Original Article

# Sociodemographic Profile of Centenarians in Southern Bangladesh 

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#### Abstract

Background: There have been few studies conducted in Bangladesh on the sociodemographic status of individuals who live beyond the age of $100 y$ years. The aim of this study was to assess the sociodemographic status of people who live for more than 100 years. Methods: This prospective observational study was conducted in the Department of Medicine Shree-E-Bangla Medical College and Hospital (SBMCH), Barisal, Bangladesh during the period from February 2022 to October 2022. In total 50 people who live for more than 100 years were included as the study subjects for this study. Data regarding age, gender, dress, residence, source of water, sanitation, education, occupation, religion, and economic status of the participants were recorded. All data were collected, processed, and analyzed by using MS Office and SPSS version 23 programs as per need. Results: In this study the male-female ratio was 2.8:1. Minimum and maximum age was 102 and 113 years and their mean ( $\pm$ SD) age was $104.18 \pm 5.49$ years. About three-fourth of the participants lived in 'tin-shaded' houses, about two-third used 'Paka' latrines, almost all (94\%) used tube-well water in their regular uses. Sixty four percent were educated up to the primary level, $58 \%$ were from lower-middle-class families, and $94 \%$ were Muslim. Agriculture was the most common occupation which was found among $74 \%$ of participants. Conclusion: Youngest person in this study was 102 years and oldest is 113 years old. Most of them were Muslim and farmer in occupation.


Key Words: Sociodemographic profile, Live for more than 100 years, Immortality, Long life.

## INTRODUCTION

Centenarians are the senior citizens of the society who have a living experience of more 100 years. In Bangladesh, very limited studies regarding the sociodemographic status of the people who live long even for more than 100 years had conducted. Many individuals desire to have a long life and this wish is likely to become the reality for increasing numbers of people. ${ }^{1} \mathrm{~A}$ continuous rise in life expectancy has been detected in
most industrialized countries over the past decades, with its main cause being lower mortality rates in the very old. ${ }^{2}$ In fact, every second child born after the year 2000 can expect to reach his or her 100th birthday. ${ }^{3}$ In Japan, the country with the highest life expectancy in the world, the number of individuals aged 100 years or older were reported to be 40,399 in 2009. ${ }^{4}$ The CENSUS 2010 documented 53,364 individuals aged 100. ${ }^{5}$ In Portugal, 1,526 centenarians were

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recorded in 2011 Instituto Nacional de Estatistica (INE). ${ }^{6}$ Between the years 1996 and 2006, the number of centenarians has multiplied by four in Japan, doubled in Italy and Spain, and increased by 1.5 in Eastern and Nordic European countries like Norway or Bulgaria. ${ }^{4}$ In addition, the United Nations (2009) has projected an increase in the centenarian population up to about 4 million by 2050. ${ }^{1}$ Increased longevity is due to several developments, like the reduction of late-life mortality and medical advances in treating and preventing many common diseases, as well as the improvements in living conditions and lifestyles. ${ }^{2,3,7}$ Death seems to be delayed as individuals reach old age in better health. ${ }^{8}$ Centenarians are generally investigated in the context of genetic, demographic, or medical research, in order to examine discipline-specific questions such as the development of the population of centenarians and/or supercentenarians in particular countries. ${ }^{3,4,9,10}$ The aim of this study was to assess the sociodemographic status of people who live for more than 100 years.

## METHODS

This cross-sectional study was conducted in the Department of Medicine Shree-E-Bangla Medical College and Hospital (SBMCH), Barisal, Bangladesh during the period from February 2022 to October 2022. In total 50 people who live for more than 100 years were included as the study subjects for this study. Data regarding age, gender, dress, residence, source of water, sanitation, education, occupation, religion, and
economic status of the participants were recorded. Ethical approval of the study had been taken from the ethical committee of the institute. As per the inclusion criteria of this study, people $>100$ years of age from both gender groups were included as the study subjects. As the proof of age of the participants, the birth certificate and/or national identification (NID) card were considered with priority. In the case of very aged 3-persons, information from relatives and participants' knowledge about ancient history were considered as proof of age. In the case of unconscious and severely ill most aged participants, the necessary information was recorded as per the opinions of the family members of the participants. So, as per the exclusion criteria, people without proper documents and/or not willing to participate in this study were excluded. A predesigned questionnaire was used in data collection. All data were collected, processed, and analyzed by using MS Office and SPSS version 23 programs as per need.

