J Nepal Health Res Counc 2022 Jul-Sep; 20 (56): 645-52

Utilization of Basic Health Services at Primary Health Care Facilities During COVID-19 Pandemic

Anita Basnet, [1] Baburam Subedi, [1] Suraj Bhushal, [2] Kedar Prasad Baral[2]

[1]School of Public Health, Patan Academy of Health Sciences, Lalitpur, Nepal, [2]Department of Community Health Sciences, Patan Academy of Health Sciences, Lalitpur, Nepal.

ABSTRACT

Background: COVID-19, a novel rapidly emerging respiratory disease has spread across the world in a short span of time, infecting millions of people around the world. Consequently, health systems are overwhelmed by both direct mortality from COVID-19 and indirect mortality from other treatable conditions. Though COVID-19 prevention and control is crucial, it is also equally important to continue basic health services. Therefore, the study aimed to explore the facilitators and barriers of basic health service utilization at primary health facilities during the COVID-19 pandemic.

Methods: An exploratory qualitative study was conducted in the Bidur Municipality of Nuwakot district. Twenty-five telephone interviews were conducted from all the wards of the municipality and each lasted at least 20 minutes. The interviews were translated into English, coded using RQDA software, and analyzed using thematic analysis manually.

Results: The participants shared basic health service was interrupted during the pandemic, especially in the first month. However, the prominent factors that were often crosscutting to many factors were socio-economic conditions and fear of acquiring COVID-19. Additionally, inadequate personal protective equipment, mental stress, shortage of health workers, supplies disruptions, social stigma and extended lockdowns come into play for determining the utilization of basic health services during pandemic.

Conclusions: Basic health service was heavily compromised during the pandemic. Fulfillment of the sanctioned posts, enhancement in the use of digital technologies can be promoting options for basic health service utilization during pandemic.

Keywords: Basic health services; COVID-19; Nepal; pandemic; utilization.

INTRODUCTION

COVID-19 is a novel rapidly emerging respiratory disease. It has overwhelmed the health system by both direct mortality from COVID-19 and indirect mortality from other treatable conditions.[1] The shift of the resources from regular health services to COVID-19 prevention and management has interrupted regular health services.[1] An estimated 10% decline in utilization of contraceptives during COVID-19 could result in additional 49 million women with unmet need for contraceptives and more than 117 million children are at risk of missing measles vaccines worldwide.[2] South Asian countries are comparatively less prepared to fight against COVID-19 because of poor health systems which can result in interruption of basic health services.[3] Besides, the poor enabling environment for health workers, stress, and movement restrictions limit basic health service utilization in Nepal.[4] Therefore, the study aims to explore the barriers and facilitators for basic health service utilization at primary health care facilities during COVID-19 pandemic.

METHODS

A cross-sectional qualitative study was used to gain a broader and deeper understanding of the factors affecting basic health service utilization during

Correspondence: Anita Basnet, School of Public Health, Patan Academy of Health Sciences, Lalitpur, Nepal. Email: itsmeanita6@gmail.com, Phone: +977 9843421820.

COVID-19 pandemic. The study was conducted in the Bidur Municipality of Nuwakot district, Bagmati Province of Nepal from June to December 2020.[5] Prior to the data collection, ethical approval was obtained from the Institutional Review Committee, Patan Academy of Health Sciences, Nepal with the reference number of PHP2009031440. Audio-recorded informed consent was taken from the participants before conducting interviews. Participants were selected judgmentally based on the socio-ecological model given by Urie Bronfenbrenner so that it could cover all the elements of the model.[6] Participants with age 18 years and above with at least six months of residence in the municipality were taken in the study. Fourteen In-depth Interviews (IDI) from Health service users of fourteen different health facilities, four key informant interviews (KII) with health service providers, three KII with health administrators and four with elected representatives were taken making 25 telephone interviews. The sampling allowed achieving maximum diversity of the study participants in terms of age, sex, occupation, education, and area of residence given in table 1. The interview was audio-recorded, and researcher took note during interviews. The validated interview guidelines through intense literature reviews, supervisors and expert opinions were used. The credibility of the information was maintained by member checking. The interview was translated from the recording soon after interview on an iterative process. All the translated interviews were imported in R software installed with RQDA package. The codes were created manually in R and broad theme were generated following the socio-ecological model. Inter-coder reliability was 74.50% and the common codes created by two independent persons were selected for the final codes. The final analysis was done manually using thematic analysis with interpretivist approach and deductive reasoning.

