Original Article

Impact of COVID-19 on the patients' income and work in Delhi, India

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Abstract

Background: Currently, there is no data on the impact of COVID-19 on patients' income and work in India. **Methods:** We conducted a cross-sectional study at a tertiary hospital in New Delhi. We included all the patients who were ≥18 years of age and consecutively diagnosed with COVID-19 between the 1st of May 2020 to 31st July 2020. Patients were interviewed by a physician using a semi-structure questionnaire. Data were collected on socio-economic status, occupation, income loss, leaves taken, decrease in work efficiency (self-perceived) and about-facing any stigma/discrimination at the workplace. **Results:** Out of 245 patients, 190 patients were employed. A total of 126 patients (66.3%) self-reported their work was affected due to COVID-19 disease. A total of 30.5% of patients (n = 58/190) reported deduction in their salary. The median amount of salary loss was INR 10,000 (IQR 9000–25000). Decrease in income and work efficiency (self-perceived) was found to be 37.3% (n = 71) and 12.1% (n = 23), respectively. A total of 47 patients (37.3%) took personal leaves (median number – 17 days (IQR 14–25), and discrimination/stigma related to the COVID-19 at the workplace was faced by 22.6% of patients. **Conclusion:** Income and work of a substantial number of patients was affected due to COVID-19, as there was a decrease in income and work efficiency. Patients also had to take personal leaves and face stigma in the workplace. This will inform the policymakers to formulate strategies to mitigate the impact of COVID-19.

Keywords: COVID-19, India, income, occupation, work

Introduction

To deal with the COVID-19 pandemic, countries have imposed lockdown to halt the transmission of coronavirus, but it did also halt their economic growth. No doubt that the pandemic has dipped the economic growth in the countries, but it has drastically caused the financial crisis in the low-and middle-income countries (LMIC). COVID-19 pandemic severely affected the LMICs as they are overcrowded and do not have well-equipped health system to deal with such pandemics.[1,2] At the microlevel, COVID-19 not only affects the patients' physical health, but it also has a significant impact on patients' economic and work status. More than 60% of the employment is informal in the LMICs, which lacks social protection and rights at work.[3] In India, according to the annual report of Periodic Labour Force Survey (PLFS) 2018-2019, 76.8% of households in the rural and 42.8% of the households in the urban has a major source of income as self-employed or casual labour.[4]

A study in Kenya and Uganda found that COVID-19 pandemic affected the source of income in 70% of the households.[5] Social isolation and stigmatization related to COVID-19 affects the

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quantity of work. A study in Vietnam found that during its first national lockdown, 61.6% of participants reported a decrease in income, and the income deficit among 41.7% respondent ranged from 20% to 100%.[6] Assessing the impact of COVID-19 on patients' work and income is an urgent need to generate the evidence and to formulate an intervention to mitigate the impacts. Currently, there is no data on the impact of COVID-19 on patients' income and work in India. Therefore, this study was aimed to assess the impact of COVID 19 on patients' income and work.

Methods

This was a cross-sectional study conducted at All India Institute of Medical Sciences (AIIMS), New Delhi, India. We included all the patients who were ≥ 18 years of age and consecutively diagnosed with COVID-19 between 1st of May 2020 to 31st July 2020. We enrolled patients after at least one month of the diagnosis. Severe cases (which needed mechanical ventilation) were excluded from the study. Patients who could not be contacted via telephone after two attempts on two separate days were excluded from the study. The interview was conducted using a semi-structured questionnaire that included data collection on patients' socio-economic details, occupation status, income loss, leaves taken, decrease in work efficiency and about-facing any discrimination/stigma at the workplace due to COVID-19. The decrease in income, sales and work efficiency was based on the self-perception of the patient. Data collection was done by a physician. Data were entered in MS Excel and analysed using Stata 13. Descriptive analysis was done for the patients' profile and its impact. Informed consent was taken from all the participants before the enrolment and after explaining the details of the study. Ethical clearance was obtained prior to the study from the Institutional Ethics Committee of AIIMS, New Delhi. (IECPG-359/22.07.2020).

