Updated BG Prasad Socioeconomic Classification, 2014: A Commentary

Abha Mangal¹, Varun Kumar², Sanjeet Panesar¹, Richa Talwar³, Deepak Raut⁴, Saudan Singh⁵

¹Senior Resident, ²PG Student, ³Professor, ⁴Director Professor, ⁵Director Professor and Head of Department, Department of Community Medicine, Vardhman Mahavir Medical College and Safdarjung Hospital, New Delhi, India

Summary

Modified BG Prasad socioeconomic scale is widely used to determine the socioeconomic status of study subjects in health studies in India. It is an income-based scale and, therefore, has to be constantly updated to take inflation and depreciation of rupee into account. The Consumer Price Index (CPI) for industrial workers (IW) is used to calculate updated income categories for January 2014. Details of the calculations involved will enable young researchers to calculate specific income categories for their research work. State-specific CPI values are also available on the Department of Labour website and should be used to determine more accurate income categories for the study area.

Keywords: BG Prasad socioeconomic classification, BG Prasad socioeconomic scale, Consumer Price Index 2014, CPI (IW) 2014, India, Inflation

Socioeconomic status is a widely used concept in medical sociology. It is a measure of the social standing of an individual or a family in the society. It is an important factor affecting the health condition of an individual or a family.¹ It has two components — the social status and the economic status. They are clubbed together, as these two entities are linked to each other directly. There is no direct measure of the social status of an individual; therefore, an attempt had been made by many eminent researchers and social scientists in the past to formulate a composite index to measure it. The most commonly used scales for measuring socioeconomic status are modified BG Prasad scale, Kuppuswami scale, and Uday Pareek scale used for both urban and rural areas, urban areas, and rural areas, respectively.²

Modified BG Prasad scale is a commonly used scale to measure the socioeconomic status of families.³-⁵ The advantages of using this scale are: It is applicable to both urban and rural areas and, therefore, uniformity is maintained, and it can be used to compare across these regions. Also, it utilizes the per capita monthly income and is therefore applicable to individuals. On the other hand, its most important disadvantage 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. Nevertheless, it remains one of the most widely used scales to determine the socioeconomic status in health studies due to the ease of application.

BG Prasad scale was originally devised in 1961 and was later modified by the author himself in 1968 and 1970.³⁶⁻⁷ Due to inflation and depreciation of the value of rupee, it is important to continuously update the scale to suit the present time.³⁻⁸ Previously it was pointed out that any income-based classification remains relevant to the study period only.⁹ Therefore, it is important to continuously update the income categories of the scale.
Revision of Modified BG Prasad Scale

The BG Prasad scale was formulated in 1961 keeping the base of Consumer Price Index (CPI) for 1960 as 100.\(^1\)\(^3\) This was revised in 1982 by introducing a linking factor of 4.93 to convert CPI (1982) from the new base of 100 to the old base CPI (1960). Again a need was felt in 2001 to revise the base, which was done by introducing the linking factor of 4.63. These linking factors have been given by the Labour Bureau.\(^10\)

To calculate the new income values, first we have to find out the current All India Consumer Price Index (AICPI) for industrial workers (IW; base 2001 = 100). Then we have to calculate the multiplication factor which is given by the following equation:\(^1\)\(^3\)

\[
\text{Multiplication factor} = \frac{\text{Current index value}}{\text{Base index value in 2001 (i.e., 100)}}
\]

The new income value can now be calculated using the following equation:\(^1\)\(^3\)

\[
\text{New income value} = \text{Multiplication factor} \times \text{old income value} \times 4.63 \times 4.93,
\]

where 4.63 and 4.93 are the linking factors given by the Labour Bureau.

CPI values are also available for different states of the country and for every month of the year. They are also available for different classes of workers, which can be used to calculate more specific income ranges.\(^10\) The CPI (IW) is released on the last working day of the succeeding month and is updated on the same day.\(^10\) 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.\(^10\) The revised income categories for January 2014 both for all India and Delhi state have been given in Table 1. They have been computed using the AICPI for January 2014 as 237 and CPI (IW) for Delhi (as an example of state-specific income categories) as 215. These values have been taken from the Labour Bureau website.\(^10\)

**Update and critical review**

Inflation directly affects the socioeconomic status of individuals and families by affecting their purchasing power. The more costly goods and services 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.\(^11\)\(^12\) The WPI is the most widely 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 pre-decided.\(^12\) But the major flaw in using the WPI for socioeconomic classification scale revision as suggested by some researchers in the past\(^8\) is that the general public does not buy at wholesale level. Also, the WPI is based on a basket of items (646 for the latest WPI) and does not cover services which form a major chunk of expenditure at the household level (e.g., education, health, etc.).\(^11\)

The CPI, on the other hand, measures price change from the perspective of the retail buyer.\(^11\) It is the real index of inflation for common people. It is based on changes in the retail prices of selected goods and services spent by a defined group of population.\(^11\) In India, four CPIs were compiled at national level until January 2012. They were: CPI for IW base 2001, CPI for agricultural laborers (AL) base 1986-1987, CPI for rural laborer (RL) base 1986-1987, and CPI for urban non-manual employees (UNME) base 1984-1985.\(^12\) The first three are given by the Labour Bureau in the Ministry of Labour and Employment and the fourth is compiled by the Central Statistical Organization (CSO) in the Ministry of Statistics and Programme Implementation.\(^11\)

The most commonly used and the most appropriate CPI for revision of socioeconomic classifications has been CPI (IW) as it represents the expenditure of a normal working class family.\(^11\) The drawback of using this or the other CPIs was that they did not include all the sections of the population and it could not reflect the effect of inflation on the entire population of the country. Therefore, to measure the CPI for the entire

---

**Table 1: Revised modified BG Prasad socioeconomic classification scale, January 2014**

<table>
<thead>
<tr>
<th>Socioeconomic class</th>
<th>Per capita monthly income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modified BG Prasad SES (1961)</td>
<td>Revised income categories for all India (IW) 2014</td>
</tr>
<tr>
<td>(Upper class)</td>
<td>100 and above</td>
</tr>
<tr>
<td>(Upper middle class)</td>
<td>50-99</td>
</tr>
<tr>
<td>(Middle class)</td>
<td>30-49</td>
</tr>
<tr>
<td>(Lower middle class)</td>
<td>15-29</td>
</tr>
<tr>
<td>(Lower class)</td>
<td>&lt;15</td>
</tr>
</tbody>
</table>

\(^{a}\)AICPI (IW) All India (base 2001) = 237\(^{10}\); \(^{b}\)CPI (IW) Delhi (Base 2001) = 215\(^{10}\), SES-Socio Economics Status
country in a comprehensive manner encompassing the entire urban and rural populations, the Central Statistics Office (CSO) of the Ministry of Statistics and Programme Implementation began compiling 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 Consolidated CPI for the Urban and Rural Population having the base 2010. Using these indices would probably give a more accurate picture of socioeconomic status classification for the entire urban and rural population and for the country as a whole. These may be used when appropriate linking factors are made available to link them to the previously used series of CPI (IW) for a more accurate description of socioeconomic classification based on the income of the individual study subject or family.

Conclusion

Socioeconomic classification is an important predictor of the health status of an individual or a family. Constant changes in the price of goods and services in the country due to inflation make it mandatory to constantly update the income-based socioeconomic scales. Therefore, by the current 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 January 2014. State-specific CPI (IW) should be used by researchers in community health-related studies to determine the socioeconomic status of the study subjects precisely.

References


Source of Support: Nil. Conflict of Interest: None declared.