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Research Article

Lockdown as Amplifier: The Amplification of Challenges to Sexual and Reproductive Healthcare Provision during Nepal's COVID-19 Pandemic Response and Lockdown in 2020

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Abstract

This article explores the amplification of challenges to sexual and reproductive healthcare provision during Nepal's COVID-19 pandemic response and lockdown in 2020. In Nepal, the provision of essential primary healthcare is compromised by systemic weaknesses, infrastructure, and the economy. This includes healthcare and services supporting women's sexual and reproductive health and rights (SRHR). During the pandemic, the government instituted a lockdown to control the spread of COVID-19. The government's focus on controlling the disease, or on 'pandemic preparedness', amplified the pre-existing vulnerabilities in the healthcare system. Policy triage caused SRHR to be under-prioritized, widened the pre-existing gaps in the healthcare infrastructure, and compelled healthcare providers to rely more on improvisation. The article concludes by calling for a re-imagination of 'pandemic preparedness' as 'lockdown preparedness'. In Nepal and in other low- and middle-income countries, 'lockdown preparedness' should inform pandemic responses and secure the prioritization of essential primary healthcare. Furthermore, 'lockdown preparedness' should direct political attention and priority towards decreasing systemic weaknesses and social inequalities, to counteract their amplification during future lockdowns.

Keywords

Lockdown; sexual and reproductive health and rights (SRHR); healthcare provision; amplification; preparedness

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Healthcare Provision During the Lockdown in Nepal

> Before [the] lockdown it was easy for me to go to the hospital. But after [the] lockdown public buses were totally not running, and my husband took me by motorbike. We could not get time [for a consultation]. When we went, the doctor was not in the hospital. After some difficulty, we met with a doctor, but we needed to stay three meters away from him. We couldn't say to the doctor: "Here is the problem, can you feel it?" They didn't check sufficiently. We were also afraid to go to the hospital and getting touched [risk infection] by another person. And in the hospital, regular services were closed. Only emergency services were open, but they also didn't check us sufficiently, as they used to do before. (Woman who gave birth during the lockdown in Nepal, 2020)

Being pregnant and giving birth in Nepal became increasingly dangerous in the spring of 2020, as healthcare provision and services crumbled in the face of strict pandemic response policies and increasing societal resource deprivation. As in Nepal, the pandemic burdened societies and healthcare systems worldwide, shutting down healthcare facilities and constraining access to medical treatment deemed nonessential (Manderson, Burke, and Wahlberg 2021, Kc et al. 2020, Bennett and Dewi 2021, Manderson and Wahlberg 2020, Mmeje, Coleman, and Chang 2020).

When the pandemic started to unfold globally, the United Nations Population Fund (UNFPA, 2021; 2020b) and the International Planned Parenthood Federation (IPPF 2020) identified crucial impacts on women in middle- and low-income countries: women experienced a decrease in access to vital sexual and reproductive healthcare provision (SRHcP), including pregnancy, delivery and post-delivery care, and coverage of contraception needs and abortion services (IPPF 2020, UNFPA 2021; 2020b). Subedi, Pant, and Koirala (2020) emphasize that women's access to timely, lifesaving essential care was constrained by other barriers: movement restrictions, transport challenges, access to service in healthcare facilities, and fear of infection.

In combination with culturally defined gender roles, the lack of access to SRHcP during the pandemic caused women worldwide to lose control of their health, bodies, and reproduction (Wenham, Smith, and Morgan 2020). The findings of this study resonate with earlier studies on the fatal consequences for women's sexual and reproductive health and rights[1] (SRHR) during the Ebola virus outbreak in West Africa in 2013 (Jones et al. 2016, McQuilkin et al. 2017, Menéndez et al. 2015). In a Nepalese context, research based on the immediate and long term impacts of the 2015 earthquakes on women's and young children's health, suggested that a delayed response by the Nepali government, were negatively impacting women's SRHR as families became unable to provide basic necessities such as shelter, warmth, cooking gas and transportation, resulting in long term impacts on maternal, newborn, and child health (Brunson 2017).