Results

A total of 245 patients were enrolled in this study. The mean age of the participants was 35.9 years (SD, 12.5). The majority of the patients were males (67%), in the age-group of 26–40 yrs (44.5%) and were unskilled workers (25.3%) [Table 1]. All the cases had an urban residence. Total employed patients were 190 (77.6%). A total of 126 employed patients (66.3%) reported their work was affected due to COVID-19 disease. Totally, 12.1% of the patients (23/190) reported a decrease in their work efficiency (self-perceived) post-illness. Among the employed patients, 30.5% of patients (n = 58) reported deduction in their salary during the illness. The median amount of salary loss was INR 10,000 (IQR 9000–25000). All the businessmen/self-employed workers (n = 13) reported a decrease in their business sales due to COVID-19. The total number of patients reporting a reduction in the individual income was 71 (37.3%). Patients who had to take personal leaves due to COVID-19 isolation or care was 47 (24.7%). The median number of leaves taken by an employee was 17 days (IQR 14–25). Six patients (3.2%) lost their job permanently. Discrimination/stigma related to the COVID 19 (self-reported) at the workplace was faced by 22.6% patients (n = 43/245). Four patients didn't reveal the diagnosis at their workplace to avoid facing the stigma/discrimination.

Table 1: Socio-demographic details of the COVID-19 patients

Variable (n=245)	Frequency (%)
Sex	
Male	164 (67.0%)
Female	81 (33.0%)
Age in years	
18c25	58 (23.7%)
26-40	109 (44.5%)
41-65	72 (29.4%)
>66	6 (2.4%)
Occupation (n=225)*	
Professional	45 (20%)
Self-employed/businessman	13 (5.8%)
Skilled worker	56 (24.9%)
Unskilled worker	57 (25.3%)
Student	21 (9.3%)
Retired	7 (3.1%)
Homemaker	21 (9.3%)
Unemployed	5 (2.2%)
Earning status	
Earning	190 (77.6%)
Not earning	55 (22.4%)
Employment status (n=190)	
Government employee	99 (52.1%)
Private employee	91 (47.9%)

*Details regarding the occupation of 20 patients were missing

Discussion

This study provides a critical result of how COVID-19 affects patients' work and income. Our study found that 66.7% of patients self-reported that their work was affected due to COVID-19. There were 37.3% of patients who reported a decrease in the individual income, which is less than a study conducted in Vietnam (61.6%),[6] Kenya and Uganda (70%).[5] The observed difference could be due to the study setting and occupation. A micro-economic model in San Francisco Bay Area reported the effect of three month of lockdown as increase of poverty rate by 8.8% in the absence of social protection and the average recovery time for an individual was one year.[7] Studies have also found that people from low socio-economic status are more vulnerable to COVID-19 infection due to adverse housing and working conditions.[2,8–10] There is a need to cushion the vulnerable population from the economic loss of the COVID-19 disease. Steps like providing a financial package of INR 20 lakh crore (equivalent to 10% of India's GDP) as a part of Atma nirbhar Bharat Abhiyaan (self-reliant India movement)[11] and providing insurance cover of INR 50 lakh for all the health worker through Pradhan Mantri Garib Kalyan Package (PMGKP)[12] may be beneficial. We found a substantial number of patients taking personal leaves and had a salary deduction. Provision of the special leaves without loss of pay (during the isolation period or illness) and its extension

in the private sector can be considered to provide financial protection to workers.

There is a stigma related to the disease, which cannot be denied.[13] India has a high prevalence of stigma regarding the disease.[14] We found that 22.6% of patients faced stigma/discrimination at the workplace, and few patients hid their diagnosis in fear of stigma/discrimination. This can be a challenging task for the contact tracing, and it has a bigger implication in the control of the outbreak.[15] Protecting a worker at the workplace from social isolation or discrimination should be considered a major priority. For this step like raising public awareness, open discussions, and creating support groups in an organization can be helpful. Several drivers and facilitators of COVID-19 related stigma have been explored, and various interventions have been recommended.[16,17] This a time for us to show social justice and solidarity, so no one is left behind. To our knowledge, this is the first study from India reporting the impact of COVID-19 on work and income of patients. Findings from this study can't be generalized at the household level, severe, or suspected cases of COVID-19, and among the rural population. We couldn't assess the impact on work according to the severity of the disease. Effect of COVID-19 on the work of unpaid workers like homemakers couldn't be evaluated. Further community-based studies on the patients' costs and impact at the household level across various occupation can be done to understand the economic burden of COVID-19 care in India.

Conclusion

We found that the work of two-third of the employed patients was affected due to COVID-19 disease and more than one-third of the patients reported a decrease in their income. One-fourth of the patients had to take personal leaves for the COVID-19 isolation or care. A substantial number of patients perceived a reduction in their work efficiency and faced stigma/discrimination in the workplace. There is a need for providing financial protection to COVID-19 patients, and accelerated efforts to be made to address the social stigma associated with the disease.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.

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