

Original Research Article

Accessibility issues of persons with disabilities due to COVID-19 pandemic in Nagpur region

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ABSTRACT

Background: Since the first case of COVID-19 in late January 2020, India has become one of the hardest hit countries by COVID-19 in world. According to 2011 census, the number of PwDs in India is roughly 2.2% of total population which is approximately 26.8 million. They are more vulnerable to COVID-19 infection due to their disability and lack of accessibility to protect them.

Methods: A cross sectional, mixed-methods approach, using a purposive sampling technique, a quantitative survey were adopted for the study.

Results: The study showed that 99% of the participants have access to regular updated knowledge of COVID-19. 74% participants faced scarcity of protective measures, 35% faced scarcity of ration supply, 48% PwDs faced major issues to access screening, testing and treatment facilities in suspected COVID-19 cases. 43% PwDs faced scarcity of access to assistive services and devices. 40% faced issues to get their regular medicines and necessary items like catheters. 86% of the participant faced financial crises due to loss of employment and businesses. Around 16% amongst them faced severe crises which was not possible to manage.

Conclusions: Facing COVID-19 situation is extremely stressful for PwDs. This study was conducted for short period of 4 months so it gives a snapshot of impact of COVID-19 on accessibility issues of PwDs.

Keywords: Disability, Accessibility, COVID-19 pandemic

INTRODUCTION

Since the first case of COVID-19 in late January 2020, India has become one of the hardest hit countries by COVID-19 in world. According to 2011 census, the number of PwDs in India is roughly 2.2% of total population which is approximately 26.8 million.¹ PwDs are most marginalized and vulnerable population in developing countries like India. They are more vulnerable to COVID-19 infection due to their disability and lack of accessibility to protect them.²

Despite being a population that is particularly at-risk to COVID-19, persons with disabilities face even greater inequalities in accessing healthcare during the pandemic due to inaccessible health information and environments as well as selective medical guidelines and protocols that may magnify the discrimination persons with disabilities face in healthcare provision. These protocols at times reveal medical bias against persons with disabilities concerning their quality of life and social value.³

They are facing higher burden of problems including lack of access to information, lack of basic support system

from caregivers and many of them facing scarcity of basic needs like food and shelter. This unprecedented challenge of COVID-19 is affecting PwDs worse than others.⁴

According to joint brief by ILO, UNICEF and IDA due to COVID-19 impact issues faced by PwDs like inaccessibility to infrastructure, transport and information systems as well as lack of inclusive public policies and services became more severe. This impact is further marginalizing them.⁵

This research was carried out with objective to measure accessibility issues of PwDs in Nagpur region during COVID-19 crisis such as access to information about COVID-19, essentials like food and basic needs, healthcare facilities of caregivers, education services and to know the financial status including employment status of PwDs.

METHODS

Study design

A cross sectional, mixed-methods approach using a purposive sampling technique, a quantitative survey as well as qualitative in-depth interviews and focus group discussions were adopted for the study. Data was collected from Nagpur division using tools like socio-demographic data sheet of personal details, standardize interview survey questionnaire and telephonic semi structured interviews. Google forms platform were used for online survey.

Study participants

Person with disability, parents, siblings and caregivers, age range is 18-60 years and PwD's age range is 6 years and above. Samples of 555 respondents were included in the study.

Inclusion criteria

PwDs and others who live with PwDs such as parents, siblings and caregivers and both sexes with all types of disabilities as mentioned in RPwD act were included in the study.

Exclusion criteria

PwDs or their family members who had not given consent for study were excluded from this study.

Study place

The study took place in the district disability rehabilitation centre, government medical college and hospital, Nagpur Maharashtra.

Study period

Study was conducted in Nagpur division from 27 July 2020 to 27 November 2020.

Data collection and procedure

The survey form included demographic details with a questionnaire having 26 questions including PwDs such as name, date of birth, sex, number of siblings, education and level of disability. Questionnaire covered major accessibility issues under objectives of study. The questionnaire was administered orally and responses were registered by our team members who are visually impaired and illiterate. Telephonic responses were also recorded for the same purpose.

Data analysis

All collected data were collected in excel sheet format. Data was analysed by simple statistical tools like percentage. Observations are drawn and presented with graphs. Based on these observations, conclusions and recommendations are formed.

RESULTS

In this study total 555 participants including caregivers, parents, siblings were involved, out of which 69% were male and 31% were females. 50% were PwDs and 50% were others who stay with PwDs. This study includes all types of disabilities. Participants were included irrespective of their gender, caste, religion and financial status (Table 1).

COVID-19 is a novel disease. Regular updated knowledge of COVID-19 is necessary to prevent the infection and get help in suspected cases. This is an encouraging finding where 99% of the participants have access to regular updated knowledge of COVID-19 (Table 2).

TV, newspaper and radio which is the conventional news resources are the main sources of information about COVID-19 amongst the participants. Social media including facebook, whatsapp also contributed considerably (Table 3).

74% participants faced scarcity of protective measures, 35% faced scarcity of ration supply. 24% of participants had not adequate supply of water, sanitation and hygiene (WASH) facilities. About 12% PwDs lost their shelter due to closure of school, rehabilitation centres and shelter homes (Table 4).