The conditions of SRHR in Nepal are precarious. The country's maternal mortality ratio (MMR), the number of maternal deaths per 100.000 live births, is problematically high, at 186 (UNICEF 2019: 9), and almost 75% of the maternal deaths are avoidable[2] (Sitaula et al. 2021). The MMR fell an impressive 66% between 2000 and 2017, but more progress is needed to strengthen maternal health and reach the target of Sustainable Development Goal 3: reduce national MMR to under 70 by 2030 (UN 2020). The pandemic challenged the access to healthcare to a degree that directly impacts life-saving interventions and that can be expected to increase the MMR (Kc et al. 2020). Giving birth out of healthcare facilities and without the assistance of skilled birth attendants is strongly connected to higher risks of maternal and infant complications and deaths (ibid.). One important indicator is the decreasing

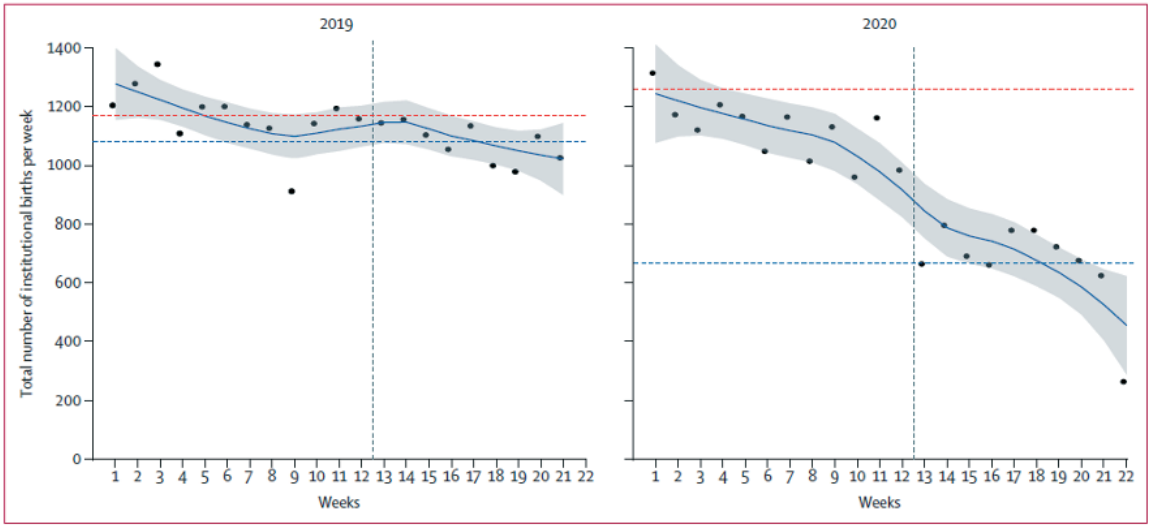

Figure 1: **Number of weekly institutional births for the first 22 weeks of 2019 and of 2020 in Nepal, indicative of implementation of national lockdown in 2020**
Datapoints are mean weekly number of births, smoothed line is the locally weighted scatterplot smoothing curve with shaded grey area showing the 95% CI. The vertical dashed line indicates week 12·5 when lockdown was announced in 2020. The horizontal red dashed line is the mean weekly number of births before week 12·5 and the blue dashed line is the mean weekly number of births during the remaining 9·5 weeks.

institutional birth rates during the lockdown (see Figure 1)[3] (ibid.).

> The decrease in the number of institutional births and increase in adverse outcomes are especially concerning because of Nepal's fragile health system and raise questions on policies regarding strict lockdowns in low-income and middle-income countries (ibid.: 1280).

In Nepal, the government implemented a nationwide lockdown in 2020 from 24 March to 21 July (K. Sharma, Banstola, and Parajuli 2021). The government shut down manufacturing, business, schools, public transportation, and "non-essential healthcare and services", and told people to self-isolate at home unless to perform essential work, seek medical attention, or purchase food (Crisis24 2020).

Nepal's public health system was expected to experience negative impacts because of a slowdown of economic activity, damaged supply chains, and limited coordination among stakeholders in healthcare management. Few infection prevention and control policies were in place, testing kits and medical supplies were in short supply, and healthcare workers needed capacity-building to prevent infection in themselves and others (Asim et al. 2020). Sexual and reproductive health (SRH) outcomes began to fall during the lockdown, similar to the ones problematized by the UNFPA, reported national newspapers. As access to hospitals and healthcare facilities for maternity services was constrained, maternal health outcomes fell, home deliveries increased in number, and the number of deaths during pregnancy and childbirth increased (Aryal 2020, Baral 2020, Bhattarai 2020, Post Report 2020, Poudel 2020b; 2020a; 2020d; 2020c, Shrestha and Heaton 2020, Shrestha and Baral 2020, Timilsina 2020).

Anthropologists and social scientists argue that viruses in the modern world should be conceptualized beyond being a vector for disease. "[I]nfluenza has partially constructed—and continues to shape—the contours of that world" (MacPhail 2015:7). Pandemics are considered co-constructers of not only human conditions but also pandemic imaginaries and social organization worldwide (MacPhail 2015, Keck, Kelly, and Lynteris 2019, Lakoff 2017, Mason 2016, Manderson, Burke, and Wahlberg 2021). Pandemics have been portrayed as portals or as terrain for imagining the future of humanity (Roy 2020, Keck, Kelly, and Lynteris 2019). Pandemic imaginaries

are manifesting in norms of "preparedness" and shaping emergency responses.

