplies were directed to the public sector, with few or none for private practitioners and midwives who could not continue, depriving many service

users of clinical services. The closure of private providers could also inadvertently increase pressure on public sector healthcare services.

“The government does not cover the private practising midwives. They are not within the government

system in terms of obtaining protection equipment. So they have to provide the service, get the equipment themselves [...]. So the most impacted is, I think, the private practising midwife. And in the beginning, I think the first three months a lot of private practice midwives stopped providing services because they didn't have the equipment ... (ID1)

Abortion policy was often sensitive while family planning sensitivities varied. Most study countries did not support safe abortion for non-medical cases, with unmarried women and adolescents among those unable to access legal abortion services. This potentially increased women's risk of morbidity and mortality during COVID-19, further burdening the public health system and households. However, legalised abortion could cause unanticipated SRH consequences as it did not always include education about family planning methods and abortion risks. For example, since Mongolia introduced a policy in 1989 allowing abortion for family planning, an estimated 24% of women used induced abortion for contraception due to assumptions about its safety for family planning.

"In many socialist countries – Vietnam, Mongolia, Laos, abortion was used as family planning, which we are against. That's why we're trying to introduce family planning." (MN1)

Other issues included: (i) poor coordination between SRH service providers; (ii) top-down health governance, with SRH priorities defined according to leadership preferences rather than civil society engagement, which de-linked political responses from frontline realities and made them less likely to be effective; (iii) poor management of external funding, particularly in newly decentralised health systems such as Nepal and Viet Nam, where healthcare restructuring occurred before provincial-level capacity-building on funds management, projection of supplies and commodities, and purchasing services, further complicating provision of necessary healthcare; and (iv) poor general pandemic preparedness.

"There could be more coordination in the health sector. I mean, in the health sector itself within the ministry of health to coordinate the different actors or among doctors themselves to sit together and see what they were doing or how they could leverage each other's strengths and the resources to pull it together." (LA3)

Religio-cultural barriers

Religio-cultural barriers were particularly evident in countries with significant religious influence on government and health authorities.

"Women are the main caregivers in the family. There are some cases where women had to let go of their job because no one to take care of the children because the children are not going to school." (MY1)

"In family planning, I think it's a little bit a challenge for the government because so far, we still don't have good conversations with the Church about the family planning issue because the condom is rejected by Church. Even we say that it's to prevent the HIV transmission [... Also, a]bortion is illegal in Timor. So, Church is not really agreeing with this." (TL2)

During COVID-19, religio-cultural barriers controlled women's access to SRH services, with some interviewees suggesting that religious authorities further constrained SRH services provided during the COVID-19 pandemic. An interviewee from Malaysia highlighted the power of religio-cultural norms embedded within health services provision, with service-user rights legally unenforceable. For example, staff could refuse to provide SRH services for religious reasons.

"Our fear might prevent us from providing services for unmarried people [...]. The unmarried ones feel some taboo and limitations." (MY1)

Effects of COVID-19 on SRH needs and access

Women and adolescents

The respondents identified women and adolescents as disproportionately affected by the pandemic in relation to SRH needs and services access, particularly unmarried women's access to safe abortion. An interviewee from Malaysia highlighted the power of religio-cultural norms embedded within health services provision, with service-user rights legally unenforceable. For example, staff could refuse to provide SRH services for religious reasons.

"Our own fear might prevent us from providing services for unmarried people. So maybe a person of the Catholic faith might not want to provide abortion services. We wouldn't know [...]. The unmarried ones feel some taboo and limitations." (MY1)

Childcare is primarily women's responsibility, particularly in patriarchal societies. COVID-19 mitigation measures, including school closures, negatively impacted household income and women's empowerment, with many forced to leave employment to care for children. Additionally, women caring for children may have had less opportunity to leave their homes to access SRH services.

Most interviewees reported increased GBV during lockdowns. Some essential services, including shelters and one-stop centres, generally functioned during lockdowns, and many governments launched campaigns against violence and opened additional centres or hotlines. However, women and girls could not always access such services and were locked down with their abusers. Interviewees in Nepal reported numbers of helpline calls spiking after lockdown.

