

Impact of COVID-19 pandemic on health care, essential services, employment, and economic activities, mental distress, and perceived quality of life among women and girls

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Abstract:

Background: After the first case of Covid-19 was identified in Pune city in the second week of March 2020, the deleterious effect of the pandemic was seen on the availability and accessibility of services for most health care needs, particularly for women. **Aim:** To identify the needs accentuated by the COVID-19 pandemic and lockdown, facilitating the design of relevant interventions. **Methods:** The study was conducted in a purposive sample of 12 slums in Pune city. In-depth interviews with 20 frontline workers and 165 randomly selected women ≤ 49 years of age were conducted. **Results:** One in every four respondents experienced an endemic illness during the COVID-19 pandemic. A large proportion could not access treatment because of lack of availability and affordability of services, but most pregnant women reported that they could access some routine antenatal care either from UPHCs (Urban Public Health Centre) or private hospitals. Women and girls appear to be the worst affected by the COVID-19 pandemic due to a considerable increase in workload, loss of peer support, decline in spousal communication, increase in family conflicts, and a lack of time for themselves. The majority of respondents reported that one or more family members had lost their job and livelihood. The COVID-19 pandemic had a deleterious impact on the mental wellbeing of women and girls, resulting in a perceived deterioration of their quality of life. The study emphasizes the need for improving the availability, accessibility, and affordability of healthcare during disaster situations.

Key words: Urban slums, health status, COVID-19 pandemic, women and children, adolescent girls

Introduction

The disruption caused by the COVID-19 pandemic is devastating. The unseen effects of the measures undertaken to curb the spread of COVID-19 have been equally deleterious, if not more. 'Lockdowns' and restrictive measures, especially, have complicated service provision and hampered access to healthcare infrastructure, drugs, equipment's as well as disrupted key supply chains putting millions of lives at risk⁽¹⁾. Such interventions negatively impact the existing health situation and aggravate the socioeconomic vulnerabilities⁽²⁾. The lockdown restrictions negatively affected maternal health care utilization services like routine antenatal and post-natal care. Even child immunizations saw a downward dip due to the unavailability of services⁽³⁾. Complete absence of public transportation further hindered access to healthcare

facilities. Barriers to transportation and disruptions in hospital services appear to be the main drivers of increased morbidity and mortality⁽⁴⁾. Owing to the pandemic, menstrual hygiene suffered due to unavailability of products, the constant presence of men in the house and hiked prices⁽⁵⁾. The aftermath of the COVID-19 lockdown unfairly affected women and adolescent girls the most⁽⁶⁻⁹⁾. There was an evident hike in the calls received by the domestic violence helpline numbers⁽¹⁰⁾. The prevalence of anxiety and depression due to lockdowns and the unpredictability of the future have gone up⁽¹¹⁻¹³⁾.

The first case of Covid-19 was identified in Pune city in the second week of March, 2020⁽¹⁴⁾. Government of India declared a lockdown across the country in the third week of March 2020⁽¹⁵⁾.

Institute of Health Management Pachod (IHMP)

undertook a study on the availability and accessibility of health services during the COVID-19 pandemic and its impact on the lives of women and girls living in the slums of Pune city.

The study's key objective was to collect relevant information on the needs accentuated by the COVID-19 pandemic and lockdown and design interventions for addressing health needs of the community during the COVID-19 pandemic.

Methods and materials

An initial study using qualitative methods was conducted to assess the impact of COVID-19 lockdown on the life of slum dwellers. ASHA volunteers, Mahila Arogya Samiti members and frontline workers were interviewed. An interview guide with open-ended questions was used to undertake in-depth interviews. Information on the impact of the COVID lockdown on the general health of the residents, livelihood, impact on women, prevalent hygiene practices, etc., was collected. A total of 20 In-depth interviews were conducted in Marathi by trained investigators through telecommunication. Manual analysis was conducted to identify the key domains that were affected by the COVID-19 pandemic. The findings from IDIs were used to design an instrument for a quantitative study. The instrument was pretested on nine women in a slum outside the study area.

