



Ministry of Health & Family Welfare  
Government of India

# Research Report

## A concurrent Mixed Method study on stigma and discrimination associated with COVID-19

May 2021

Department of Community Medicine and School of Public Health, Postgraduate  
Institute of Medical Education & Research (PGIMER), Chandigarh

# Executive Summary

## Background and Objectives

Stigma and discrimination have been recognized as barriers in providing effective healthcare service. Stigma affects health negatively, it erodes social bonding and lead to social exclusion, which contributes serious health concerns and make it more difficult to manage disease outbreak. At the beginning of the COVID 19, both patients and frontline workers faced stigma and discrimination from community. There was enough evidence on stigma and discrimination attached to COVID-19 and how it was disrupting health service delivery on one hand, and access to health care services on the other, further leading to the poor health outcomes as people tend to hide their illness and refrain from healthcare services in-order to avoid discrimination.

The present study was framed to measure: the extent of COVID-19 related stigma in the community and among healthcare workers as well as identifying the drivers of stigma and their effect on accessing health care services, and the prevalence of COVID-19 appropriate behaviors and its related barriers. We used conceptual frameworks of drivers of stigma, C3 model for reasons of vaccine hesitancy and COM-B model for developing the programmatic inputs.

## Methodology

The study was conducted in the state of Punjab. A concurrent mixed method design was used, and data was collected from January to April 2021 in four districts of Jalandhar, Ludhiana, Mansa, Shaheed Bhagat Singh Nagar of Punjab. The selection of districts in Punjab was based on disease load in respective districts in January 2021. Two districts each with high and low load were selected on the basis of COVID-19 monthly bulletin of December 2020. Random selection of blocks, sub-centers and UPHCs was done in each selected district. The estimated sample size of 423 were collected from Jalandhar (N=87), Ludhiana (N=109), Mansa (N=125) and Shaheed Bhagat Singh (SBS) Nagar (SBS N=102).

Quantitative data was collected using structured questionnaire and qualitative data was collected using in-depth interview guide. Data was collected on drivers of stigma and discrimination, knowledge and practices of appropriate behaviors, and vaccine hesitancy. Both healthcare service providers and community members including non-covid population and COVID-19 recovered population were the participants in this study.

The quantitative data was collected using mobile application and information was collected by Auxiliary Nurse Midwife (ANMs) among community members.

Themes from qualitative data were extracted using N-Vivo software and been presented in tables using COM-B model and C3 model to suggest action point for behavior change both of service users and providers. The categorical variables of quantitative data have been presented as figures and percentages. For continuous variables, mean with standard deviation or median with interquartile range (IQR) was applied. In the next step, outcome variables were computed by adding up the individual scores of each domain like knowledge, practice, stigma and discrimination. Further, the categories of the derived continuous variables were formed either by dividing the total score range into tertiles or by taking median score as the cut-off point depending upon the data distribution. Binary Logistic regression was used to explore factors related to appropriate behaviors towards COVID-19 prevention, stigma and discrimination and vaccine hesitancy.