“What the police records show is that the number of calls in the police helplines reduced in the initial period. And that is clearly because women in lockdown do not have the privacy to make those calls in safety. So those calls were reduced, and that was not so much a signal that there's less GBV, but it was because of the context.” (NP1)

Interviewees indicated a lack of trust between GBV survivors and service providers. An interviewee in Myanmar described how GBV cases were usually incidentally identified when accessing other health services as women were reluctant to seek help from the public sector.

“You'll see quite a lot of women in Myanmar suffer both physical, mental abuses from their spouses. And if you look at it, you will see that none of them got help. [...] Services are not like a pick and choose. Because if you are a woman, if you are in the reproductive age, you always have to go to get contraception or anything in your lifetime. And none of them got help from the government services. So that is really alarming for me.” (MM2)

Women's reluctance to seek GBV services was exacerbated by COVID-19 due in part to service and staff reductions, unclear messaging on services available, and public-sector enforcement of movement restrictions.

Adolescents' access to SRH during COVID-19 appeared hindered by pre-existing inequities, religio-cultural legislative norms, and education interruptions. Inequities in health resources

distribution challenged adolescent access to SRH services even before COVID-19 disruptions, although these worsened during the pandemic as, for example, access to youth centres was further restricted.

“Because previously there's only been like, again, pockets of areas where young people can access care, like the youth centre for instance. That happens here and there across the country, but not in all provinces. So it's difficult for young people to access these special places.” (MN1)

An interviewee in Laos highlighted the increased risk of girls dropping out of school during the pandemic and the concomitant increase in adolescent pregnancies as, despite doing more household chores, the girls have more free time to spend than they would if they were at school. These phenomena are potentially related to declining household income, increasing domestic responsibilities, and limited access to online educational materials due to poor electrical infrastructure and inadequate computers and technology.

“When you spoke to the adolescents, both girls and boys, the girls did mention that their burden of household chores has increased ... So what it practically meant to us was that they really didn't have time to look at TV or study [...] The parents are not interested anymore to send their daughters to school, or the adolescent girls becoming pregnant, and then subsequently dropping out.” (LA3)

Interviewees in Bangladesh and Pakistan reported increases in the incidence of child marriage during lockdowns. They suggested COVID-19 exacerbated this pre-existing problem by decreasing household income and closing schools, pressuring many families to marry off their daughters to reduce financial burdens.

“A lot of other factors that influence child marriage, ranging from social security, and also poverty, education. So, there are all those factors that lead to being in child marriage. There is legislation, but the problem is people are not reporting [...]. You cannot get married to girls under 18, but these people are hiding their ages ...” (BG1).

“There is some increased tendency of child marriage in this situation [COVID-19 pandemic], and that will have a long-term impact on their education, on their health, on their mental conditions, and overall a social impact on the country.” (BG2)

An interviewee in the Philippines referred to reports that COVID-19 lockdowns could potentially increase adolescent risks for sex trafficking due to lack of social contact through school closures and household financial constraints.

“We had some academic institutions that are very good in technology and cybersecurity experts to explain that this COVID-19 pandemic may increase the number of those young people to be exposed to sex trafficking.” (PH1)

The rapid switch to online education did not give students the knowledge or pastoral support to mitigate cyberbullying or grooming.

“So then we changed to an online platform. So that will bring children and young people to the risks of cyberbullying. Yeah, because in most cases old school or university just gets children, the students through this online platform without any preparation for them to cope with this type of risk.” (VN2)

The number of girls continuing in education has increased significantly in Asia,²⁷ but interviewees indicated that this has not necessarily translated into better SRH access or concomitant reductions in GBV. An interviewee in Mongolia described domestic violence as embedded in the country's culture:

“Education enrolment rate is maybe higher, but in this minority area, women have to do everything at home because of the culture. So their status is very low, like even if the mother-in-law abuses them. [...] So that's also a big pressure for them.” (MN1)

Isolation and financial strains experienced by many households during the pandemic magnified the problem of gender-based violence.

