



## Physical Problems of Old Aged (60+ Years) Santhal Population of Two Municipal Areas of Jangal Mahal, West Bengal, India

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**KEYWORDS** Elderly. Health Problems. Morbidity. Tribal Population

**ABSTRACT** The elderly population is increasing rapidly in India as well as around the world. In this present scenario of the great demographic shift, understanding the problems of the elderly population has become more important than ever. The present study aims to get a better understanding of the prevalence of a few common physical problems among the Santhal elderly population. This study also aims to find sex differences in the prevalence of physical problems. To fulfill the purpose, the present study was conducted among 300 elderly Santhals of Jangal Mahal (Paschim Medinipur and Jhargram), West Bengal. Very high prevalence was found for most of the problems under consideration, namely eye problems, hearing problems, skin problems, digestive problems, diabetes, diarrhea, cold and cough, bone or joint pain, and sleeping problems. Most of the chronic problems which do not affect daily life greatly are treated as small problems and believed as inevitable as a result of old age by the elderly respondents.

### INTRODUCTION

Many of the developed countries accept 65 years as the criteria for becoming an 'elderly', older or aged person. But this varies country wise. Especially most of the developing countries do not follow this concept. The United Nations has not adopted a standard criterion, but generally uses 60+ years to refer to the older population. It is also widely accepted that this biological age is not synonymous to being elderly (WHO 2002), as many of the concepts and criteria are culturally constructed. In India, 60 years of age is generally considered as old age. According to the Maintenance and Welfare of Parents and Senior Citizens Act (2007), "senior citizen" means any person being a citizen of India, who has attained the age of sixty years or above (Ministry of Law and Justice 2007). In the present study, 60 years of age or above were considered as the criteria for being an elderly or old aged person.

The world is graying rapidly and the rate of growth of the general population is lower than

the aging population (Satyanarayana and Medappa 1997). One of the most important global trends of the 21<sup>st</sup> century is population aging (Help Age India 2014). Growth is a global phenomenon and between 2017 to 2050 every country in the world will experience a noticeable increase in the number of the elderly population (United Nations 2017). A report by the United Nations Population Fund (UNFPA 2017) very precisely describes the aging of the human population in the world. According to the report, twelve percent of the total population is elderly and by 2050, they will constitute twenty-two percent of the total global population outnumbering the under 15 years aged population for the first time in history.

A healthy lifestyle and nutritious food play a major role in providing better health throughout life (Banerjee et al. 2018). With improving socioeconomic conditions, the Indian population is getting better nutrition, leading to a longer life. After independence in 1947, the life expectancy in India was nearly 32 years and by 1990 the life expectancy had reached 60 years (Prakash 1999). By 2002-2006 the life expectancy at birth increased to 64.2 years (Central Statistics Office 2011) and further increased to 67 years in 2015 (United Nations 2015) and the increase in life expectancy will continue to rise in the upcoming years. With the increase in the life expectancy, the size of the elderly population is also increasing rapidly due to a longer life. In

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2011, there were 103.8 million elderly people in India, which increased from 76.6 million in 2001 (Government of India 2016). It is projected that the elderly population will increase to 324 million by the year 2050 (Help Age India 2014).

Though the size of the elderly population is increasing rapidly, not enough attention has been given to them. Economic insecurity, incomplete preparedness for old age, housing problems, health concerns, psychological issues and elder abuse are some major issues and problems faced by the aged population. In old age people become weak, both physically and mentally, as the metabolism slows down. As the immune system weakens in old age, people become vulnerable to sickness, disease and syndromes, etc. The prevalence of non-communicable diseases are most common among the elderly (Singh 2015).

Amiri (2018) in his paper "Problem Faced By Old Age People" mentioned that according to Indian tradition, old aged people always enjoyed the power and prestige in the family. However, now this scenario is changing and they are becoming inactive, dependent, sick and weak in every area of life. On the other hand, with technological advancement in the field of health, medical facilities and different national schemes, the death rate is decreasing, resulting in continuous incline in 60 years and above aged people in India.

Elderly people are more susceptible to chronic diseases and physical disabilities and mental incapacities. He mentioned that the prevalence of arthritis, rheumatism, heart problems, and high blood pressure is very common among elderly people. Most of the illnesses among elderly people are chronic in nature. He also mentioned that they were neglected by the academic and scientific societies for a long time and there is a lack of studies about the problems of the aged population in India (Raju 2011). Many other studies were conducted to understand the different problems of the elderly population (King and King 2010; Hameed et al. 2014; Kaur et al. 2015; Arlappa et al. 2016).