RESULTS

The facilitators and barriers were identified at the individual level, interpersonal level, organizational level, community level, and policy level based on the theoretical framework which is illustrated by figure 1

The prominent factor that was often cross-cutting to many factors was the low socio-economic status of participants. Health service providers expressed that those who were low socio-economic class are with the low awareness level and faced difficulties in service utilization. Moreover, the unaffordability of ambulance services and other means of transportations for seeking health services were problems in low socio-economic group creating problem in seeking health service.

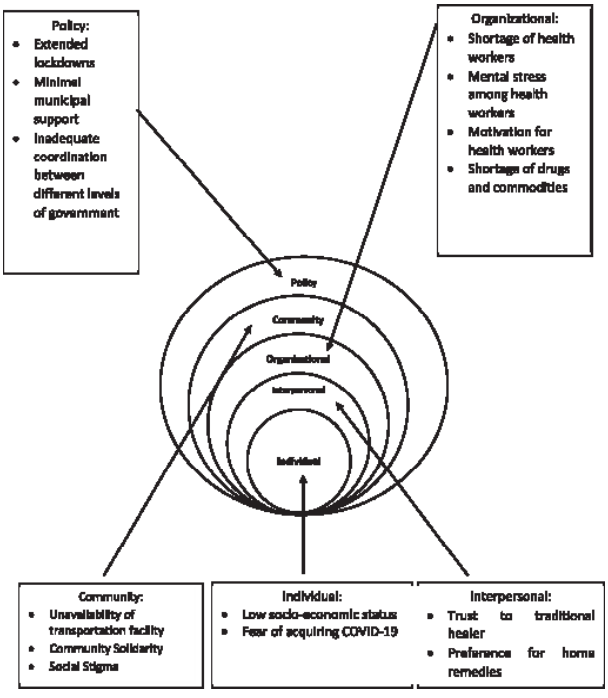

Figure 1. Factors affecting the basic health service utilization during COVID-19 pandemic based on socio-ecological model given by Urie Bronfenbrenner.

"It is difficult to approach ambulance service for low socio-economic groups. But it is not difficult for those who can pay for it."- A3

Moreover, the fear of the global COVID-19 pandemic stressed the public. The fear of acquiring illness, fear of not receiving treatment if infected, fear of stigmatization if infected were found to be major fears that limit the service users for receiving basic health services.

"This scenario is new to us. So, I am afraid to visit doctors."- U1

Service providers expressed the additional fear of failing to provide the health services in a new environment, fear of carrying the virus to the home, family and friends, fear of stigmatization, and boycott from community. This scenario interrupted services delivery like immunization services, family planning services and other regular services.

"We could not run the immunization services because of fear of being infected." - A2

Table 1. Demographic characteristic of the study participants.

S.N	Codes	Age (yrs)	Sex	Address	Ethnicity	Marital Status	Highest educational level	Occupation
1	A1	37	Male	Bidur Municipality	Brahmin	Married	BPH	Health Inspector, Focal person of COVID-19
2	A2	40	Male	Bidur Municipality	Janajati	Married	HA	Health Co-ordinator
3	A3	34	Female	Khadkabhanjyang HP	Chhetri	Married	HA	Incharge of health post
4	E1	48	Male	Bidur 03	Brahmin	Married	Higher secondary	Ward Chair
5	E2	40	Male	Bidur 04	Janajati	Married	BPH	Ward Chair
6	E3	37	Male	Bidur 01	Brahmin	Married	Bachelor	Ward Chair
7	E4	45	Female	Battar	Brahmin	Married	Master	Deputy Mayor
8	P1	35	Female	Bidur 11, UHC	Brahmin	Married	PCL Nursing	ANM
9	P2	40	Female	Gerkhu HP	Chhetri	Married	ANM course	ANM
10	P3	26	Female	Tupche HP	Brahmin	Unmarried	PCL Nursing	Staff Nurse
11	P4	39	Male	Upper Gerkhu-12,UHC	Brahmin	Married	AHW	AHW
12	U1	40	Male	Bidur 11	Brahmin	Married	Literate	Agriculture
13	U2	21	Female	Bidur 10	Brahmin	Married	Secondary level	Homemaker
14	U3	50	Male	Bidur 02	Newar	Married	Higher sec	Teacher
15	U4	28	Female	Bidur 05	Brahmin	Married	Sec level	Homemaker
16	U5	26	Female	Bidur 02	Janajati	Unmarried	Higher sec	Business
17	U6	50	Female	Bidur 03	Chhetri	Married	Literate	Agriculture
18	U7	35	Male	Bidur 07	Brahmin	Married	Bachelor	Teacher
19	U8	23	Female	Bidur 08	Chhetri	Unmarried	Bachelor	Student
20	U9	60	Female	Bidur 03	Brahmin	Widow	Illiterate	Homemaker
21	U10	82	Male	Bidur 06	Chhetri	Married	Literate	Ex-army
22	U11	32	Female	Bidur 12	Brahmin	Married	Literate	Social worker
23	U12	22	Female	Bidur 13	Chhetri	Unmarried	Bachelor	Student
24	U13	25	Male	Bidur 13	Chhetri	Unmarried	Bachelor	Banker
25	U14	31	Male	Bidur 12	Brahmin	Unmarried	Bachelor	News reporter

