Modified BG Prasad's Socio-economic Classification-2018: The need of an update in the present scenario

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Modified BG Prasad socioeconomic scale has been in use for determining the socio-economic status of study subjects in community-based health studies in India since 1961. It is an income-based scale and, therefore, constant update is required to take inflation and depreciation of rupee into account. For industrial workers (IW), the consumer price index (CPI) is used to calculate updated income categories at any given point of time, viz Jan 2018.

These details of the calculations involved will help many researchers to calculate specific income categories for their ongoing and prospective research work in current calendar year. On the Department of Labour website (www.labourbureaunew.gov.in), state-specific CPI values are also available and should be used to determine more accurate income categories.

The current exercise is a step towards increasing the validity of use of classification with relevance to the current price levels and enabling a real time update for a considerable time in the near future.

The health behavior of an individual or a community is interdependent on their socio-economic status. The concept of socio-economic status is widely used in medical sociology. The social standing of an individual or a family in the society can be measured

by it. Therefore, is an important factor affecting the health condition of an individual or a family. (1) Socio-economic status has been defined as "The position that an individual or family occupies with reference to the prevailing average standards of sultural and material possessions income and

cultural and material possessions, income and participation in group activity of the community". The social status may be inherited, but in modern society it is achieved on the basis of occupation, income, type of housing and neighborhood, membership of the certain associations and organizations, material, possessions, etc. (2)

In India, several methods or scales have been developed for classifying different populations based on their socio-economic status, viz. Parikh scale 1964, Shirpurkar scale 1967, Jalota scale 1970, Kulsherestha scale 1972, Srivastava scale 1978, Bharadwaj scale 2001. (3-8)

Modified BG Prasad's classification that is used for both urban and rural areas. Modified Kuppuswamy classification is used in urban and peri urban areas which considers the education of the head of family, occupation of head of the family and per capita monthly income.(9,10) Another classification for rural areas is Uday Pareekh classification which takes into account following characteristics namely caste,

occupation of family head, education of family head, level of social participation of family head, landholding, housing, farm power, material possessions and type of family.(3)

The most commonly used scale to measure the socioeconomic status of families is modified BG Prasad scale. (9) This scale was devised in 1961 and was later modified by the author himself in 1968 and 1970.(11,12) The scale uses per capita monthly income and is therefore applicable to individuals. An important limitation of this scale is that it takes into account only the income and, therefore, may miss out on the other factors affecting the social status of the individual. It is important to continuously update the scale to suit the present time due to inflation and depreciation of the value of rupee. (13,14)

Inflation directly disturbs the socioeconomic status of individuals and families by disturbing their purchasing power. The more costly goods and amenities would be in the country, more it would push families into poverty. In India, inflation is measured using five major national indices: The Wholesale Price Index (WPI) and the four categories of the CPI used to measure inflation for four different sections of labor force. (15) The WPI is the most broadly used index of inflation in India. It captures the comprehensive price movements at the first point of bulk sale for a basket of goods which is predecided. (16) But the major fault in using the WPI for socioeconomic classification scale revision as suggested by some researchers in the past is that the general public does not buy at wholesale level. Also, the WPI is based on a basket of items and does not cover services which form a major quantity of expenditure at the household level (e.g., education, health etc.). (15) The CPI, on the other hand, measures price alteration from the perception of the retail buyer. It is the actual index of inflation for common people. It is based on changes in the retail prices of selected goods and services spent by a distinct group of population. In India, four CPIs were amassed at national level until January 2012. The most commonly used and the most suitable CPI for revision of socioeconomic classifications has been CPI (IW) as it represents the expenditure of a normal working class family. (16) The problem of using this or the other CPIs was that they did not include all the segments of the population and it could not reveal the effect of inflation on the entire population of the country. Therefore, to measure the CPI for the entire country in a broad manner encompassing the entire

urban and rural populations, the Central Statistics Office (CSO) of the Ministry of Statistics and Programme Execution began gathering the following new series of CPI: CPI for the entire urban population (CPI Urban) base 2010, CPI for the entire rural population (CPI Rural) base 2010, and Joined CPI for the Urban and Rural Population having the base 2010.(17,18) Using these indices would probably give a more precise picture of socioeconomic status classification for the entire urban and rural population and for the country as a whole. These may be used when suitable linking factors are made available to link them to the earlier used series of CPI (IW) for a more accurate description of socioeconomic classification based on the income of the individual study subject or family.

CPI values are also available for different states of the country and for every month of the year.

They are also available for diverse classes of workers, which can be used to estimate more specific income ranges. The CPI (IW) is released on the last working day of the succeeding month and is updated on the same day. The CPI for agricultural and rural laborers is released on the 20th day of the succeeding month and is updated on the same day on the website of the Labour Bureau. The revised income categories for Jan 2018 for all India have been given in Table 1. The linking factors have been obtained from the website www.labourbureau.nic.in

For arriving at the conforming household income cutoff values for the year 2001,

New income value = (old value \times 4.63 \times 4.93).

To calculate the values for real time update, we have to look at the current All India Average Consumer Price Index Numbers for Industrial Workers (Base 2001 = 100). The value of the index for Jan 2018 is 288. This value has been taken from the Labour Bureau website. (19)

The new values are calculated by further applying a multiplying factor:

Multiplying factor = current index value (=288)/Base index value in 2001 (=100) = 2.88

The updated values for the per capita monthly income (in Rs./month) for Jan 2018 are given in <u>Table</u> 2. They have been calculated as: New income value = $2.88 \times (\text{old value} \times 4.63 \times 4.93)$.

Conclusion

Socioeconomic classification is an important forecaster of the health status of an individual or a family. Continuous changes in the value of goods and

services in the country due to inflation make it obligatory to regularly update the income-based socioeconomic scales. Therefore, by the existing exercise, the BG Prasad scale used widely to determine the socioeconomic status in health studies has been updated for the most recent CPI (IW) for Jan 2018. State-specific CPI (IW) should be used by researchers in community health-related studies to switch the socioeconomic status of the study subjects precisely.

The existing exercise is a step towards increasing the legitimacy of use of classification with significance to the current price levels and enabling a real time update for a substantial time in the near future.

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Tables

TABLE 1 REVISED PER CAPITA INCOME PER MONTH LIMITS

Price index by Old base (1960) for the	Price index by new base (1982) for the	Linking factor between 1960 and	Price index by new base (2001) for the	Linking factor between 1982 and
original scale	year 1982	1982 series	year 2001	2001 series
100	100	4.63	100	4.93

TABLE 2 PROPOSED MODIFIED BG PRASAD'S SOCIAL CLASSIFICATION

Prasad's social classification (1961)		Revision of the Prasad's social classification for the year 2018	
Social Class	Per capita monthly income limits	Social Class	Revised for 2018
			(in Rs./month)
1	100 and above	I	6574 and above
II	50-99	II	3287-6573
III	30-49	III	1972-3286
IV	15-29	IV	986-1971
V	Below 15	V	985 and Below