The study was conducted in a purposive sample of 12 slums in Pune city. Most of these slums were declared as containment zones by the Pune Municipal Corporation. Census was conducted to form a sampling frame of women aged ≤ 49 years. The sample size was computed using $p=0.45$, the precision of 5%, and 95% confidence interval. A sample of 15 women from each slum was drawn using systematic random sampling methods to cover a sample size of 160.

Three trained research investigators having experience in quantitative data collection were appointed for the study. A Computer Assisted Personal Interview tool was designed using KoBoCollect software for data collection, which was conducted via telecommunication in June 2020. A total of 165 women

aged ≤ 49 years were interviewed from 12 study slums. Verbal consent was taken prior to the interview. The questionnaire had eight sections, which covered prevalence of endemic illness and treatment utilization in the three months prior to the study, utilization of routine maternal services by pregnant mothers in 3 the month period prior to the study; immunization of children aged ≤ 2 years, utilization of family planning services, availability and use of Sanitary pads, personal hygiene during COVID – hand washing, use of a mask. Impact of COVID-19 on women and girls – workload, communication, anxiety about future, domestic violence, loss of livelihood, procurement of household needs, availability of food, availability, and procurement of medication for diabetes and hypertension, ICDS services, entitlements from Government, quality of life of women and girls.

Results

Background characteristics of the respondent

The mean current age of the respondents was 30.1 years, about 25% of the respondents were young married women of age ≤ 24 years. Less than half the respondents (46.7%) had an education of at least 8th standard. The majority (67.3%) were housewives, and 18.2% worked as maidservants in housing societies near their slum. A majority (84.8%) belonged to Hindu, and 10.3% to the Muslim religion. 44.8 % of the women lived in one-room tenements, and 18.3% had three or more rooms, indicating the economic diversity in the slums. Seventy percent of the respondents were reportedly residing in the slum for at least 10 years.

Common endemic illness during COVID-19 period

Information about illnesses prevalent over three months preceding the survey during the COVID - 19 pandemic was collected. Out of 165 respondents, 24.2 percent reported the illness of one or more members. In the households that reported an illness, a total of 49 individuals were ill during the three months of the COVID-19 pandemic.

Information about symptoms was collected for the people who had any type of illness ($n=49$). The largest proportion (32.7%) reported symptoms of cough and

cold with fever, 6.1% reported gastrointestinal symptoms, 18.4% had fever with other symptoms like body ache and weakness, 8.2% had body and headache, 2.0% reported diabetes and hypertension, and 4.0% had burns and injuries.

When asked about the duration of illness, it ranged from 1 to 25 days; 70% reported symptoms lasting for three days; 18.4% had symptoms for seven days or more. About 91.8% of symptomatic individuals took treatment for the illness. Of them, most individuals took treatment from private hospitals near their slums, a small proportion (6.7%) utilized Urban Primary Health Centre (UPHC) services, and about 8.9% took medicines from nearest medical stores.

Of those who reported an illness, 38% experienced a problem in accessing treatment, out of which 53% had difficulty in procuring medicines, 80% complained of an increase in the cost of medicines, and 47% reported an increase in hospital fees.

Services received by pregnant mothers during the COVID-19 period

About 1 in 10 respondents reported that a woman in their family was pregnant in the last three months. majority. that is 87.5% of pregnant women were able to utilize some routine antenatal care services. Of these, 37.4% received services from the UPHC and 43.7% from private hospitals, and 6.2% did not receive any antenatal care.

A majority, 68.7% pregnant women experienced problems in utilizing antenatal services. Of these 18.7% did not receive diagnostic tests, 37.5% were not examined, 31.2% could not get sonography done, merely 12.5% received 90 tablets of IFA, the rest received less than the prescribed dose, 6.0% did not get TT injections, and 12.5% did not receive treatment for complications.

The difficulties experienced by pregnant women in utilizing services ranged from - hospital was too far from the slum (46.7%), lack of transportation (40.0%), increase in the price of medicines (80.0%), increase in doctor's fees (46.7%), difficulty in procuring medicines (53.3), services at the hospital were not available (6.0%).