The health workers further expressed the unavailability of personal protective equipment (PPE) during the COVID-19 raised additional fear to them to deliver the health services.

"We are five staffs in this health post, but we have a single set of PPE." - P2

Thus, fear of acquiring COVID-19 during a pandemic could be considered as a strong barrier to basic health service utilization.

Participants were found to have trust in traditional healers, as it has been a part of Nepalese culture. Service users expressed the practice of visiting the Dhami/Jhakri more during the COVID era instead of health facilities because of fear of exposure to the virus creating a barrier to health service utilization. *"I prefer to visit Dhami-Jhakri than visiting the hospital during this period because of the risk of infection. I have also a strong belief in Dhami-Jhakri." - U2*

In addition, Participants shared that they started searching for alternative home remedies during

their illness. They preferred home remedies for the treatment of minor illnesses and injuries instead of health facilities, as they believed that health facilities could be source of the infection. Service users were found to be using turmeric water, ginger water, thyme seeds water, Giloy water, etc. for illnesses.

"For minor illness, we have been using jwano pani, besar pani and other treatments at home."-U10

KIIs revealed that the shortage of Human Resource for Heath (HRH) is a major challenge in Nepal. The rise of COVID-19 pandemic made a health system further distress as a limited health workers were in pressure to manage and provide regular health services and tackle with COVID-19.

"Government has allocated less workforce for the health sector, which makes it more difficult to provide health services during pandemic." - A3

The global pandemic created the distress to the national health system. Health workers were in pressure to respond to pandemic along with carrying out regular health services. Many of the health workers were quarantined and isolated which increase responsibilities with limiting health workers. Therefore, health service delivery by limited health workers led to reduced basic health service utilization.

"Health workers were in quarantine and isolation. So, I couldn't receive my anti-hypertensive medicines." -U10

Further, Health workers and administrators revealed that they worked for long hours under overwhelming pressure. They reported having mental problems like anxiety, depression, and insomnia which decreased their work efficiency.

"I couldn't have sound sleep during nights. I fear to work in health post as I have a small baby" -P3

Further, they expressed that the existing social stigma and poor support system further exaggerated the mental stress. Therefore, mental stress for health workers during pandemic is also a factor affecting health service utilization.

Moreover, Service providers shared that the main motivation for them to work was the support from the federal and local governments. Elected representatives reported that they had been supporting the service providers financially to keep them motivated.

"We have increased the allowance of the health workers by 50%. So, I think health workers are giving their best to continue basic health services." - A2

In contrast, service providers complained that they did not receive any incentives. The government didn't adequately recognize their contribution. They complained that the health workers from some health facilities received allowances while others didn't. Such conditions created reduce motivation for health workers hindering them to provide health services.

"The state has committed to provide hazard allowance for those health workers working in pandemic but still we haven't received it even after 6-7 months of the pandemic." - P2

The restricted movements and lockdowns created difficulties to both service providers and service seekers in delivering the health services. The logistic management system was disturbed creating difficulties in supplying the drugs like anti-tubercular drugs, anti-retroviral drugs and other essential drugs which created interruption in service delivery.

Some health workers revealed the shortage of family planning measures like Depo-Provera, vaccines, and anti-tubercular drugs, many other essential medicines, and medical products.

"Medicine supply was interrupted for the first three to four months of the pandemic." -A2

Local-level elected representatives further clarified that the supplies from the provincial and federal levels were interrupted for nearly three months. This led to poor health service delivery.