In *Unprepared*, Lakoff (2017: 12) examines how concerns over infectious disease outbreaks in the future resulted in the emergence of "preparedness", or approaches and practices that came to structure expert thought and government action. The logic of preparedness is not to avoid the disaster but rather to identify vulnerabilities in the present and gage them, thereby preventing events from spiraling into catastrophe (ibid.: 19, 167). "Pandemic preparedness" policies are guided by assessments of what threats and societal vulnerabilities are vital and what are not. In a pandemic preparedness perspective, the key site of vulnerability is the infrastructure that secures the continuity of political and economic order, not population health (ibid.: 34).

Prioritizing critical infrastructure over population health can have far-reaching consequences on healthcare provision. Mason (2016: 16) illustrates how during the outbreak of severe acute respiratory syndrome (SARS) in 2003, a distinction emerged between stopping illness in individuals and preventing disease outbreaks in populations. Mason uses the concept of "bifurcation of service and governance" to unfold how viral outbreaks can catalyze change in healthcare systems. She further shows that social inequalities become deeply embedded in healthcare systems due to government priorities and policies co-evolving alongside pandemics, which results in some essential aspects of health being prioritized over others.

The policy of prioritizing strict disease control regulations such as lockdown measures in response to COVID-19 have been criticized for directly endangering the health of individuals; these dangers affected people differentially according to pre-existing social fault lines and inequalities (Roy 2020, Bennett and Dewi 2021, Manderson, Burke, and Wahlberg 2021). Manderson, Burke, and Wahlberg (2021: 2) write in the introduction to *Viral Loads*: "The COVID-19 pandemic loaded onto already existing socio-economic inequalities, racial discrimination and uneven access to healthcare."

In their study of the ways in which the COVID-19 pandemic and the policy responses on the SRHR of vulnerable Indonesian communities, Bennett and Dewi (2021) illustrate how the policies intensified the preexisting conditions of deprivation and inequalities in access to SRHcP. Bennett and Dewi argue that crises and pandemics have an "amplification effect", wherein the "concrete and often overlapping conditions of deprivation have been intensified within the pandemic" (Bennett and Dewi, 2021: 223).

This article follows their approach in exploring the ways the pandemic response policies and lockdown affected women's access to SRHcP in Nepal. We use the concept of the "amplification effect" to explore how pre-existing vulnerabilities and inequalities constraining female SRHR are intensified during lockdown. This study is therefore centered on the larger health footprint of COVID-19 in Nepal and show how the lockdown and other responses to the pandemic intensified the preexisting vulnerabilities and inequalities in women's access to SRHR in ways which can be expected to result in poorer health outcomes.

We explore the constraints to women's SRHR qualitatively through the perceptions and experiences of NGO SRHR specialists and healthcare providers working with SRHcP in 2020 in the Kathmandu District, the Chitwan District, and the mountain region of the Gorkha District. We supplement these perspectives with the experiences of women receiving SRHcP during the lockdown and offer a qualitative, contextualized exploration of the ways in which the COVID-19 pandemic affected SRHcP.

The analyses offered in this article add qualitative texture to the problems contoured by these quantitative indicators and seek to challenge the policy of strict lockdown in low- and middle-income countries. This study does not attempt to represent SRHR, or all the events in SRHR in Nepal during

2020, or one community, ethnicity, caste, or gender; rather, it aims to identify and problematize complex and intersecting implications valuable for future considerations within SRHR coverage in times of crisis. Even though time has passed, and practices have been re-evaluated since the COVID-19 lockdown in 2020, perspectives on the implications emerging during the initial emergency response still hold important lessons for rethinking preparedness and response plans.

Ultimately, we argue for "lockdown preparedness", or the provision of essential primary healthcare and livelihood needs, during outbreaks of viral disease in the future: emergency response plans should widen their scope and aim to mitigate societal vulnerabilities and secure better general health outcomes in addition to protecting populations against viruses.

National and global discussions of pandemic preparedness focus on disease control. Widening the discussions beyond disease control could cast general health, social, economic, and infrastructural vulnerabilities as objects of preparedness intervention to a higher degree and, thereby, mitigate systemic weaknesses and social inequalities – rather than allowing for their amplification during future outbreaks and lockdowns.

Fieldwork in Lockdown Times

The unfolding pandemic in the summer of 2020 and the lockdown in Nepal did not only provide material for analysis—it also came to condition the data collection process. Scholars have navigated the pandemic conditions by utilizing digital technology and local gatekeepers (Davis-Floyd, Gutschow, and Schwartz 2020, Bennett and Dewi 2021; Block and Vindrola-Padros 2021). In line with other scholars, we collected data for this study online and in the field; we conducted fieldwork in 2020 between July and September. The infield data collection was carried out in the Chitwan District and consisted of 10 semi-structured interviews conducted in Nepali or Tharu with women who gave birth during the lockdown period.

