

DATA PAPER

Data from "Social determinants of unmet hospitalisation need amongst the poor in Andhra Pradesh, India: A cross-sectional study."

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The dataset is of a health survey amongst the 21.5 million poor families of the Indian state of Andhra Pradesh conducted during April and May 2013. The dataset captures individual characteristics and household characteristics of the past 365 days. Data was collected by 2022 trained field staff of Aarogyasri Health Care Trust (AHCT) of Government of Andhra Pradesh using a questionnaire modelled after that used for the health surveys by National Sample Survey Organisation of India.

Keywords: health survey of Andhra Pradesh; Rajiv Aarogyasri; unmet hospitalisation need

Funding statement

The data is not the result of any funded project.

(1) Overview

Context

Spatial coverage

Description: 23 districts Adilabad, Nizamabad, Karimnagar, Warangal, Hyderabad, Rangareddy, Medak, Mahbubnagar, Nalgonda, Anantapur, Kurnool, Kadapa, Chittoor, Nellore, Prakasam, Guntur, Krishna, Khammam, West Godavari, East Godavari, Visakhapatnam, Vizianagaram and Srikakulam of Andhra Pradesh state, India were covered.

Boundaries of Andhra Pradesh state:

- Northern boundary: Latitude 19.91671, Longitude 78.315655
- Southern boundary: Latitude 13.388455, Longitude 80.312420
- Eastern boundary: Latitude 17.59052, Longitude 83.254010
- Western boundary: Latitude 14.614320, Longitude 76.750103

Temporal coverage

1 April 2012 - 31 May 2013

Species

Homo sapiens

(2) Methods

Steps

- a) Design of questionnaire: National Sample Survey Organisation (NSSO), Ministry of Statistics, Government of India conducts yearly consumer expenditure surveys as well as focussed surveys on health care. The health survey questionnaire and the consumer expenditure questionnaire used for the 60th round (2004-05) of NSSO were integrated by suitably abridging the consumer expenditure details and used for this survey. The questionnaire for this survey collected the following information: the identification of sample household, household characteristics, household member characteristics, consumption expenditure details of household with break-up of food and non-food items, chronically ailing household members, details and expenses of in-patient episodes, and details and expenses of out-patient episodes.
- b) Pilot survey: Changes suggested by external experts were carried out in the questionnaire. Two pilot surveys were conducted with the questionnaire in the districts of Medak and Rangareddy and the questionnaire frozen. The questionnaire was administered in Telugu language and all the responses were given codes based on the results of the pilots.
- c) Training of surveyors and supervisors: The 2022 field staff (aarogyamitras) of Aarogyasri Health Care Trust (AHCT) of Government of Andhra Pradesh under the supervision of 97 team leaders conducted the survey. An intensive one week training program was given to the

supervisors who in turn conducted a one week training to all the field staff under the supervision of 23 district managers. Training was given on how to administer the survey questionnaire following the methodology laid down by Goode and Hatt (2006)[1].

d) Conduct of survey: After obtaining an informed consent, surveyors conducted the survey in the mornings before the household head left for work.

e) Collection of filled up questionnaires: All the questionnaires were collected at a centralised location in Hyderabad by AHCT.

f) Design and development of Information Technology (IT) application: An IT application was developed by AHCT for data entry of the questionnaire with required validations for data entry.

g) Data entry: The data entry of all the questionnaires was done by a trained team of 38 data entry personnel under 3 supervisors through the custom built IT application.

h) Data checking: The entered data was sample checked for accuracy of data entry.

Sampling Strategy

Government of Andhra Pradesh launched a fully funded demand-side financed cashless inpatient health care scheme covering 21.5 million poor families in the state, with the objective of offering protection against catastrophic health care expenditure, starting from April 2007. This scheme, known as Rajiv Aarogyasri Scheme and implemented by Aarogyasri Health Care Trust (AHCT) of Government of Andhra Pradesh, is the oldest and largest demand-side financed inpatient health care scheme in India.

A cross-sectional study was done through a multi-stage stratified survey conducted during April and May 2013 in all the 23 districts of Andhra Pradesh. Urban and rural mandals form the grass-root level administrative units within a district. All the 1074 rural mandals and 268 urban mandals in the state were surveyed. Villages in rural mandals and wards in urban mandals were considered as Primary Stage Units (PSU). Two PSUs were selected through simple random sampling with replacement from each mandal in the state. The households within a village or ward formed the Second Stage Units (SSU). Three strata were formed for the SSUs viz., families who underwent at least one in-patient treatment under Rajiv Aarogyasri Scheme during the last 365 days (RAS stratum), families who underwent at least one in-patient treatment but all of them outside Rajiv Aarogyasri Scheme during the last 365 days (non-RAS stratum), and families who did not have any member admitted in a hospital as an in-patient during the last 365 days (Out patient stratum).