"It was very difficult for us to supply the logistics to every health facility as the supplies from the district and provincial health office were not enough."-E4

The imposition to restrict public transport during pandemic remained a challenge for meeting the health care demand. Service users shared the unavailability of transportation facility even the ambulances. This led to difficulties in reaching the health facilities for basic health services.

"I couldn't visit health facility during my leg injury as ambulance drivers get scared to carry me in their ambulance."- U6

In addition, service providers made clear that the ambulance drivers avoid carrying the referred cases because of fear of acquiring COVID-19. This seemed to create a complex scenario to reach health facilities even for non-COVID cases.

"It's more difficult to get ambulance facilities for referred case even though referred case is serious." -P3

It was found that inadequate health knowledge to handle COVID-19 cases among drivers, created unnecessary anxiety among drivers compelling them to ignore the cases.

"People complained me that when they seek ambulance services, drivers will ignore by saying that they are busy somewhere like building houses, or carrying the other sick people, geographically far from their residence, etc."- E2

Therefore, unavailability of the transportation facilities during pandemic acted as a barrier for basic health service utilization during pandemic.

Moreover, During the chaotic situation of COVID-19, community solidarity is the requirement to combat its consequences. Service users expressed that high-class people need to support vulnerable populations like migrants, slum dwellers, daily wage earners, etc. for transporting them to health facility, providing food, and many more.

"Those who own private vehicles could facilitate marginalized community people to take them to the health facility." - U10

Elected representatives recommended that the community people need be unified so that they could reach the health facility and tackle the global crisis. Therefore, community solidarity acted as a facilitator to basic health service utilization during pandemic.

Further, Social stigma created a barrier in seeking the health services. Service users reported that COVID-19 infected people were mistreated and misbehaved by society. Therefore, they shared that they don't approach for treatment during illness with the fear of testing RT-PCR positive and being neglected by the society aftermath. Therefore, illnesses remained concealed during this pandemic.

"Community people were saying my sister would destroy whole community by transmitting infections when she was tested positive for COVID. We were tortured by the community people by labeling with different nicknames." - U8

"The problem of social discrimination, social stigma, and inequalities have sharply increased in COVID era. So, people don't prefer visiting the health facility." - E2

Health workers exemplified the experiences of social stigma. They shared the experience of mistreated by home tenants, neighbors, society, and even in hotels. They were said to vacate the rented homes. This deteriorated the work efficiency of the health workers and limiting the basic health service utilization during pandemic.

"Hotel owner didn't give chance to enter to health workers saying that there will be a risk of transmission of COVID infection." - E3

All these activities affected basic health services delivery and utilization during the pandemic.

As a response to combat the COVID-19, Nepal government adopted a social measure, extended lockdowns. This seemed to create detrimental effects on basic health service utilization. Service users reported the strict lockdown policy made difficulties to reach health facilities.

"I couldn't make regular antenatal check-ups by extended lockdowns. I couldn't reach in time to health facility even during delivery." - U2

The role of the local government seemed to be pivotal in controlling COVID-19 meanwhile providing basic health services. However, service providers and administrators expressed that they received minimal support from the municipality office. They complained that their efforts and initiations were unrecognized by the municipality.

"I requested the municipality office for the support of essential supplies, commodities, and human resources to run basic health services, but they didn't even respond to us"- P1

Service providers clarified the reason for the minimal support by the municipality to the health facility which might be inadequate understanding of the health programs by the leaders who were in the decision-making position. They seemed to focus on transportation and other infrastructures neglecting the health sector.

"To date, the local government can only understand what the politics is but they are not able to understand the health sector." - A1

The major problem lies in inadequate coordination between the health workers and elected representatives appeared to create inconsistency in basic health service delivery and utilization.

"We are working so hard on this pandemic but the municipality officials do not even say 'thank you' in this chaotic situation. It decreased our motivation to work." - A1

Therefore, minimal municipal support was a barrier to basic health service utilization during pandemic.

Further, It seemed to have limited coordination between three tiers of the government. Some of the elected representatives explained that some health programs remained unimplemented or partially implemented because of failure to transfer the power with clarity to the local level. Further, the inadequate supplies and support from the federal and provincial governments affected in providing basic health services during the pandemic.

"We need adequate power and resources from the higher level to manage pandemic so that the health programs can be effectively implemented."- E2

Health administrators expressed that the health facilities that were kept under the local government posed a great challenge in conducting basic health services in pandemic because of limited staff and skill at local level to manage.