The Tharu are a culturally and linguistically diverse ethnic group. They made up 6.62% of the total population in Nepal in 2020. They reside in districts along the Terai area and practice agriculture as their primary occupation. Despite some development within different socioeconomic aspects, their status is unsatisfactory (S. Sharma et al. 2021: 2, 10). The Tharu are divided into castes like the Mahato, Chaudhary, Kathoriya, and Rana Tharu (S. Sharma et al. 2021: 2).

Eight of the 10 women we interviewed identified as ethnically Tharu. They belong to the Chaudhary or Mahato caste, and their socioeconomic status reflected their belonging to the rural community in and around Sauraha Village, in the Chitwan District. All the women were married new mothers and eight had more than one child. All had had their deliveries in the hospital; eight by vaginal delivery and two by caesarean section. Four of the women had experienced complications during pregnancy and one related to her newborn's health. The lockdown confined them to their homes during the infancy of their babies. We refer to this group as the Sauraha mothers in this article. We interviewed an untrained traditional birth assistant, a Sudheni, from the Chitwan District.

We collected the online data through communication platforms. The data comprised 12 semi-structured interviews of SRHcP professionals and specialists conducted in English, each lasting 1–1.5 hours. The interviewees were NGO and INGO professionals, nurses, a healthcare provision coordinator, midwifes, and community workers. The 23 informants participating in this study are locals to the Kathmandu District, the Chitwan District, and the mountain region of the Gorkha District. The interviews of this study therefore provide the perspectives of people living in both Terai and mountain areas and across rural and urban localities and local and national perspectives on Nepalese

women's SRHR during the pandemic in 2020. This article also builds on an analysis of official material such as policy briefs and government documents, INGO and NGO guidelines, reports, and Nepalese news articles.

Policy: Triage upon Triage

Resource scarcity and a fragmented healthcare system caused the provision of SRHcP in Nepal to be constrained already before the COVID-19 pandemic (Bhattarai 2008). Access to healthcare in Nepal is inequal and differentiated along social fault lines (Brunson 2018) such as gender (Tamang 2002), caste (Brunson 2020; 2016), ethnicity (March 2002), and nationality (Craig 2020), and across geographical locations, notably creating a differentiation of access to healthcare in rural and urban areas (Acharya et al. 2010).

The difficult geographical terrain and poor roads, hospitals, and transportation and communication systems restrict the availability of healthcare professionals; constrain access to basic maternal healthcare before, during, and after birth; and lead to the underutilization of the services available. Access is constrained also by poverty, illiteracy, the low status of women in society, and political conflict (Brunson 2018, Dhakal et al. 2007, Bihha Simkhada et. al. 2006).

The SRHR policy environment in Nepal is progressive compared to others in the Southeast Asian region, all non-governmental organization (NGO) professionals participating in this research underlined in interviews. They argued that the government employs a rights-based approach and aims at providing universal access to SRHcP. Reproductive and maternal healthcare are both part of the government's policy on basic and essential healthcare provision. Nepalese governments have for decades worked at improving SRHR through programs providing universal access to SRHcP. Notably, the 'Safe Motherhood' program, initiated in 1997, aimed at increasing maternal and infant health and decreasing mortality rates (Ministry of Health and Population 2022).

As the pandemic infiltrated Nepal in 2020, the importance of and challenges to SRHR were empathized.

> I think this COVID situation has highlighted the importance of these essential sexual and reproductive health and rights. Just because in emergency women will still deliver, women will still get pregnant, women will still need family planning services. […] So this COVID situation has, I think, rather revitalized or emphasized the fact that, if you don't ensure the continuity of life-saving services, then you will have a more devastating impact of COVID (UNFPA Nepal representative in 2020).

This quote emphasizes how the essentiality of SRHR has been highlighted, revitalized, and exposed during the Nepalese COVID-19 response and lockdown period.

When the pandemic began in 2020, NGOs published policy documents that held it would be essential to continue lifesaving SRHcP (UN Nepal 2020a; 2020b, UNFPA 2020; WHO 2020a; 2020b; 2020c). In line with those documents, the government responded by instituting a strict lockdown and ordering healthcare facilities and providers to continue to provide essential sexual reproductive maternal infant and child health (SRMNCH) services. The instructions were laid down in the "Interim Guidance for Reproductive, Maternal, Newborn and Child Health Services in COVID-19 Pandemic" (MoHP 2020), a document published by the Family Welfare Division of the Ministry of Health and Population.