Alcohol misuse was identified as a key driver of domestic violence in Mongolia, Laos and Cambodia.

“A lot of the violence is also centred around parents' use of alcohol and drugs. During the lockdown, what we had was like boys and girls having to spend more time in households. They were more exposed to this domestic violence.” (LA3)

Other potentially vulnerable groups

Interviewees described concerns about the potential effects of movement restrictions on SRH services access for refugees and forcibly displaced

people, particularly in Malaysia, where migrant access was already poor due to fears of stigmatisation for having COVID-19.

“They are being severely affected. And one of the reasons is that, because of the lack of mobility and stigma [...]. Some of the communities were internally displaced for multiple reasons, and they are being told they are being put into one particular corner.” (MY2)

Interviewees did not generally discuss potentially more hidden marginalised groups, such as people with disabilities or LGBTQ communities. However, one participant from Mongolia mentioned that, as their families and healthcare providers usually discriminated against disabled people, lockdowns could have forced them to spend more time at home, potentially increasing vulnerability.

Effects of COVID-19 on service delivery

Participants from all countries suggested that COVID-19 reduced access to many SRH services, reportedly increasing the incidence of unsafe abortions, and caesarean sections over that of vaginal deliveries due to clinical convenience, and home births without skilled attendants in many areas. In countries such as Pakistan, where SRH services continued despite budget reductions and task-shifting to support the COVID-19 response, movement restrictions and public transport closures reduced access. This disproportionately affected service-users without access to reliable transportation, especially in rural areas, raising financial risk and catastrophic spending and reduced institutional deliveries.²⁸

“It's hard for them to walk like two hours or three hour [to] a health facility for ANC and delivery. Also the transport, it's also a problem for mothers to access to health facility.” (TL2)

Interviewees in Mongolia described a progressive 10-year push for institutional birthing, which contributed to dramatic maternal mortality reductions, but diminished the role of community midwives and thus decreased women's access to maternal health services during lockdowns.

“I feel like we're going back because there is no family planning service or commodity [...] and one of the cases I saw was because they could not come to the health facilities during the lockdown, performed [un]safe abortions. They tried to do it

in a community somewhere, illegal, and that led to the maternal death.” (MN1)

Risk communications

Emergency risk communication, defined by WHO as “the exchange of real-time information, advice and opinions between experts and people facing threats to their health, economic or social wellbeing”, aims to help at-risk individuals make informed decisions.²⁹ Early in the pandemic, interviewees reported that fears of infection risk among the general public and health-workers, compounded by minimal reliable information on availability and safety of SRH services, reduced service use, including emergency obstetric care. As an interviewee in Bangladesh noted, people felt safer self-treating than accessing SRH services, leading them to delay visiting facilities and increasing maternal and neonatal mortality risks.

“There was fear that once they go to a hospital, they might be infected with COVID. So that’s why people were reluctant to go to the facility.” (BG1)

One reported risk communication challenge was confusion over COVID-19 concerns and perceptions. Several interviewees noted that communication with sub-populations, including young people, should be contextualised and comprehensible.

“You can’t have a blanket approach of talking about reproductive health to all young people in one way. It could be a language barrier. It could be that they don’t understand the terms. All these causes are there.” (MY1)

Although the need for tailored approaches to communication to meet the needs of specific sub-populations was not discussed further with respect to COVID-19, it is also relevant for risk communication during the pandemic.

Some described how the absence of standardised and reliable information on SRH facility availability led to conflicting perceptions and confusion among service-users, e.g. on SRH facility operating hours and capacities.

“We demanded that they reopen those clinics. And I’m not sure if they’re open or they’re open partially.” (PK1)

In the Philippines, risk communication targeting social media users overlooked potentially

vulnerable groups such as the elderly, poorest, and rural/remote communities.