"The health system needs to be under the federal government for the effective and timely response during pandemic so that it couldn't interrupt in conducting basic health services."-A1

Therefore, the coordination between three tiers of the government needs to be streamlined for effective health service delivery and utilization in all endeavors.

DISCUSSION

COVID-19 is a nobel disease with less information and evidences on it regarding its source, transmission, incubation period, its treatment and many more. On the other hand, Nepal was severely suffered by COVID-19 as many cases were unexpectedly surged on this period. This further created the uncertaininty and confusion among the health workers and public hindering the basic health service delivery and utilization.The numerous changes on the genetic materials of COVID-19 virus with genetic mutations on it as time passes with creating a new variants made a chaotic environment among the general public and health workers.All of this issues made disturbances in health service utilizations.

The utilization of basic health services was heavily compromised during the initial period of lockdown. However, it became comparatively easier in the subsequent month. In support of present study, health facilities had a low capacity to provide regular health services and the quality of care was compromised during the lockdown.[4,7,8] Moreover, the pulse survey conducted by WHO also concluded that the most disrupted services during the COVID-19 pandemic included routine immunization services, family planning, treatment of non-communicable diseases, and antenatal care services.[9]

Most of the participants shared that people lost their regular job during the COVID-19 pandemic, rising unemployment rate leading to higher levels of impoverishment. This seemed to limit the basic health service utilization during pandemics. In line with the study, the income lost during pandemic further limits health service utilization.[10] The pulse survey also supported the finding where the relatively low socio-economic group had severe disruption of basic health service utilization.[9]

In addition, fear of acquiring COVID-19 infection was identified as a major barrier for basic health service utilization during pandemic. The available literature showed that fear of being diagnosed with COVID-19 discouraged people to seek health services during pandemic.[10,11] Furthermore, the past history of SARS and Ebola epidemic also supported the finding that people have fewer visits to health facility because of fear of acquiring infections.[10]

Mostly trust in traditional healers and home remedies discouraged service users from receiving the health services during pandemic. The preference for the traditional healer in the Nepali context led to a decrease in health service utilization at health facilities in Nepal.[12] Furthermore, the evidence generated in different parts of the world showed fear of acquiring COVID, shortage of health workers, mental stress for health workers, shortage of essential medicines and commodities were the major barrier for health service utilization during

pandemic which is consistent with the present study.[1,9,13] The study of Nick Simons Institute (NSI) supported the finding that insufficient infrastructure and supplies were the major hindrances for health service utilization during pandemic.[4] In addition, the study done by World Bank Group concluded that the overburdened health workforce and supply chain difficulties hindered health service utilization during pandemic.[14]

Though the contribution of ambulance drivers is appreciable, however, the participants believed that the unavailability of the transportation facility acted as a major barrier for service utilization. In line with the study, the ambulance drivers were not willing to provide ambulance services for the referred patients.[4] The hindrance for the health service delivery during the pandemic was mental illness because of stigmatization for health workers which is consistent with the present study.[15] The article published by WHO also supported the finding that the COVID-19 patients are labelled, stereotyped, and discriminated which prevented them from access to health services.[16] Moreover, the global supply shortage affected basic health service utilization during pandemic.[17] The study done by World Bank Group supported the finding that the lockdown policies affected the ability to reach the health facility.[18]

The findings of the study couldn't be generalized in all context as the study was done in a single setting. It could be only applied in a similar context. The gestures, body language, and non-verbal communication of participants couldn't be observed during the telephone interview, which was the major limitation of the study.

CONCLUSIONS

The utilization of basic health services was severely affected during COVID-19 pandemic. It had affected the utilization of services like maternal and child health services, chronic treatment of non-communicable diseases, immunization, family planning services especially. Major barriers for the basic health service utilization during the COVID-19 pandemic were low socio-economic status, fear of acquiring COVID-19 at the individual level. At the interpersonal level, the major barriers were trust in the traditional healer and preference for the home remedies. The barriers at the organizational level consisted of shortage of health workers, mental stress among health workers, low motivation for the health workers, and shortage of drugs and commodities. The barriers at the community level were unavailability of the transportation facility and social stigma while the facilitator was community solidarity. The policy level barriers for basic health service utilization were extended lockdowns, minimal municipal Support, and inadequate coordination between different levels of government. Moreover, the fulfillment of the sanctioned posts by concerned authorities, enhancement in the use of digital technologies can be promoting options for basic health service utilization during the pandemic and similar conditions.