### Objectives

The size in number as well as in the proportion of the elderly population will increase drastically in upcoming years. It is also a fact that

they are one of the most vulnerable as well as neglected sections of the community. So it is very important to get a better understanding of the problems of the elderly to address the problems. Considering all these factors mentioned above the present study was conducted to understand the prevalence of different common physical problems of the elderly population of the study area. This study also aims to depict the gender difference in the prevalence of these physical problems.

### METHODOLOGY

Jangal Mahal literally means 'jungle estates' and initially was a district formed by the British. Presently, the western part of south Bengal including a major part of Paschim Medinipur, Bankura and Purulia district is literary marked as 'Jangal Mahal' (Sultan 2014). The Government of West Bengal (2016 and last updated 2018) formulated an Action Plan called "Jangal Mahal Action Plan" where Bankura, Purulia and Paschim Medinipur were initially included as this area in general known as Jangal Mahal. Now Jhargram is separately included after bifurcation from Paschim Medinipur. Initially, in the designing phase of this study, the study area was restricted within the Paschim Medinipur District. The study progressed as planned, but during that time Jhargram district was formed (bifurcated from Paschim Medinipur). As a result of this the study area comprises two districts and according adjustments have been to made to address this issue. Also, the title of this study was changed.

The present study was conducted among 300 elderly Santhals of Paschim Medinipur and Jhargram district, West Bengal, India. All the study participants live in semi-urban areas of Paschim Medinipur and Jhargram district. Data was collected only once so the present study is a cross-sectional study. Fieldwork was conducted between March 2017 and October 2017. The study participants were selected using a combination of purposive and snowball sampling methods. The criteria for selection of study participants were as follows:

1. The study participants must be an elderly (age 60 years or above)
2. They should belong to the Santhal community

3. They should their consent and volunteer to participate.

Among the 300 study participants, 171 were male and 129 were females. The structured schedule and interview method were used for data collection. The observation method was also used in some aspects. Data about some common physical problems and issues were collected for this study, namely eye problems, hearing problems, skin problems, symptoms of arthritis, digestive problems, diarrhea, diabetes, cold and cough, sleeping problems. Data about different physical problems, issues or their symptoms were collected from self-report of the respondents. Data about diabetes was collected from a previous diagnosis.

Appropriate statistical methods were used to calculate differences between groups and associations between variables. P-value < 0.05 was considered as statistically significant. Other levels of significance like  $p < 0.1$  and  $p < 0.01$  were also mentioned to have a better understand-

ing. Data management and statistical analysis were done using SPSS 16.0 version.

**RESULTS**

Table 1 represents some important socioeconomic and demographic aspects of the study population, which can provide a better understanding of the participants under study. Among the 300 study participants, most of them belong to the young-old age category (60 to 69 years of age), as they are the most dominated section among the Santhal aged population. The mean age of male and female study participants was 68.19 years and 66.06 years respectively, whereas the overall mean age of all the participants was 67.27 years. Illiteracy is very high among the study population. Among the educational groups, the largest section of the participants (53.8% of males and 76.7% of females) was illiterate. Only one individual among the study population was found to have passed the higher

**Table 1: Socio-economic and demographic profile of the elderly Santhals of study area**

Category	Age distribution (age in years)					
	Male		Female		Total	
	No.	Mean (SD)	No.	Mean (SD)	No.	Mean (SD)
<i>Age</i>						
Young Old (60-69)	109	63.33 (2.45)	105	62.90 (2.56)	214	63.12 (2.51)
Old Old (70-79)	39	72.38 (3.25)	10	72.10 (3.25)	49	72.33 (3.11)
Oldest Old (80 & above)	23	84.09 (5.21)	14	85.50 (4.57)	37	84.62 (4.96)
Total	171	68.19 (7.94)	129	66.06 (7.76)	300	67.27 (7.92)
<i>Educational Status</i>						
Category	No.	%	No.	%	No.	%
Illiterate	92	53.8	99	76.7	191	63.7
Primary	56	32.7	18	14.0	74	24.7
U. Primary	15	8.8	11	8.5	26	8.7
Secondary	7	4.1	1	0.8	8	2.7
H.S	1	0.6	0	0.0	1	0.3
<i>Occupational Status</i>						
Category	No.	%	No.	%	No.	%
Agriculture	47	27.5	19	14.7	66	22.0
Day labour	22	12.9	19	14.7	41	13.7
Others	7	4.1	5	3.9	12	4.0
Pension	6	3.5	1	0.8	7	2.3
Unoc. /H.W.	89	52.0	85	65.9	174	58.0
<i>Marital Status</i>						
Category	No.	%	No.	%	No.	%
Married	133	78.2	72	55.8	205	68.56
Unmarried	00	00	1	0.8	1	0.34
Widow/Widower	37	21.8	56	43.4	93	31.1