However, systemic capacity to ensure the continuity of SRHcP during the pandemic in Nepal, as well as in other developing countries, were problematized. Accordingly, the MMR was expected to increase and other SRHR outcomes were expected to worsen (UN Nepal 2020a; 2020b, UNFPA 2020, WHO 2020a; 2020b; 2020c). In Nepal, the system

did not have sufficient capacity, causing it to fail in ensuring the continuity of essential lifesaving SRHcP. Because of this, a gap between government policy and implementation of this policy in practice caused SRHR to be an underprioritized field during the pandemic response.

> The government says, despite the pandemic, all services must be available. In principle government has acknowledged [the importance of continuation of SRHcP], but in practice, it isn't there. Not even in the [Kathmandu] valley. So, what can we think of the remote areas? They are left in the hand of nature (Beyond Beijing Committee Chairperson in 2020).

As the Chairperson of the Beyond Beijing Committee (BBC) explains, there existed a gap between policy and practice. Policy implementation in Nepal was hindered by several factors that predated the pandemic, and these hinderances were perceived to shape the canalization of information and resources across the country.

This prioritization of resources within the healthcare system can be illuminated through the concept of 'triage' (Nguyen 2010). Triage in medical terms is the process of determining which patients needs urgent care and which can wait (ibid.: 10). Reflecting on these processes and their role for healthcare provision, Nguyen employs triage as a concept which describes how evolving historical, cultural, and political logics define the criteria determining which patients should be provided with treatment. As it is based on certain logics and moralities, the process of triage can result in the reproduction of social inequalities by favoring some types of patients over others (ibid.: 6-10).

Prioritization in healthcare systems is not specific to the pandemic; rather, it is a daily reality, especially in developing countries (Manderson and Wahlberg 2020: 20). Resonating with this tendency, the Nepalese healthcare system was also challenged by resource scarcity, and processes of triage and prioritization of resources already before the pandemic. Especially 'scarcity of economic and human resources', 'country geography and insufficient infrastructure', and 'patriarchal societal structures' were identified by the informants as factors historically influencing governmental logics and decision-making resulting in the underprioritization of SRHR.

The hindrances to SRHcP during the lockdown will be explored in the following section. At this point, this article will emphasize how SRHR became even more underprioritized, and access to SRHcP became increasingly constrained, when COVID-19 disease control gained political priority.

> [W]e did very well in reducing maternal mortality, but it will go up! Because of the lack of focus of the government. Because now focus is on COVID, COVID, COVID, PPE, all these things. Not on making safer abortion service available, contraceptive and maternal health service accessible and [not providing] quality services. Politicians and authorities all have different priorities, rather than these issues. These issues are still regarded as women's issues. They haven't really been understood, acknowledged fully, as issues of the nation, issues of everybody (Beyond Beijing Committee Chairperson in 2020).

This quote critically portrays a tendency in the government emergency response to prioritize disease control at the expense of the continuation of essential SRHcP. This resonates with studies from other contexts illustrating how, when healthcare workers were asked to divert their time and energies to tackle the COVID-19 virus, limits on technical, fiscal, and human resources resulted in people with other medical conditions to suffer (Manderson and Wahlberg 2020: 20). The quote further expresses how SRHcP were not conceptualized as a national emergency concern, but rather as "women's issues", acceptable to disregard in the face of emergency, as they

were not conceptualized as "issues of the nation". Patriarchal societal structures were indicated to inform healthcare triage to a degree where women's health, opportunities, and rights were neglected.

Our informants expressed how resources were focused into direct COVID-19 disease control initiatives rather than effectively implementing the previously mentioned government policy on SRMNCH. This indicates how SRHR, a field already subjected to processes of triage before the pandemic, was subjected to additional triage during the lockdown. This triage-upon-triage appeared to assess the field of SRHR as even less deserving of intervention and support than before the pandemic. Triage in lockdown times, following ongoing triage in the healthcare system, appears to have amplified the underprioritization of female access to SRHcP to a degree where dire consequences for SRHR were expected by the informants.

The Nepal representative of the UNFPA explained:

> If [institutional] delivery is 50% lower than what it originally used to be, then the maternal deaths will increase three-fold.

An anonymous INGO professional said:

> People are at the gate of the hospital and you're refusing the cases. And this is completely a human rights violation. And that causes maternal death.

As these quotes indicate, both women's health and rights were perceived to have been increasingly put at risk due to decreased access to SRHcP during the pandemic.

In an analysis of preparedness policy, Lakoff (2017: 33-34) distinguishes between "population security", the long-term development of public health infrastructure, and "national preparedness", including short-term interventions in response to crises. Primary healthcare issues can be categorized as a "population security" concern rather than as a "national preparedness" concern, illustrates Lakoff, and issues that are not of national preparedness are underprioritsed in government responses to emergencies (ibid.: 33-34).