ACKNOWLEDGEMENTS

I would like to acknowledge all the faculties from the School of Public Health, Patan Academy of Health Sciences for their valuable suggestions and feedback. Further, I would like to appreciate the efforts and suggestions of Dr. Suman Rimal from the Institute of Medicine, Tribhuvan University for providing valuable comments on earlier drafts. Further, my sincere thanks go to all the participants for their cooperation and support during the study. I am very thankful to Institutional Review Committee, PAHS for confirming the ethical approval for this study.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

REFERENCES

1. World Health Organization. Operational guidance for maintaining the essential health services during an outbreak. 2020. [Link]

2. PHCPI. Primary Health Care and COVID-19.2020. [Download PDF]

3. Chalise HN. Situation in South Asia. Journal of Health and Allied Sciences.2020;10(2);11-14. [Article]

4. Institute NNS. A review of NSI associated hospitals' service utilization during the COVID-19 pandemic in Nepal:2020. Available from: http://nsi.edu.np/en/pages/current_research/250/a_review_of_nsi_associated_hospitals_service_utilization_during_the_covid_19_pandemic_in_nepal#

5. Brief Introduction | Bidur Municipality [Internet]. [Accessed on: 2020 Jun 25]. Available from: http://bidurmun.gov.np/en/node/4

6. Härkönen U. The Bronfenbrenner ecological systems theory of human development.[Download PDF]

7. Kc A, Gurung R, Kinney MV, Sunny AK, Moinuddin M, Basnet O, et al. Effect of the COVID-19 pandemic response on intrapartum care, stillbirth, and neonatal mortality outcomes in Nepal: a prospective observational study. The Lancet Global Health [Internet]. 2020 ;8(10):1273–81.[Article]

8. Karkee R, Morgan A. Providing maternal health services during the COVID-19 pandemic in Nepal. The Lancet Global Health. 2020;8(10):1243–4. 9.[Article]

9. World Health Organization. Pulse survey on continuity of essential health services during COVID-19 pandemic.2020. Available from:https://www.who.int/publications/i/item/WHO-2019-nCoV-EHS_continuity-survey-2020.1

10. Global Financing Facility. Preserve essential health services during COVID-19 pandemic.2020.[Download PDF]

11. Ahmed SAKS, Ajisola M, Azeem K, Bakibinga P, Chen YF, Choudhury NN, et al. Impact of the societal response to COVID-19 on access to healthcare for non-COVID-19 health issues in slum communities of Bangladesh, Kenya, Nigeria and Pakistan: results of pre-COVID and COVID-19 lockdown stakeholder engagements. BMJ Global Health. 2020; 5(8):e003042. [Article]

12. Marahatta SB, Yadav RK, Giri D, Lama S, Rijal KR, Mishra SR, et al. Barriers in the access, diagnosis and treatment completion for tuberculosis patients in central and western Nepal: A qualitative study among patients, community members and health care workers. PLOS ONE. 2020;15(1):e0227293.[Article]

13. Hung KK, Walline JH, Chan EYY, Huang Z, Lo ESK, Yeoh EK, et al. Health Service Utilization in Hong Kong During the COVID-19 Pandemic – A Cross-sectional Public Survey. International Journal of Health Policy and Management. 2020. [Article]

14. World Bank Group. Economic Impact of COVID-19-Implications for Health Financing in Asia and Pacific.2020 Available from: https://openknowledge.worldbank.org/handle/10986/34572

15. Khanal P, Devkota N, Dahal M, Paudel K, Joshi D. Mental health impacts among health workers during COVID-19 in a low resource setting: a cross-sectional survey from Nepal. Globalization and Health. 2020;16(1):89.[Article]

16. WHO.A guide to preventing and addressing social stigma associated with COVID-19; 2020. Available from: https://www.who.int/publications/m/item/a-guide-to-preventing-and-addressing-social-stigma-associated-with-covid-19

17. UNFPA. Impact of COVID-19 pandemic on family planning and ending gender based violence.2020. Available from: https://www.unfpa.org/sites/default/files/resource-pdf/COVID-19_impact_brief_for_UNFPA_24_April_2020_1.pdf.

18. Tashrik, Fern PA, Drouard S, Friedman J, et al. Monitoring continuity of essential health services during the COVID-19 Pandemic. Global Financing Facility. 2020. [WebLink]