Note: Unoc. /H.W.=Unoccupied/ Housewife

secondary level of formal education, with no female participants having such qualification. Most of the study participants do not work presently (58%) and have no direct source of income. Others, mainly engage themselves in agriculture (22%), followed by day labour. Other individuals worked on a contract basis in private business, hotels, and shops in nearby areas. 68.56 percent of the study participants were married, whereas 31.1 percent are were widow/widower.

The prevalence of a few common physical problems was studied and the results were shown in Table 2. The prevalence of different problems and issues was very high in the study population. Fifty-four percent of the study participants reported eye problems. The hearing problem was more prevalent among male (35.1%) than female respondents (25.6%). Prevalence of skin problem (18.4%) was less among the study population compared to other problems. The percentage of male and female who reported

having skin problems are 16.5 percent and 20.9 percent respectively. Bone and joint pain was very common in this population, 73.1 percent male and 79.1 percent of females were found with bone or joint problems. The digestive problems were higher among men compared to women in the study population. It was found from this study that 49.1 percent of males reported digestive problems compared to only 32.0 percent female. Diabetes awareness is higher among male than female in this population, as only 15.8 percent male never diagnosed their diabetic condition compared to 27.1 percent female. But males (11.7%) show a high percentage of diabetes cases than females (5.4%). It was also found that the prevalence of diarrhea was much higher among males than females. Similarly, chronic cold and cough is also very high among the male population, compared to females (67.3% and 25.6% respectively). In the study population, thirty-two percent reported having sleeping

**Table 2: Prevalence of physical problems or issues and sex differences among the elderly Santhals**

	Male		Female		Total		Chi-square
	Number	%	Number	%	Number	%	
<i>Eye Problems</i>							
Yes	93	54.4	69	53.5	162	54.0	0.024
No	78	45.6	60	46.5	138	46.0	
<i>Hearing Problems</i>							
Yes	60	35.1	33	25.6	93	31.0	3.107*
No	111	64.9	96	74.4	207	69.0	
<i>Skin Problems</i>							
Yes	28	16.5	27	20.9	55	18.4	.972
No	142	83.5	102	79.1	244	81.9	
<i>Bone/Joint Pain</i>							
Yes	126	73.7	102	79.1	228	76.0	1.169
No	45	26.3	27	20.9	72	24.0	
<i>Digestive Problems</i>							
Yes	84	49.1	41	32.0	125	41.8	8.790***
No	87	50.9	87	68.0	174	58.2	
<i>Diabetes</i>							
Yes	20	11.7	7	5.4	27	9.0	8.058**
No	124	72.5	87	67.4	211	70.3	
Don't know	27	15.8	35	27.1	62	20.7	
<i>Diarrhoea</i>							
Yes	28	16.4	5	3.9	33	11.0	11.732***
No	143	83.6	124	96.1	267	89.0	
<i>Cold and Cough</i>							
Yes	115	67.3	33	25.6	148	49.3	51.080***
No	56	32.7	96	74.4	152	50.7	
<i>Sleeping Problem</i>							
Yes	55	32.2	41	31.8	96	32.0	0.005
No	116	67.8	88	62.2	204	68.0	

\*\*\*p<0.01, \*\*p<0.05, \*p<0.1

**Table 3: Accessibility and preference of medical facilities**

<i>Accessibility of Medical Facilities</i>	<i>Male</i>		<i>Female</i>		<i>Total</i>		<i>Chi-square</i>
	<i>No.</i>	<i>%</i>	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>	
Yes	81	47.4	50	38.8	131	43.7	2.215
No	90	52.6	79	61.2	169	56.3	

  

<i>Prefer to Visit Doctor for Above Mentioned Problems</i>	<i>Male</i>		<i>Female</i>		<i>Total</i>		<i>Chi-square</i>
	<i>No.</i>	<i>%</i>	<i>Number</i>	<i>%</i>	<i>Number</i>	<i>%</i>	
Yes	43	25.1	35	27.3	78	26.1	0.183
No	128	74.9	93	72.7	221	73.9	

problems. In digestive problems ( $\chi^2=8.790$ ;  $p<0.01$ ), diabetes ( $\chi^2=8.058$ ;  $p<0.05$ ), diarrhea ( $\chi^2=11.732$ ;  $p<0.01$ ) and cold and cough ( $\chi^2=51.080$ ;  $p<0.01$ ), significant difference was found between male and female participants.