“All those people that don’t have access to the internet are not part of the conversation anymore. Before, we could actually go to the community and talk to them. Now, we have to ensure they are provided with an internet stipend for them to join in. But then, technology-wise, they don’t have the proper machine. They don’t have the proper phone. They don’t have laptops and all that or even electricity in the community in the rural areas. So, it left a lot of people behind. This whole technological age brought about by the COVID-19 ... ” (PH2)

Interviewees highlighted the need to ensure that all civil servants and community leaders adhered to updated public health messages. For example, in Nepal, police hindered service-users’ access to life-saving treatment through perceived duties in enforcing movement restrictions.

“One example that we heard in the cluster was that this girl had heavy bleeding due to her miscarriage. She was young, and she was to be rushed to the hospital ... But the police, they didn’t find it as an emergency ... ” (NP1)

According to one interviewee, countries such as Cambodia and the Philippines provided timely SRH risk communication resulting in consistently good SRH services usage.

“The Ministry of Health in general, the service, the hospital, all hospitals are still open. All the media outlets educate the people on how to prevent COVID. So people seem to have understood well about COVID and how to prevent them from being infected with COVID. That’s why I think people, then they come and use service as they did before COVID.” (KH1)

SRH supplies and equipment

Challenges included insufficient contraceptive supply, budget allocations, and supply chain management. In Myanmar, medical supply chains were locked down, causing procurement delays, although any harm remained unclear.

“... when Yangon was closed for two weeks, some of our goods could not reach our targeted health centre, just two weeks. I guess it is not a big problem ... ” (MM1)

Some supply challenges were a result of political and administrative inefficiencies. For example, Nepal's political transition during the pandemic reduced healthcare system capacity to address disrupted supply chains.

“And even in the normal circumstances, in Nepal, we have challenges and limitations in terms of having efficient management of the supply chain system. Since federalisation recently, there definitely is a weak capacity in the ground ...” (NP1)

Financing

Many Asia-Pacific governments shifted political priorities and resources to COVID-19 responses, reducing investment in universal health coverage and SRH. Interviewees from Laos, Viet Nam, and Cambodia indicated that SRH budgets were halved and diverted toward COVID-19 responses. Reductions in essential SRH service funding could affect vulnerable groups reliant on national insurance schemes and subsidies.

“A lot of funding had been diverted from the regular programs because of COVID. So obviously everything is impacted [...], and even though SRH is one of the priorities, it could be put aside if they think that money should be well spent on other areas ...” (LA2)

Human resources

While total numbers of reported COVID-19 deaths remained relatively low in Asia during the first wave,³⁰ many midwives and other SRH staff shifted to pandemic-related administrative work and COVID-19 screening, which reduced access to SRH services.

“[The government] put human resources, they put financial resources, they put the effort, they put their thinking just only around COVID. This means that the other health issue is just only that they are important, but not as important as COVID.” (KH2)

With constrained human resources, COVID-19 increased clinical workloads and responsibilities beyond the usual job scope in countries such as Myanmar. Midwives in Malaysia were required to take on additional duties caring for COVID-19 patients. In Timor-Leste, PPE supplies and training were restricted to certain healthcare cadres, such as doctors and midwives, while other frontline

workers, including hospital cleaners, received no PPE.

“So, I think we still need more training for all health providers. It's not only doctor and midwife, but if possible to include like the cleaner or whoever that work in the health facility like a hospital or in the clinic, so they can protect themselves too.” (TL2)

At the same time, many frontline health workers were forced to work even when they were potentially infected and unable to self-isolate.

“So many of our doctors are sick. So many doctors have died. So in Pakistan, the most health staff that have died are doctors, including very senior doctors who were very, very worried. I've continued to work because I'm an obstetrician. I didn't have the luxury to sit at home and self-isolate and doodle as much I would have loved to. I have had to continue working. I've had COVID, I've continued to work. I continue to operate on COVID service-users.” (PK2)

Promising initiatives during COVID-19

Learning technologies in education and communication

The COVID-19 pandemic created space and necessity for innovation and increased the use of technology for SRH services. Positive unintended consequences included strengthening collaborations between SRH actors at sub-national, national, and regional levels. COVID-19 opened new channels for communication between education and SRH actors. An interviewee in Laos mentioned that COVID-19 enhanced coordination between education actors, helping accelerate the production of online SRH educational materials.