In Nepal, the government treated SRHR as a population security issue, not a national preparedness issue. Underprioritizing population security issues undermines the effectiveness of the broader emergency response (ibid.: 34). To strengthen access to SRHcP, the Nepal government should establish SRHR as a priority for national preparedness and the triage process and integrate it into pandemic responses beyond policy.

As the Nepal representative of the UNFPA said:

> If you don't ensure the continuity of life-saving services, then you will have a more devastating impact of COVID. It's not only the COVID, infection, and cure. It's about the other issues.

As this quote indicates, primarily focusing on disease control issues and underprioritizing essential SRHR issues risk undermining Nepal's broader pandemic emergency response.

Gaps Amplified

> For our government, the basic health services are free in Nepal. But due to the scarcity, due to the various reasons, the government is unable to provide all kinds of facilities. Due to economic conditions, and due to the remoteness of the areas, you know. So everywhere for the government is it very difficult to do this in the grassroots level (National Director, Community Action Nepal in 2020).

The national director of Community Action Nepal (CAN) describes how multiple gaps in the primary healthcare infrastructure challenges both physical access and flows of resources to primary healthcare provision in Nepal. These gaps were challenging the SRHcP even before the pandemic and were

amplified by the pandemic response and lockdown.

Reduced Quantity and Quality of Healthcare Provision

Even before the pandemic, the quantity and quality of SRHcP accessible in Nepal was not sufficient. The healthcare providers participating in this study explained how there was a significant lack of skilled healthcare providers performing quality SRHcP nationally—in terms of both numbers and capabilities. During the pandemic, the quantity and quality of care was further decreased. The lockdown and disease control measures raised the need for government support, regulations, and resources. Importantly, decreasing or disrupted access to SRHcP and commodities needed for pregnancy, delivery and post-delivery healthcare, family planning services, access to contraceptives, and safe abortion services were problematized. Nevertheless, the human and material resources available was not enough to meet the need.

The healthcare facilities did not have the capacity or staff to implement procedures to identify, examine, and treat COVID-19 patients and others for SRHR, especially at remote locations. There was no monitoring or regulation—or education of staff. The staff was exposed to contagion because personal protective equipment (PPE) was in short supply, because the lockdown had disrupted the commodity supply chains. Precautionary measures implemented to contain spread—social distancing between staff and patients, and minimizing the time patients spent at healthcare facilities—made healthcare provision inadequate or unavailable.

The interviews also underlined how access to equipment, contraceptives, family planning and safe abortion services, and delivery and post-delivery healthcare was disrupted. Pregnant women were not adequately examined for pregnancy complications, new mothers were sent home few hours after cesarean sections and vaginal deliveries, and infants died because the provision for examination and care was inadequate. Based on these described challenges to SRHcP, the SRHR providers and specialists who participated in this study expected the already high MMR to increase.

Aligning with the argument that the pandemic amplified social vulnerabilities and inequalities (Bennett and Dewi 2021: 223), these findings suggests that decreasing quantity and quality of care intensified the vulnerability of women as well as inequalities in health outcomes, as female health was increasingly challenged by decreased access to SRHcP.

Decreased Access to Institutional Delivery

A primary concern within SRHcP during the lockdown was the lower levels of attendance in healthcare facilities for pregnancy, delivery,[4] and post-delivery services. As emphasized by an informant: fetal and infant health is increasingly being put at vital risk due to decreasing provision of care related to deliveries.

Some socio-cultural factors were explained to contribute to women increasingly delivering at home during the lockdown. Notably, decision-making power over SRHR issues customarily lies with the head of the family or the mother-in-law rather than with the mother-to-be. This resonates with studies of women's decision-making power in Nepal highlighting that women of varying socio-economic, cultural, religious, and ethnic backgrounds share decision-making-power over SRHR issues with family members and mothers-in-law in particular (Brunson 2010, Simkhada, Porter, and Van Teijlingen 2010). Notably, a study shows that Nepalese women's autonomy in decision-making is positively associated with their age, employment, and number of living children, and that women from rural areas and the Terai region have less autonomy in decision making (Acharya et. al. 2010).

In the interviews of the present study, the influence of family members on women's choices regarding pregnancy, delivery and the post-partum period was problematized as some cultural traditions were explained

to favor home deliveries as traditional, safe, and natural, which could motivate family members to increasingly prefer them in times of crisis.