Immunization Services received by children of age <=2 years during COVID-19 period

Of the 165 women who were interviewed, a total of 44 mothers had children <=2 years. Out of 19 children who were eligible for vaccination, only 36.8% were immunized. Of the mothers who said that the child could not be immunized, the majority 31.5% said that the service was not delivered in their slum, 31.5% said it was because of lack of transportation during the COVID-19 pandemic. Merely 16.0% said they did not face any difficulty in getting the child immunized.

Utilization of family planning services by eligible couples during the COVID-19 period

Only 18.2% of respondents reported that they were using contraceptives. The study identified 44 women who are eligible (non-pregnant and non-sterilized) to use contraceptives. Out of these, during the COVID-19 pandemic, 40.9% did not face a problem in accessing contraceptives. The remaining 59.1% experienced various problems, 22.7% because the medical facility was closed, 18.2% because of non-availability of the contraceptive at slum level, 11.4% because of inflated cost of the contraceptive and another 11.4% because of financial problems.

Personal hygiene and protection during COVID-19 pandemic

Out of 165 respondents, 44.0% of women faced problems accessing sanitary pads over the last three months during the COVID-19 pandemic. The problems experienced were - the medical facility was closed (24.2%), lack of money to buy pads (9.7%), price of pads had increased (9.7%), pads were not available at the store (4.2%), lack of transportation (3%).

Washing of hands during COVID19 period

The proportion of respondents washing their hands five times a day prior to COVID-19 was 53.9% which increased to 98.2% during the COVID-19 pandemic.

Use of Masks

All the respondents said they were using a mask when going outside their homes. However, only 47.2% said that their family members were using masks as required. About 14.0% of respondents said that less than five out of their 10 neighbors wore masks outside their homes.

Impact of COVID-19 on women and girls

79.4% of respondents said that their workload had increased enormously during the pandemic. 32.9% reported a substantive increase and 13.4% a moderate increase in girls' workload in the household. 55.8% of respondents could not interact with neighbors and friends; as a result, they experienced a barrier in communicating with peers.

42.4% of respondents said that the girls and women in their household did not get any time for themselves during the last three months. 27.2% of respondents reported a barrier in communication with their spouses during the pandemic. 27.9% had moderate to severe conflicts with family members during the three months prior to the survey.

69.1% of respondents said that at least one person in their house lost their livelihood, and 90.7% said they were apprehensive about the future. (Refer Table 1)

respondents reported severe, and another 25.4% reported a moderate lack of access to milk and dairy products. All the respondents said that ICDS services are entirely unavailable.

A majority of respondents, 87.3%, said there is no water shortage for drinking and domestic use.

But 15.8% reported severe and 15.8% moderate shortage of household cleaning products.

Impact of COVID-19 pandemic on other services

35.0% had severe, and another 10.0% had a moderate lack of access to medicines for diabetes, hypertension, etc.

23.0% of respondents said that at least one person in their family is addicted to tobacco or alcohol. 47.4% of respondents reported experiencing fights and conflicts because of stress due to the non-availability of addictive substances. 21.8% of respondents felt an increase in domestic violence in at least 1 out of every 10 households.

Table 1: Impact of COVID-19 on women and girls

Sr.	Indicator	Category	% (n=165)
1.	Did your household work increase during COVID-19 pandemic?	Yes	79.4
2.	Did you experience any limitation in communicating with peers with whom you used to regularly connect?	Yes	55.8
3.	Did the lockdown have any impact on communication between you and your husband?	Yes	27.2
4.	Do you feel any apprehension about the future?	Yes	90.7
5.	Did you experience any conflicts at the household level?	Yes	27.9
		No	72.1
6.	Did anyone from your household lose his/her livelihood during the lockdown?	Yes	69.1
7.	Was there any increase in workload for girls?	Yes	32.9
		Somewhat	13.4
		No	53.7
8.	Did girls and women get time for themselves or time to be alone during the lockdown period?	Yes	42.4

Availability of rations, food and other supplies necessary for the home

73.9% of respondents said that the pandemic had a severe, adverse impact on the availability of groceries and food articles in their homes, and 13.3% reported a moderate shortage of food articles. 23.0% of

50.3% of respondents perceived 10 out of 10 neighbors had been adversely affected by the COVID-19 pandemic, and another 26.1% felt that eight-nine out of 10 had an adverse experience. (Refer Table 2)