The SSUs in the three strata were selected through Simple Random Sampling With Replacement (SRSWR) from the list of households. The Civil Supplies Department of Government of Andhra Pradesh (GoAP) maintains a database of all households in the State which totalled 245,57,811 consisting of 29,83,106 Above Poverty Line (APL) and 215,74,705 Below Poverty Line (BPL) families as on 1st March 2013. The BPL family list of Civil Supplies Department was utilised for the purpose of drawing

random samples from each PSU for the different strata. The sampling from the RAS stratum was done from the AHCT data repository. In case the sampled household fell into a stratum from which a household was already surveyed, resampling was done till a household from the unsurveyed stratum was identified. One SSU or household was identified for survey from each of the strata. Three households (SSUs) one from each strata were surveyed from each of the selected village/ward (PSU).

Quality Control

After the survey each questionnaire was scrutinised by the supervisor. Resurveys of the same household were conducted by the supervisor along with the surveyor in all cases where the surveyed form failed the inspection. A total of 6696 households were surveyed, with 2232 households from each stratum. A team of 38 trained data entry persons entered the data in a custom built IT application. The primary data in the survey forms was entered manually while the rest of the data in the forms which involved simple arithmetic operations was auto populated by the IT system.

Constraints

A limitation of the survey was that it was confined to the poor families which possessed a BPL card issued by GoAP. Though 87.7% of population were in possession of BPL cards, there is a likelihood that some of the eligible poor families were not in possession of the BPL cards and ineligible APL families were in possession of BPL cards.

Privacy

An informed consent was obtained by the surveyor before starting the survey. Permission was given by Government of Andhra Pradesh to the author for publication of the data[2]. We have de-identified and anonymised the dataset to the maximum extent possible[3]. Publication of the dataset may not likely present any risk to confidentiality of study participants.

The following steps were taken to protect privacy:

- Characteristics such as age, land possessed and family size were classified into intervals.
- The BPL card number which identifies the family was not captured in the questionnaire. Each family in the dataset was given a running serial number.
- The village to which the family belongs was replaced by a serial number.
- No provision was made to enter the names of family members in the data entry screen of the IT application, instead family members were assigned running serial numbers in the dataset.

The details such as age and family size will be provided on a case by case basis.

(3) Dataset Description

Object Name

- healthsurveyquestionnaire_english.doc contains the questionnaire used for the survey

- metadata_unmetneed1_1.xlsx contains references for each variable name to the item number in the health survey questionnaire
- data_unmetneed1_1.csv contains data under each variable name

Data Type

Primary data, processed data.

Format Names and Versions

- The full health survey questionnaire is in Microsoft word 97-2003 (.doc)
- The file describing variables is in Microsoft Excel Worksheet (.xlsx)
- The data file is in Microsoft Excel Comma Separated Values File (.csv)

Creation Dates

The data was created between 01-04-2013 and 31-05-2013.

Dataset Creators

- Srikant Nagulapalli, Collector and District Magistrate, Nellore, Government of Andhra Pradesh and formerly Chief Executive Officer of Aarogyasri Health Care Trust prepared the questionnaire, sample design, study design, designed the IT tool for data entry.
- Ayyappa Srinivas Sunkara, Executive (PMU), Aarogyasri Health Care Trust, Government of Andhra Pradesh prepared the IT tool for data entry, cleaned the data and oversaw the data entry.
- M. Swadeep Kumar, Executive (PMU), Aarogyasri Health Care Trust, Government of Andhra Pradesh assisted in preparation of survey questionnaire and IT tool preparation.

Repository Location

<http://hdl.handle.net/1902.1/22335>

Publication Date

25/10/2013

Language

Telugu

License

CC0

Competing Interests

- SN worked as Chief Executive Officer of Aarogyasri Health Care Trust, Government of Andhra Pradesh during the period of this study, and received fixed salary

from Government of Andhra Pradesh. This work was done by SN for fulfilling the requirements of Ph.D. degree at Andhra University, Visakhapatnam, India, and was not the asking of Government of Andhra Pradesh;

- No financial support was received for this work from anyone other than Aarogyasri Health Care Trust;
- No family members or friends of SN with commercial entities have an interest in this work;
- SN is an official of Government of Andhra Pradesh and hopes to bring to light the current status of health system in Andhra Pradesh with a view to informing the state health policy.

(4) Reuse potential

The data which belongs to families below poverty line could be reused for the purposes of:

- Teaching in the fields of public health, statistics and economics
- Analysis of important household and personal characteristics of poor
- Social determinants of important health and economic indicators of the poor
- Validation of the publications based on this data
- Reference purposes
- Collaborative work in the field of health economics

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