“The actors kind of came together and developed online resources for sexual education. So that coordination actually became stronger during and after COVID.” (LA3)

An interviewee in Indonesia highlighted how COVID-19 facilitated negotiations with the Ministry of Education to allocate resources to pilot training of teachers on adolescent reproductive health.

“So we received a good response, a positive response from the Ministry of Education. Usually, they were quite reluctant because ... the classic reason is the school is already being very overloaded. There was

some reproductive health, the topic on adolescent reproductive not being prioritised, so at the moment we are able to engage them, and the good thing is they also already allocated budget ...” (ID2)

A promising initiative in Laos provided financial support for poor households identified by teachers to limit the risk of girls withdrawing from school during the pandemic. It appeared effective in keeping girls enrolled.

“So we worked with the district education board and the schools themselves to identify households with the girl child at the secondary education level who were already poor, and it’s more likely that the girl will drop out because of poverty. [...] and then we provided some support for her parents ... It covered things like uniforms, menstrual hygiene management pads. It also covered a little bit of transportation fees for the girls.” (LA3)

Mobile teams for engagement and service delivery

A Philippines-based interviewee highlighted a promising ground-up initiative in metropolitan Manila, providing door-to-door ANC and family planning services, circumventing COVID-19 movement restrictions. Scaling up these types of SRH services targeted at vulnerable or remote populations, and integrating these initiatives within the existing community health services plan, will improve accessibility to SRH nationally.

“[Local government units (LGUs)] went house-to-house providing services right at their homes. So, antenatal care, while we required them that this will be done in a health facility because our mobility was affected, we don’t have transport during the lockdown. What the LGUs did at the primary level was go house to house and offer their service. They did it as well for family planning. I think I’ve seen a Facebook post of a local government unit, a city in Metro Manila having their own version of house-to-house family planning service provision.” (PH3)

Rise of online platforms

A Myanmar-based interviewee highlighted how Facebook was more effective for conducting SRH needs assessments and raising family planning awareness among marginalised groups than in-

person activities, as people were more relaxed communicating online.

“For example, in face-to-face meetings, some workers seem to be silent. Sometimes they don’t want to ask questions. They just listen, and then they just leave it. On Facebook, they ask some questions and [NGO] responds to those questions properly.” (MM1)

Many countries began using online platforms, particularly to access young people.

“I think COVID is making us more creative by using online digital platforms.[...] We need to be creative in engaging young people through digital platforms, and it is another work. It is not easy to engage young people online because we don’t know what they do at the same time when we have a discussion, whether they are still in front of the laptop or doing something else.” (ID2)

COVID-19 provided unexpected communication and capacity-building opportunities, with access to webinars, online training, and global exchanges of experiences.

“We have been able to reach out to people like I’m talking to you right now [...]. We’ve had so many meetings, webinars, training sessions with all the countries in this region ... the whole world actually – from Europe, from America, from India and Bangladesh, and Afghanistan. So all of our colleagues, we’ve been able to talk to each other so easily and exchange ideas, which we didn’t before.” (PK2)

Donors used COVID-19 funding to digitise family planning materials, increasing dissemination in rural areas.

“Do you know this COVID-19 provided the opportunity? We provided money, and our civil society organisations are now digitising all this material on family planning [...]. They are now all digitised, and this can be accessed by people in the rural areas offline.” (PH1)

Discussion

Key findings

This study provides an initial “snapshot” of critical SRH issues within the Asia-Pacific region during the COVID-19 pandemic, raising important concerns that both generally support national and sub-national research findings and show that more in-depth data are needed.^{31–37} This supports

comments by Kumar et al. and Michielsen that highlighted gaps in sexual health research during the pandemic and the need for surveys of the overall effects of COVID-19 measures on SRH in different regions and more detailed research at national levels.^{38,39} Our study provides a broad regional perspective, synthesising SRH provision challenges during the pandemic from 12 countries and highlighting promising innovations useful in future emergencies.