Table 2: Impact of COVID-19 lockdown on other services

Sr.	Indicator	Category	% (n=165)
1.	Did your family face any problems in getting regular medicines for diabetes, hypertension, etc. during the lockdown	Yes	35.0
		Somewhat	10.0
		No	55.0
		n	20
2.	Is anyone from your family addicted to tobacco or alcohol?	Yes	23.0
3.	Did your household experience any fights /conflicts as a result of lack of availability of addictive substances during the lockdown period?	Yes	47.4
		No	52.6
4.	Have you received any entitlements during lockdown period?	Received ration from NGO	36.9
		Received ration from Govt.	81.8
		Received free gas cylinder	03.0
		Received cash incentives	15.1
5.	In your opinion, out of your 10 neighbours how many received any entitlement from the Govt?	Not received any help	12.7
		Nil	03.6
		1-5 families	12.1
		6-9 families	56.9
6.	Out of your 10 neighbours how many do you think have been adversely affected due to the Covid-19 pandemic?	10 families	41.2
		Nil	05.5
		1-5 families	10.8
		6-7 families	07.3
7.	Out of 10 neighbours in how many households do you think there was an increase in violence against Girls?	8-9 families	26.1
		10 families	50.3
		At least one family	21.8

Impact of COVID-19 on the Quality of Life of women

A vast majority, 84.2% respondents said that they experienced anxiety, and 78.2% respondents reported deterioration in their quality of life, 20.6% reported severe and another 33.9% moderate disturbance in their sleep. 11.6% were not at all satisfied with the support

they received from family members, whereas 23.0% said they felt a lack of support. 18.2% said that they regularly experience negative feelings such as despair or anxiety, and another 40.0% said they experience these feelings periodically. (Refer Table 3)

Table 3: Impact of Covid19 on Quality of Life of women

Sr.	Indicator	Category	% (n=165)
1.	Did you experience anxiety regarding availability of necessary food and other supplies during lockdown?	Yes	42.1
		Somewhat	42.1
		No	15.8
2.	Do you enjoy life in lockdown period as you used to before?	Yes	11.5
		Somewhat	10.3
		No	78.2
3.	How disturbed was your sleep during the lockdown period?	Highly disturbed	20.6
		Somewhat disturbed	33.9
		Not disturbed	45.4
4.	How satisfied are you with the support you get from your family during the lockdown period?	Highly satisfied	65.4
		Somewhat satisfied	23.0
		Not at all satisfied	11.6
5.	How often do you have negative feelings such as depression, despair, anxiety during the lockdown period?	Always	18.2
		Sometimes	40.0
		Never	41.8

Discussion

Common endemic illness during the COVID-19 period

In the current study, about one in four respondents reported an episode of endemic illnesses among their family members during the COVID-19 pandemic. A large proportion could not access treatment because of a lack of availability and affordability. A multi-centre study by Rajiv Raman et al.; highlighted the impact of the lockdown on healthcare services and general, social, and mental health of the population and concluded that the impact of COVID-19 pandemic and lockdown on health and healthcare was negative⁽¹⁶⁾. Another study by Panchansky R, Thomas JW came to the same conclusion⁽¹⁷⁾. Data collected from the WHO on causes of death and analyzed by Euro Stat and OECD (2018) in any situation, the endemic illnesses and NCDs are preventable as well as treatable if detected timely. Decentralizing curative health services and providing

treatment for common endemic illnesses through mobile clinics is an urgent need of slum communities during epidemic situations.

Services received by pregnant mothers during the COVID-19 period

Estimates based on NFHS 4 indicate that nearly one-third of women and children in India do not have access to RMNCH services⁽⁹⁾. In this study, a majority of pregnant women reported that they could access routine antenatal care either from the Urban PHC or from private hospitals. But they experienced a range of difficulties in utilizing these services⁽¹³⁾. The quality of antenatal care services needs to be monitored, and there is a need for price regulation in times of epidemics and disasters. The provision of routine, standard antenatal care through Urban Health and Nutrition Days (UHNDs) and mobile clinics would overcome this deficiency. The quality of services needs to be

monitored by MAS members.