Table 3 represents the availability and attitude towards medical facilities. The availability of medical facilities is very low in the study population. Communication problems and expenses are the main reason behind the lack of availability as the study participants reported. Access to the medical facility is more among males than females, whereas 47.4 percent of men and only 38.8 percent of women reported that they have access to medical facilities. When the participants were asked, if they want to visit a doctor for the above mention physical problems and issues, most of them answered ‘No’ (73.9%). According to the result found from this study most men (74.9%) and women (72.7%) participants do not want to visit a doctor for the above-mentioned problems. As most of them believe these are natural and in old age these problems are inevitable.

**DISCUSSION**

India, a population superpower, is undergoing massive demographic changes (Agarwal et al. 2016). Lack of social security system, sub-standard pension system, rapidly changing social norms are causing difficulties for the average Indian elderly population (Mahajan and Ray 2013). Only 37.15 percent death of the elderly population is due to old age, while others die due to different health issues, most of them

chronic (Rajan 2006). Aged people are more vulnerable to different chronic illnesses by nature and the condition worsens with negligence and/or improper treatment. In the early stages, most of the chronic condition can be treated easily but can cause prolonged illness and even death if not treated in time. In the present study, common physical problems were selected and studied among the elderly Santhal. The result shows that most of the problems and issues have a very high prevalence among the study population. Most of them are believers and convinced it is unavoidable due to the old age.

In India, tribal population is considered one of the most backward and underdeveloped sections of the country. The present study depicts that illiteracy is very high among the study population and women are way behind than men in terms of literacy. Overall educational status of the study population is very low having no graduates and only one individual reached the higher secondary level. Most of the study participants do not work presently (do not have any income). Though most of them help other family members in their primary and secondary occupations (animal husbandry, collecting Sal leaf and helping in the vegetable garden are some common examples) and females are also engaging themselves in rearing their grandchildren and household activities. Many others have to work hard until this old age to earn money. Agriculture (22.0%) is the most common occupation followed by day labour (13.7%).

Prevalence of joint pain, cough, blood pressure, piles, diabetes is very common among the older population (Paltasingh 2012). Eye prob-

lems (54%) were very common in the studied Santhal elderly population. Balamurugan and Ramathirtham (2012) found a similar prevalence, only 45.0 percent male and 31.1 percent females have good eyesight without glasses. They also found that 80.0 percent male and 67.9 percent of females have good hearing. Other studies reported both higher (Thakur et al. 2013; Ramchandra and Salunkhe 2014; Bhattacharyya 2017; Sahu et al. 2018) and lower (Kamble et al. 2012) prevalence of physical problems. High prevalence of chronic illness (60.1%) was found by Sidik et al. (2004). Lena et al. (2009) found a very high prevalence of hypertension, diabetes, osteoarthritis and bronchial asthma among the elderly person in rural south India.

In the case of eye problems ( $\chi^2=0.024$ ;  $p>0.05$ ), hearing problems ( $\chi^2=3.107$ ;  $p>0.05$ ), skin problems ( $\chi^2=0.972$ ;  $p>0.05$ ), bone or joint pain ( $\chi^2=1.169$ ;  $p>0.05$ ) and sleeping problem ( $\chi^2=0.005$ ;  $p>0.05$ ), the differences between male and female participants were not statistically significant. Bone or joint pain (76.0%) is widely found in both sexes, while cold and cough was very highly reported by the male (67.3%) respondents. In the case of digestive problems ( $\chi^2=8.790$ ;  $p<0.01$ ), diabetes ( $\chi^2=8.058$ ;  $p<0.05$ ), diarrhea ( $\chi^2=11.732$ ;  $p<0.01$ ) and cold and cough ( $\chi^2=51.080$ ;  $p<0.01$ ) the sex difference is statistically significant. Very similarly, diabetes prevalence was found in rural south Indian males (Lena et al. 2009), but in the present study females show a lower prevalence of diabetes. This may be due to the negligence and lack of diagnosis as many of them do not know (27.1%) about their diabetes condition.