Pre-pandemic funding and governance challenges noted in our findings align with regional literature,¹² while the effects of COVID-19 on SRH needs and access, as described by our interviewees, indicated that COVID-19 mitigation measures largely exacerbated existing concerns. National lockdowns, movement restrictions, and public transport closures reduced access to time-sensitive and potentially life-saving SRH services for service users and providers.¹² We found that even in countries exempting essential SRH services, such as caesarean sections, from movement restrictions, women were hindered by unclear government and provider messaging. Inadequate provision of PPE and essential SRH medications resulted in closures of many facilities. Health services distribution inequities, such as limited adolescent services provision in rural areas, also limited access during the pandemic. This supports Li's findings from an online survey of 3,500 Chinese young people, in which 31% reported worsening relationships with their partners and challenges with contraception provision.³³ Similarly, in Uttar Pradesh, a populous area of India, more than 5.8 million couples could not access contraceptives during the first wave of COVID-19, which could result in 421,601 unintended pregnancies and 309 maternal deaths.⁴⁰ Interestingly, only one participant highlighted the effects of COVID-19 on SRH for people with disabilities. However, this group was likely subject to additional service access challenges, as noted by Courtenay et al. in describing the additional difficulties and risks faced by individuals with intellectual disabilities when accessing clinical services⁴⁰ and studies highlighting the multidimensional vulnerabilities faced by adolescents with disabilities in accessing SRH services.^{41,42}

The effects of COVID-19 on SRH service delivery, as described by our interviewees, indicated national staff shortages due to illness and re-tasking were compounded by COVID-19 mitigation measures globally, including border closures and

travel restrictions, on SRH supply chains. In countries with underdeveloped pharmaceutical industries and poor domestic medical supplies, such as Pakistan and Nepal, instability brought about by COVID-related disruptions precipitated vulnerabilities that manifested as supply chain disruptions and shortages.⁴³ Medical and pharmaceutical companies in many Asian countries rely heavily on Chinese imports, which were disrupted early in the pandemic.⁴⁴ Our findings that insufficient PPE and COVID-19 testing could decrease frontline health workers' willingness to engage with service-users supported findings on the effects of insufficient and substandard PPE on COVID-19 infection and mortality among health-workers in many other settings.^{45,46} Additionally, religio-cultural and policy barriers to SRH services delivery, including ongoing tensions around family planning and abortion, have a well-documented influence on SRH matters and are likely to aggravate gaps and barriers caused by the pandemic.⁴⁷ More positively, our findings show that COVID-19 encouraged organisations to invest in technology and improved remote collaboration and communication between national, regional, and global actors. COVID-19 has demonstrated that providers can promote and adopt different approaches to support a wider spectrum of service users, including digital health (e.g. telemedicine, texting) and mobile/outreach services (e.g. household-level message delivery, home-based medical abortion). However, many initiatives relied on good internet access.

WHO recommends COVID-19 mitigation be implemented as a comprehensive package of public health and social measures, in accordance with Article 3 of the International Health Regulations, guaranteeing peoples' dignity and fundamental human rights.¹⁴ However, interviewees described similarities in COVID-19 responses across countries during the initial three months after WHO announced COVID-19 as a pandemic. Almost all shifted their health resources toward COVID-19 response planning and implementation, depriving SRH services of funding. Strict movement restrictions and safe-distancing as used effectively among high-income populations for COVID-19 mitigation were more problematic in settings where 60% of the population work in the informal sector for daily wage rates.⁴⁸ Stay-at-home policies to prevent COVID-19 deaths could thus increase deaths due to food insecurity or social problems, as noted in Syria.⁴⁹ Although the first COVID-19

wave had less impact on countries such as Viet Nam and Cambodia than others, mitigation measures were not adjusted to country contexts. Consequently, most interviewees predicted increases in maternal mortality, child marriage, GBV, and unintended pregnancies, which corresponds with Robertson's modelling of an 8.3–38.6% increase in maternal deaths per month in LMICs resulting from severe mitigation measures.⁵⁰ Appropriate response planning requires bottom-up health governance considerations that engage communities in decision-making and needs identification.⁵¹ However, interviewees highlighted the lack of such engagement in many countries, explaining discrepancies between policies and needs.