Facility Avoidance due to Fear of Infection

Infrastructures are always situated in socio-material practices and imbued with inscriptions (Guma 2022: 65). To understand how infrastructures of healthcare are accessed and utilized, we must first appreciate the perceptions and practices centered on the healthcare system in Nepal during the pandemic. At the time, the scientific information on COVID-19 morbidity and mortality was not well documented, and the perception that infection would be life-threatening for pregnant women shaped public debate as well as the perceptions encountered in this study. Most people feared that visiting healthcare facilities or providers would infect them.

The fear was especially pronounced in women going through pregnancy in 2020 because the perceived risk for mother and child under these circumstances. Strategies of facility avoidance included receiving counseling exclusively by phone, neglecting check-ups for pregnancy or other SRHR issues, refusing to visit facilities and desiring to avoid pregnancy all together. Therefore, facility avoidance was perceived to contribute to the amount of home deliveries and thereby cause an increase in maternal and infant mortality rates. Employing facility avoidance strategies was explained to be widely practiced by people during lockdown.

The SRHcP specialists we interviewed expected decreasing mental health, increasing domestic physical and psychical violence, increasing suicide rates, and increasing anxiety to impact women's health outcomes. The healthcare infrastructure was imbued with negative inscriptions associated with vital risks, therefore, and infrastructures of care failed to offer the minimum of reliable services and personal security needed for the continuation of SRHcP during lockdown.

Based on these perspectives, fear of infection and facility avoidance strategies disrupts access to healthcare provision, which can be expected to increasingly worsen physical and mental health outcomes for women during lockdown. In this way, facility avoidance amplified the vulnerability of women during lockdown.

Disrupted Mobility and Infrastructure

Our informants described how access to healthcare staff skilled at SRHcP in Nepal has long been hindered by the absence of adequate ambulance services and public and private transport infrastructure, especially in areas with challenging geography. The infrastructure also restricts the supply of medical and protective equipment, medicine, and contraceptives, especially in remote areas. These challenges were amplified by the lockdown as restrictions against public transportation were imposed and impacted on both patients and providers ability to access facilities. A nurse commented on how lockdown induced mobility restrictions increased risk for women's health:

> There is no sufficient transportation. No delivery transportation to go to the hospital, to receive the maternity services. Sure, there are more vulnerable women and home deliveries (S., Anonymous Nurse).

Even after public transport was resumed, some people avoided it out of fear of infection.

Disruptive Resource Scarcity

The government prohibited non-essential work and business during the lockdown but did not provide sufficient financial or nutritional aid. Therefore, many were forced to break regulations and work to feed their families. Resource scarcity and economic hardship limited the ability of patients to pay for medicine or fees at private hospitals or to travel to healthcare facilities.

During the lockdown, some hospitals required patients to present COVID-19

test results upon arrival. These tests were expensive, at 4000-5000 NPR, and unaffordable for families experiencing economic hardship. Even though this requirement was not implemented everywhere, it disrupted access to healthcare. People perceived private hospitals to be safer than government hospitals, but private hospitals—especially during lockdown—were expensive and therefore not an option if experiencing economic difficulty.

This situation can be problematized as people with the least resources were more exposed to contagion from public health facilities or compelled to avoid facilities, increasing the risk of worsening health outcomes. In this way, the lockdown amplified existing social inequalities and vulnerabilities.

Improvisation Amplified

In the early days of the pandemic, new challenges to SRHcP emerged. As illustrated in the previous sections, these challenges both supplemented and amplified the preexisting challenges to healthcare access and quality. Healthcare providers in resource-poor contexts had to contend with the lack of evidence-based treatment and the limited supply of drugs and PPE, and shift, tinker, and adapt to unpredictable, rapidly changing circumstances, especially as government support was insufficient (Block and Vindrola-Padros 2021: 306). Information was scarce and resources deficient, and providers adapted and supported the continuation of SRHcP by improvising healthcare provision and practices.

As the government imposed COVID-19 regulations, the management at local governmental hospitals and healthcare facilities set up teams to coordinate information sharing, contact tracing, testing, isolation, and quarantine, as well as to support a continual supply of PPE. After a period where COVID-19 and non-COVID-19 patients were admitted together, for example for delivery, services were separated. Nursing campus facilities or community buildings were changed into COVID-19 wards. Additionally, hospitals provided service and consultation online or by phone. Examples of services provided by phone includes nutritional advice in pregnancy, prescription of medicine, and after-delivery hygiene education.

When the government declared private homes and community centers off-limits for community health providers, they too began counseling patients and healthcare staff long-distance. Furthermore, INGOs and NGOs incorporated COVID-19 related commodities into existing health kits and distributed them through already existing infrastructure (one example being COVID-19 upgraded post-delivery kits). Some healthcare providers managed COVID-19 testing in communities, others spent their resources capacity building and preparing for disease outbreaks in their regions. As these examples illustrate, providers spent their efforts during the initial months of the pandemic outbreak supporting the continuation of SRHcP by adapting healthcare provision and improvising practices in a context of information scarcity and resource deficit.