PwDs are more dependent on healthcare system than others. 48% PwDs faced major issues to access screening, testing and treatment facilities in suspected COVID-19 cases. 43% PwDs faced scarcity of access to assistive services and devices. 40% faced issues to get their regular

medicines and necessary items like catheters. Lockdown and other measures to prevent spread of COVID-19 hardly hit PwDs who depends on essential services like blood transfusion for their survival. Around 33% PwDs faced this problem. 27% and 24% were faced issues with caregiver and regular hospital visits for DM (Table 5).

86% of the participant faced financial crises due to loss of employment and businesses. Around 16% amongst them

faced severe crises which was not possible to manage (Table 6).

Many times PwDs depend on pension money received by state or central governments. During COVID-19 pandemic, 51% of them were unable to receive the pension money due to number of reasons. 83% PwDs lost their employment or livelihood since the onset of COVID-19 pandemic (Table 7).

Table 1: Participants gender.

Gender	N	%
Male	384	69.1
Female	171	30.9
Total	555	100

Table 2: Responses access to updated knowledge about COVID-19.

Responses	N	%
Yes	551	99.2
No	4	0.8

Table 3: COVID-19 information source.

Information Sources	N	%
News	299	53.8
Social media	17	3
Government COVID helpline	4	0.8
News and social media	187	33.6
News, social media and helpline	39	7
News and helpline	3	0.5
Social media and helpline	2	0.3
None of the above	4	0.8

Table 4: Access to essentials services.

Issues	N	%
Ration	195	35
Shelter	66	12
WASH	135	24
Protective measures	410	74

Table 5: Access to healthcare services.

Issues	N	%
Hospital visits	48	24
Medicines	73	40
Essential services	14	33
Assistive services	55	43
Caregiver	78	27
COVID-19 testing	35	48

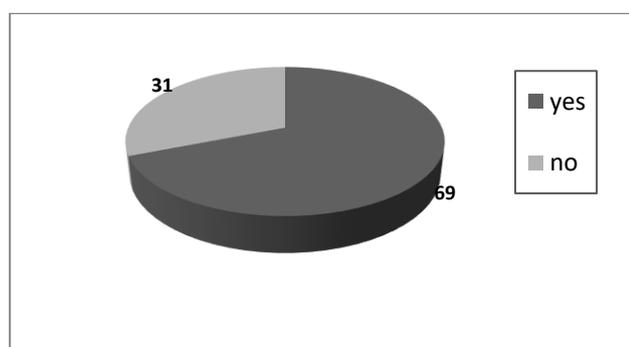
Table 6: Financial and employment status.

Financial Crises Responses	N	%
No	74	13.3
Affected not manageable	190	34.2
Little bit and manageable	202	36.3
Grossly and not at all manageable	89	16

Table 7: Details of lost employment.

Responses	N	%
Yes	416	74.9
No	86	15.4

69% of PwDs have to stop their education due to COVID-19 (Figure 1).

**Figure 1: Access to education.**

DISCUSSION

COVID-19 pandemic situation affected PwDs in all aspects.⁶ The awareness including preventive measures about COVID-19 in PwDs spread in considerably short time period.⁷ News agencies like newspapers, TV and social media played important role in it. This is appreciable that in countries like India, information reached to almost all PwDs irrespective of their geographical location.

COVID-19 pandemic caused scarcity of food to many people in India.⁸ PwDs also struggled to get access to essentials like food and shelter. Scarcity of personal protective measures like mask was most prominent, followed by ration supply and WASH facilities. Lockdown and loss of employment was a major factor for unavailability of these essentials. Closure of rehabilitation centres, shelter homes added extra burden on families of PwDs.

Lockdowns, lack of transport system and unavailability of caregivers hampered the access to healthcare for PwDs.⁹ Their routine medicines and physiotherapy like services were stopped. Even in suspected COVID-19 cases, many of them were unable to reach testing and treatment centre.

Some PwDs missed their essential health services like factor 9 transfusion for haemophilia patients.

PwDs had worse impact on employment and financial status than others.^{10,11} The worst effect of COVID-19 pandemic on PwDs was loss of employment and subsequent financial crisis. Many of them inevitably pushed below poverty line.

COVID-19 pandemic has worsened the educational status of the PwDs.¹² Many of them have to stop their education permanently.

Earlier during COVID-19 pandemic, lack of information, fear of infection and lack of necessary health system response to COVID-19 in PwDs, were major concerns. But fortunately in India, CFR (case fatality rate) is 1.5% as on 11 October 2020, much lower than global CFR of 2.26% for COVID-19.¹³ Now as the time goes on, this study shows that, the major impact of COVID-19 on PwDs is financial burden. 86% of PwDs faced financial crisis in one or the other forms. 83% lost their employment.

CONCLUSION

Facing COVID-19 situation is extremely stressful for PwDs. This study was conducted for short period of 4 months. So, to know long term effects further study with large sample size and including other regions is necessary. This study gives a snapshot of impact of COVID-19 on accessibility issues of PwDs in Nagpur region.

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