Limitations

Several study limitations should be considered. First, limited time was available, i.e. two months, due to the importance of providing timely knowledge for policymakers. Second, our sample was relatively small for the wide geographical coverage due to these time constraints. However, interviewees were not speaking for their institutions, and findings were remarkably coherent across countries, indicating actual concerns. Third, interviewees were primarily in senior leadership positions, and over half from UN agencies. Hence, responses were primarily at the policy level, reflect donor perspectives, and should be interpreted accordingly. However, many interviewees had dual roles, such as working both for the UN or government and in clinical practice and this also informed their responses. Fourth, SRH service-users were intentionally not included to focus on regional and national-level SRH expertise, so this did not enable the inclusion of marginalised perspectives.

Implications for policy, practise, and further research

Our findings suggest COVID-19 responses could be improved to enable the continuation of SRH service provision and use during further COVID-19 waves or similar emergencies. Governments could strengthen national and regional SRH governance to prepare for future health emergencies. This could include encouraging dialogue between policymakers, frontline providers, and service-users, so policies more clearly reflect population needs and improve sustainability and funding use. Lessons learned can strengthen SRH planning

for future emergencies, such as strengthening risk communication.⁵² Governments could develop national and subnational capacities in collaboration with donors and the private sector, including investing in pharmaceutical development, strengthening economies, and reducing dependency on imported SRH commodities. Concurrently, supply chains must be strengthened to cope with national emergencies beyond COVID-19, particularly as the region is vulnerable to natural disasters. Federal countries, such as Nepal, must increase subnational management capacity.

In collaboration with regional SRH partners and civil society actors, international donors should build on initiatives developed during the first year of the COVID-19 pandemic. Expansion of online coordination platforms established during the pandemic and advocating for open-learning SRH resources should continue even after COVID-19. National investments in better internet infrastructure and communication channels that do not require advanced technical skills are needed to avoid further marginalising groups such as older people, the poorest, people with disabilities, those affected by GBV, and those in remote or rural communities. Governments should be supported in equity assessment and mapping potentially vulnerable groups whose access to services could be hindered during emergencies.

Governments and civil society should continue advocacy to prioritise SRH, including GBV services and safe abortion. This requires investments in human resources, engagement with political and religious leaders, and training health-workers to respect different beliefs.⁵³ Our study identified several gaps in SRH research in the Asia-Pacific region. In collaboration with regional governments and SRH partners, Asia-Pacific universities and research institutes are encouraged to conduct policy-relevant applied research on the prevalence and underlying factors of maternal and neonatal mortality, GBV, abortion and unwanted pregnancy among adult women and adolescents during the epidemic. Research is needed on the prevalence of unwanted pregnancies and maternal mortality during COVID-19, primary reasons behind any changes, and improved responses during emergencies. Further exploration is warranted of the effects of COVID-19 and mitigation measures on migrants, sexual and ethnic minorities, and people with disabilities in Asia-Pacific countries.

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Data availability

Anonymised data are available from the corresponding author on reasonable request within 10 years of study completion.

Author contributions


NH conceived the study with support from STL, PN, and MNH. STL, PN, JC, MNH, MRK, and NH collected data. ADB, MM and STL analysed data and drafted the manuscript with help from NH. NH revised for critical content. All authors contributed to interpretation and approved the version for submission.

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Résumé

La pandémie de COVID-19 a mis à rude épreuve les systèmes de santé dans le monde, les gouvernements imposant des mesures strictes de distanciation et de limitation des déplacements. On sait encore peu de choses sur les conséquences de la pandémie de COVID-19 sur la santé sexuelle et reproductive (SSR). Cette étude a examiné les effets perçus de la COVID-19 sur la prestation et l'utilisation de services de SSR dans la région Asie-Pacifique. Nous avons mené une étude qualitative entre novembre 2020 et janvier 2021 à