Government and NGO policy guided the adaptation, innovation, and improvisation of practitioners making difficult choices in providing care in contexts of intensified material and human resource scarcity and guidance delay. Healthcare providers described how confusion intensified and constrained SRHcP for months. A nurse described the lessons learned from navigating the pandemic situation with insufficient governmental support:

> Most of all, I want to say that this pandemic has taught us to be self-dependent (K., anonymous nurse).

As this quote illustrates, the healthcare providers efforts were experienced as the primary drivers of the continuation of SRHcP during the pandemic.

Improvisation can drive and enable care to proceed amid uncertainty and scarcity, shows Livingston (2012). In *Improvising Medicine*, she shows how healthcare providers improvise with the material and human resources available in highly

contextual ways—a process including both innovation of care and therapeutic futility (ibid.). In the context of SRHcP in Nepal during the COVID-19 pandemic and lockdown, improvisation seems to have been intensified as an important driver of innovation of practices, at the same time as direct and indirect challenges to SRHcP can have resulted in additional lives being compromised or lost.

"It is this ethic of experimentation and improvisation that sustains the hospital as a space of hope as well as failure", writes Street (2014) in *Biomedicine in an Unstable Place*. Even though healthcare provision is not confined to hospitals in Nepal, it too unfolds in a space of opportunities and constraints. Healthcare providers participating in this study navigated this space by calling out to local and national governments and imploring for regulations and preparedness, hoping that the government will prioritize SRHR in the future.

Conclusion: Lockdown Preparedness

> Responding to, and preparing for, the inevitable and yet unpredictable emergence of new epidemics and pandemics has become a prolific terrain for imagining the future of humanity (Keck, Kelly, and Lynteris 2019: 1).

But *how* should we imagine the future of humanity so that our response and preparedness plans can serve it fully?

Our modern interconnected world is not temporarily affected by epidemics; rather, it is continually being co-constructed by viruses (MacPhail 2015). We need to reimagine pandemics so as not to see them as events confined to certain timeframes and societal spheres but rather as powerful forces of change affecting all aspects of society. Long-term change being caused by pandemics demands for preparedness plans to incorporate holistic societal strategies. The question 'what happens when emergency strikes?' must be answered with more than a focus on disease control. Rather, it is of vital importance that policymakers, practitioners, and populations imagine a future where national resources are canalized towards multiple aspects of essential and lifesaving healthcare during disease outbreaks—also in resource-scarce healthcare systems.

With the point of departure in the presented literature and ethnographic findings, this article suggests that the concept of pandemic preparedness must be reimagined to better support the continuation of primary healthcare in future pandemics. Continuing healthcare provision during lockdown may require what this article will term as 'lockdown preparedness'. Lockdown preparedness indicates a widening in scope and prioritization in future preparedness and emergency response plans beyond protecting populations against virus. Lockdown preparedness should additionally enable the continuation of essential primary healthcare provision and coverage of essential livelihood needs to a larger degree. In this way, lockdown preparedness aims to mitigate multifaceted and overlapping societal vulnerabilities to improve general health outcomes during pandemic disease outbreaks.

Not being prepared for supporting continuation of primary healthcare during future lockdowns risk undermining broader emergency responses as well as and set back progress in health development. Lockdown preparedness, on the other hand, would let the provision of essential healthcare continue. In Nepal, as in other low- and middle-income countries, lockdown preparedness would support continuation of essential healthcare, as well as mitigate systemic weaknesses and social inequalities, rather than allowing for their amplification in future pandemics and lockdowns. Furthermore, widening national and global discussions of pandemic preparedness should cast primary health issues, as well as social, economic, and infrastructural vulnerabilities as objects of preparedness intervention to a higher degree.

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Endnotes

1. This study considers only those aspects of SRHR most evident in the interview data: maternal health pregnancy, delivery and post-delivery care, contraception needs, and abortion services. The study does not consider other aspects of SRHR but those aspects are essential and they deserve academic and political attention.

2. Based on a study from Eastern Nepal. This study portrays hypertensive disorder of pregnancy, obstetric hemorrhage, sepsis, and anemia as common and preventable causes of maternal deaths in Nepal (Sitaula et al., 2021: 2).

3. Figure 1 reproduces a figure printed in Kc et al. (2020).

4. As described in the interviews, institutional deliveries cover deliveries in healthcare facilities, assisted by skilled health personal, such as nurses, nurses practicing as midwifes, midwifes, skilled birth attendants, or doctors. Non-institutional deliveries are happening in private homes with no equipment assisted by untrained people such as family members and possibly a traditional birth specialist such as a Sudheni.

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