Immunization Services received by children of age ≤ 2 years during COVID-19 period

It has been estimated that an additional 49,000 child deaths and 2300 maternal deaths in a month could be attributable to severely disrupted services in India⁽¹¹⁾. In this study a majority of children did not receive vaccinations due to a variety of reasons, either because the slum level clinics are interrupted or due to lack of transportation. This could result in a rise in preventable illnesses in children and needs immediate attention. Decentralized immunization services or vaccinations through mobile clinics would be able to overcome this problem effectively. It would also be an efficient way of extending the cold chain right up to the point of the beneficiary child.

Utilization of family planning services by eligible couples during the COVID-19 period

An estimated 2.4 million unintended pregnancies; 1.45 million abortions, out of which more than half would end up being unsafe; and more than 1700 excess maternal deaths will occur if the current situation continues⁽¹²⁾. The lack of access to family planning methods could result in an increase in the number of unwanted pregnancies and children born. This could also result in a reduction in spacing between births, which would affect the health of both mothers and newborns.

Distribution of contraceptives through ASHAs, mobile clinics, and peer educators can effectively address the problems with access to family planning services.

Personal hygiene during COVID-19 pandemic

An estimated 1.8 billion girls, women, and gender non-binary persons menstruate, yet millions of menstruating women and girls worldwide cannot manage their monthly cycle in a dignified, healthy way⁽⁵⁾. Girls and women experienced problems accessing sanitary pads over the last three months resulting in an exacerbation in the lack of menstrual hygiene management. Most respondents are washing their hands quite frequently. Whereas the respondents are using masks when going

outside their homes, not all their family members use masks. Some of the families in their slum are not using masks at all. There is a need for distributing sanitary pads to girls and women during the COVID-19 pandemic. Some of the immediate interventions required are distributing masks to marginalized households, organizing social pressure for use of masks, and awareness regarding their correct use.

Impact of COVID-19 on women and girls

Women and girls appear to be the worst affected by the COVID-19 pandemic due to a considerable increase in workload, loss of peer support, decline in spousal communication, an increase in family conflicts, and a lack of time for themselves. A majority of respondents reported that one or more family members lost their job and livelihood. A large majority of the respondents reported feelings of apprehension about the future. These findings were similar to another Indian study where the psychological impact on females was statistically significant⁽⁸⁾. People living in slums are in urgent need of jobs and livelihood, much more than mere relief and hand-outs. The data indicate the need for socio-psychological support for women and adolescent girls. There is an indication of an urgent need for mental health interventions for women and girls.

Availability of rations food, and other supplies necessary for the home

A majority of households experienced food shortages, and a sizable proportion faced a shortage of milk and dairy products. Children are not receiving nutritional supplementation at the ICDS centres. It is expected that post-COVID-19, there will be a considerable increase in malnutrition and anemia in children, adolescent girls, and women.

Impact of COVID-19 pandemic on other services

Monitoring and treating chronic diseases can be reached through mobile clinics. There is no dearth of medicines with the Municipal Corporation. The need is for last-mile connectivity with the beneficiaries. There is an urgent need for mental health intervention and for addressing gender-based violence.

Receipt of relief from the Government

The families that have not received relief supplies need to be assisted. During an exceptional time like this, the Government should ensure that all the households residing in slums are provided with relief.

Impact of COVID-19 on the Quality of Life of women

According to OECD, women's anticipated vulnerability through the COVID crisis will likely be exacerbated in developing countries⁽¹⁴⁾. The COVID-19 pandemic appears to have had a deleterious impact on the mental wellbeing of women and girls residing in slums, resulting in a perceived deterioration of their quality of life. The findings indicate an urgent need for mental health interventions. Verma and Mishra⁽⁶⁾, in their survey during the first lockdown in India reported the prevalence of moderate to severe depression, anxiety, and stress to be 25%, 28%, and 11.6%, respectively, in the study participants⁽¹⁸⁾. The study by Rehman U, Shahnawaz MG, Khan NH, et al.; reported depression, anxiety, and stress during the COVID-19 lockdown as well⁽¹⁹⁾.

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