Resumen

La pandemia de COVID-19 ha causado una sobrecarga de los sistemas de salud del mundo, y los gobiernos han tenido que imponer estrictas restricciones de distanciamiento y movimiento. Aún no se sabe mucho sobre los efectos de la pandemia de COVID-19 en la salud sexual y reproductiva (SSR). Este estudio examinó los efectos percibidos de COVID-19 en la prestación y el uso de servicios de SSR en la región de Asia-Pacífico. Realizamos un estudio cualitativo utilizando entrevistas semiestructuradas con 28 expertos en

l'aide d'entretiens semi-structurés avec 28 experts en SSR sélectionnés par choix raisonné dans 12 pays d'Asie et du Pacifique (par exemple des institutions des Nations Unies, des organisations non gouvernementales nationales et internationales, des ministères de la santé, des établissements universitaires). Nous avons analysé les données en utilisant l'approche d'analyse thématique en six étapes proposée par Braun and Clarke (2019). Les personnes interrogées ont indiqué que les mesures d'atténuation de la COVID-19, comme les restrictions de transport et celles qui ont diminué la disponibilité des équipements de protection individuelle (EPI), ont réduit l'offre et l'utilisation de services de SSR dans la plupart des pays. Les besoins de SSR liés aux obstacles aux services et à la violence sexuelle ont augmenté. Les difficultés systémiques comprenaient des plans de riposte fragmentaire à la COVID-19, de même qu'une communication et une collaboration insuffisantes, en particulier entre les secteurs public et privé. Les obstacles se rapportant à la prestation des services de SSR incluaient la priorité accordée à la réponse à la COVID-19, par exemple l'affectation du personnel de SSR à des tâches de dépistage de la COVID-19 et de recherche des contacts, et le manque de fournitures et d'équipements nécessaires. Les réponses innovantes en matière de prestation de SSR comprenaient des services de soins prénatals et de planification familiale à domicile aux Philippines, des plateformes en ligne pour l'éducation et la sensibilisation à la SSR au Viet Nam, et l'accroissement de la participation des services de SSR par le biais des médias sociaux au Myanmar et en Indonésie. Pour garantir la continuité des services de SSR pendant les urgences sanitaires, les gouvernements devraient réserver des ressources humaines et financières, et donner la priorité à la sécurité des agents de santé de première ligne; travailler avec les communautés et le secteur privé; et mettre au point une communication efficace des risques encourus.

SSR muestreados intencionalmente, en doce países de Asia-Pacífico (ej. Naciones Unidas, organizaciones no gubernamentales internacionales y nacionales, ministerios de salud, académicos) entre noviembre de 2020 y febrero de 2021. Analizamos los datos utilizando el enfoque de análisis temático de seis etapas propuesto por Braun y Clarke (2019). Las personas entrevistadas informaron que las medidas de mitigación de COVID-19, tales como restricciones al transporte y aquellas que disminuyeron la disponibilidad de equipo de protección personal (EPP), disminuyeron la prestación y el uso de servicios de SSR en la mayoría de los países. Aumentaron las necesidades de SSR relacionadas con las barreras a los servicios y la violencia de género. Algunos de los retos sistémicos eran planes fragmentados de respuesta al COVID-19 y comunicación y colaboración insuficientes, en particular entre los sectores público y privado. Ejemplos de retos relacionados con la prestación de servicios de SSR eran la priorización de respuesta a COVID-19, ej. redirigir las tareas del personal de SSR al tamizaje de COVID-19 y al rastreo de contactos, y la falta de insumos y equipos necesarios. Entre las respuestas innovadoras para la entrega de servicios de SSR se encontraban la atención prenatal y provisión de planificación familiar de puerta en puerta en Filipinas, plataformas en línea para la educación y actividades de extensión comunitaria sobre SSR en Vietnam, y mayor participación en los servicios de SSR por medio de las redes sociales en Myanmar e Indonesia. Para garantizar la continuación de los servicios de SSR durante emergencias de salud, los gobiernos deben asignar los recursos humanos y financieros y priorizar la seguridad de los trabajadores de salud de primera línea; trabajar con las comunidades y el sector privado; y formular comunicaciones eficaces de riesgos.