## RESULTS

About two-third of the paricipants (74\%) were male (Figure-1). The mean ( $\pm$ SD) age of the participants was $104.18 \pm 5.49$ years. In this study, the majority ( $64 \%$ ) of participants were educated up to the primary level. Besides this, $10 \%$ and $2 \%$ were educated up to SSC and graduate/above levels respectively. Religious studies were taken by $2 \%$ and the rest $22 \%$ were illiterate (Table-1). Most of the participants (62\%) were with the habit of using traditional Bengali dress in their daily life and the rest $38 \%$ were used to

Islamic dress. On the other hand, the majority (64\%) of participants lived in 'tinshaded' houses and only $10 \%$ lived in buildings (Table-2). The majority of the participants (94\%) were Muslim whereas the rest $6 \%$ were Hindu in religion (Figure-2). About three-fourth (72\%) portion of the participants used 'Paka' latrines whereas the rest $28 \%$ used "Kacha" latrines (Figure-3). All most all of the participants (94\%) used tubewell water in their regular uses. Only $6 \%$ of participants used pond water in their regular uses. Agriculture was the most common occupation which was found among 74\% of participants. Besides this, 12\%, 6\%, and 8\% of participants were engaged as nongovernment service holders' government service holders, and businessmen respectively (Table-1). The majority of the participant (58\%) in this study were from lower-middle-class families. Besides these, $4 \%, 20 \%$, and $18 \%$ of participants were from rich, upper-middle-class, and poor families respectively (Table-1). 62\% were using traditional Bengali dress in their daily life and $38 \%$ were using Islamic dress.


Figure I: Gender distribution of the Participants ( $\mathrm{N}=50$ )

Table 1: Educational, Occupational and economic status of participants ( $\mathrm{N}=50$ )

| Variables | N | \% |
| :---: | :---: | :---: |
| Educational Status |  |  |
| Illiterate | 11 | 22\% |
| Primary | 32 | 64\% |
| SSC | 5 | 10\% |
| Graduate/Above | 1 | 2\% |
| Religious Study | 1 | 2\% |
| Occupational Status |  |  |
| Agriculture | 37 | 74\% |
| Non Government service | 6 | 12\% |
| Government Service | 3 | 6\% |
| Businessman | 4 | 8\% |
| Economic Status |  |  |
| Rich | 2 | 4\% |
| Upper Middle Class | 10 | 20\% |
| Lower Middle Class | 29 | 58\% |
| Poor | 9 | 18\% |



Figure 2: Religious status of participants ( $\mathrm{N}=50$ )

Table 2: Residence types of participants (N=50)

| Type | n | $\%$ |
| :--- | :---: | :---: |
| Kacha ghar | 7 | $14 \%$ |
| Tin-shaded house | 32 | $64 \%$ |
| Tin shed building | 6 | $12 \%$ |
| Building | 5 | $10 \%$ |

Type of latrine using of the study Population


Figure 3: Type of latrine used by the Participants ( $\mathrm{N}=50$ )

## DISCUSSION

In this study, the mean ( $\pm$ SD) age of the participants was $104.18 \pm 5.49$ years with the range between 102 and 113 years. Centenarians had clothing that embodies their cultural heritage and personal taste. ${ }^{1}$ About three-fourth of the participants (62\%) were with the habit of using traditional Bengali dress in their daily life and the rest were using Islamic dress. Some studies reported that many centenarians continue to have goals and want to live that they may have particular personality profiles. ${ }^{11-13}$ In our study, we have found that the dress habit is the reflection of that personality profiles. Most of the participants (94\%) used tube-well water in their regular uses. Rest of the participants used pond water. This scenario reflects the personal hygiene and health concern of theses senior citizens. In this study, the majority (64\%) of participants were educated up to the primary level, religious studies were taken by $2 \%$ and the rest $22 \%$ were illiterate. The level of education has also considered to what extent psychological as well as social
wellbeing are present. ${ }^{14,15}$ Poon and colleagues and Martin P \& Martin M also offer theoretical models including a broader set of predictors like demographics, personality, life events, and social aspects to gain a more comprehensive understanding of factors associated with longevity, health as well as the quality of life. ${ }^{16,17}$ Regarding the lifestyle and social aspects of the centenarians we found that the agriculture was the most common occupation which was the occupation of majority of the people in this part of Bangladesh during the younger phase of their life. So, they had good quality in these longer life as they had followed the traditional way of livelihood. Most of the participants (94\%) were Muslim whereas the rest were Hindu. This reflects the scenario of Muslim predominated society.

## Limitation of the study:

Though it was a single-centered study with a small sample size, so the findings of this study may not reflect the exact scenario of the whole country.

## CONCLUSION

Mean age was 104 years ranging from 102 to 113 years. Most of them were Muslim and farmer in occupation.

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