According to the respondents, it is clear that accessibility is not good in this area of Jangal Mahal. Though many of them reported having access, most of them said it is not necessary to visit a doctor for these small issues. Health issues due to increasing age are complicated by the non-availability of good quality, age-sensitive, health care for the elderly in India (Prasad 2017). There is a need to develop an integrated and responsive health care system to meet the care needs and challenges of the elderly in India (Mane 2016). To improve the quality of life of the aged people special health care facilities focused to address the problems of the elderly population are necessary. Early identification is

very important to address and cure health issues (Reji and Kaur 2013). Awareness plays a very important role in early detection of health issues and the proper health care and wellness of individuals or the community. Awareness can increase with the increase in the quality of education and early preparedness.

From an ethic perspective, it can be said that negligence is present among the study population about their physical problems, which is also a fact. But there is another view of this situation and can be observed just by visiting this area that it is very hard for them to meet the basic day to day needs. So visiting a doctor and 'wasting' time, money and recourses for these problems which can be tolerated by will power is a luxury for them. Many of the respondents mentioned local remedies for some of the problems. As for an example, one old lady having bone or joint pain mentioned using mustard oil, garlic, and heat to lessen the back and knee pain and no need to visit a doctor. There are many other local remedies, maybe some of them work and others do not. But the presence of these remedies clarifies that the suffering is present and study participants seek for relief, though in most of the cases, no medical action was taken to treat the sufferings, only home remedies used to lessen the pain or illness temporarily.

## CONCLUSION

The elderly population is vulnerable to different health issues by nature. With increasing age, the problem worsens if proper care is not provided to the elderly population. The Santhal elderly males are more vulnerable to most of the health problems compared to females. Bone or joint pain is widely prevalent in the study population. Cold and cough is very common among the male elderly Santhals. Most other physical problems and issues were also highly prevalent among the aged Santhal population. Age sensitive and available medical facility is most important to improve the situation of the elderly population.

## RECOMMENDATIONS

There is a need to develop an integrated and responsive health care system to meet the care

needs and challenges of the elderly population. Economic sufficiency is the most important factor to improve health care as well as the total way of life of the elderly. The old-age pension is a very positive policy to improve the livelihood of the elderly. Outside help is very important, but preparation for old age has more relevance to economic freedom, and needs to be promoted immediately. More studies (both micro and macro level) about the problems of the aged population are necessary to get a better understanding of their problems and possible ways to solve the problems.

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### REFERENCES

- Agarwal A, Lubet A, Mitgang E, Mohanty S, Bloom DE 2016. Population Aging in India: Facts, Issues, and Options. *IZA Discussion Paper No. 10162*. Bonn, Germany.
- Amiri M 2018. Problem faced by old age people. *The International Journal of Indian Psychology*, 6(3): 52-63.
- Arlappa N, Balakrishna N, Kokku SB, Harikumar R, Rao KM, Ravindranath M, Laxmaiah A, Brahmam GNV 2016. Diet and nutritional status of the older adults in rural India. *Journal of Ageing Research and Healthcare*, 1(1): 36-48.
- Balamurugan J, Ramathirtham G 2012. Health problems of aged people. *International Journal of Research in Social Sciences*, 2(3): 139-150.
- Banerjee S, Roy S, Biswas CS, Pal M, Bharati S, Bharati P 2018. A comparative study of food consumption and nutritional status of women in West Bengal. *Journal of Life Science*, 10(2): 132-141.
- Bhattacharyya KK 2017. Health and associated social problems of elderly population in an urban setting: A study from Kolkata, India. *International Journal of Community Medicine and Public Health*. 4(12): 4406-4410.
- Central Statistics Office 2011. *Situation Analysis of The Elderly in India*. Ministry of Statistics & Programme Implementation, Government of India. New Delhi.
- Central Statistics Office 2016. *Elderly in India*. Ministry of Statistics and Programme Implementation, Government of India, New Delhi.
- Department of Planning and Statistics, Government of West Bengal 2016. Last updated on December 2018). Jangal Mahal Action Plan. From < www.wbpspm.gov.in/MajorProgram/JangalMahal > (Retrieved on 17 March 2019).
- Hameed S, Brahmabhatt KR, Patil DC, Prasanna KS, Jayaram S 2014. Quality of life among the geriatric population in a rural area of Dakshina Kannada, Karnataka, India. *Global Journal of Medicine and Public Health*, 3(3): 1-5.
- Help Age India 2014. State of Elderly in India. New Delhi. From <https://www.helpageindia.org/wp-content/themes/helpageindia/pdf/state-elderly-india-2014.pdf> (Retrieved on 23 December 2019).
- Kamble SV, Ghodke YD, Dhumale GB, Avchat SS, Goyal RC 2012. Health status of elderly persons in rural area of India. *Indian Medical Gazette*, CXLVI(8): 295-299.
- Kaur H, Kaur H, Venkateshan M 2015. Factors determining family support and quality of life of elderly population. *International Journal of Medical Science and Public Health*, 4(8): 1049-1053
- King AC, King DK 2010. Physical activity for an aging population. *Public Health Reviews*. 32(2): 401-426.
- Lena A, Ashok K, Padma M, Kamath V, Kamath A 2009. Health and social problems of the elderly: A cross-sectional study in Udupi Taluk, Karnataka. *Indian Journal of Community Medicine*, 34(2): 131-134
- Lt Col Reji RK, Lt Col Kaur S 2013. Prevalence of common physical problems among elderly in selected old age homes of a cosmopolitan city. *International Journal of Science and Research*, 4(6): 1034-1038.
- Mahajan A, Ray A 2013. The Indian elderly: Factors affecting geriatric care in India. *Global Journal of Medicine and Public Health*, 2(4): 1-5.
- Mane AB 2016. Ageing in India: Some social challenges to elderly care. *Journal of Gerontology and Geriatric Research*, 5(2): e136. doi: 10.4172/2167-7182.1000e136
- Md Sultan I 2014. Expansion of 'Red corridor' in Jangalmahal: Demand for ethical justice. *Journal of Humanities and Social Sciences*. 19(4): 59-65.
- Ministry of Law and Justice (Legislative Department) 2007. *The Maintenance and Welfare of Parents and Senior Citizens ACT (2007)*. New Delhi.
- Paltasingh T, Tyagi R 2012. Demographic transition and population ageing: Building an inclusive culture. *Social Change*. 42(3): 391-409.
- Prasad R 2017. Problems of senior citizens in India. *International Journal of Humanities and Social Science Research*, 3(1): 35-37.
- Prakash IJ 1999. *Aging in India*. World Health Organization. Geneva: 1.

- Rajan SI 2006. *Population Ageing and Health in India*. The Centre for Enquiry into Health and Allied Themes (CEHAT), Mumbai, India.
- Raju S 2011. Studies on Ageing in India: A Review. *BKPAI Working Paper No. 2*, United Nations Population Fund (UNFPA), New Delhi
- Ramchandra MU, Salunkhe AH 2014. A study to assess physical problems of old age with special emphasis on psychosocial problems of geriatric population among nuclear versus joint family in selected rural area. *International Journal of Science and Research*, 3(4): 303-307.
- Sahu Y, Singh SP, Srivastava M, Arya SK 2018. Physical health problems and hypertension among elderly residing in old age homes in Varanasi, India. *International Journal of Health Sciences and Research*, 8(11): 15-19.
- Satyanarayana K, Medappa N 1997. Care of the aged – a long haul ahead. *Indian Journal of Medical Research*, 106: i-ii
- Sidik SM, Rampal L, Afifi M 2004. Physical and mental health problems of the elderly in a rural community of Sepang, Selanagor. *Malaysian Journal of Medical Sciences*, 11(1): 52-59
- Singh R 2015. Social conditions of elders and problems. *Journal of Research in Humanities and Social Science*, 3(3): 52-54.
- Thakur RP, Banerjee A, Nikumb VB 2013. Health problems among the elderly: A cross-sectional study. *Annals of Medical and Health Science Research*, 3(1): 19-25.
- United Nations 2015. *World Population Prospects: The 2015 Revision*. United Nations Department of Economic and Social Affairs Population Division. Geneva.
- United Nations 2017. *World Population Ageing*. Department of Economic and Social Affairs, United Nations, New York.
- United Nations Population Fund 2017. *Caring for Our Elders: Early Responses*. *India Ageing Report-2017*, UNFPA, New Delhi, India
- World Health Organization 2002. Proposed Working Definition of an Older Person in Africa for the MDS Project, Health Statistics and Information Systems. From < <https://www.who.int/healthinfo/survey/ageing-defnolder/en/> > (Retrieved on 5 February 2019).

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