Dental and Eye Problem of Nepali Older Adults Living in Old Age Home

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Background

Aging is a lifelong process of growing up and growing old which begins at conception and ends with death [1]. Globally, an elderly subgroup of the population is the fastest growing population than any other age group [2,3]. Ageing has direct and indirect implications for families, health and economics at both micro and macro levels [4]. However, such issues remain relatively under-researched, particularly in poorer and developing countries [5,6]. So, much research in this field from different countries and cultures will help for the possible policy formation for the quality of life of older adults [7].

There is very little research carried out focusing on issues of older adults in Nepal [2,3,6,8-11]. Most of the aging research carried out in Nepal is in small sample size [2,3,9,12] and there is no publicly available National research carried out in this field. Consequently, there is a dearth of specific initiatives in such nations for developing programs and services to enhance the well-being and quality of life of the older population [13].

Recently, the number of OAHs is increasing in Nepal and many elderly have also started to live in such a home [14,15]. A study shows that there are about 1,500 elderly living in about 70 organizations registered all over Nepal at present [16]. However, many of them are still deprived of proper care, support and basic need for comfortable survival [17]. The quality of the elderly home concerning the facilities they provide is poor [18,19,20].

Very few studies are carried out focusing on the health status of elderly living in old age homes (OAH). A study carried out by Chalise (2014) shows that depression is very high among the elderly living in OAH [8]. Another study shows major health problems of elderly living in Briddashram were eye problems (72.9%), joint ache (71.8%), teeth problems (62.8%), Backache (58.0%), hearing (48.9%), asthma (34.6%), Insomnia (31.4%), stomach ache (29.8%), hypertension (25.5%), allergy (15.4%), constipation (11.2%), diabetes (9.6%), and heart disease (5.3%) [20].

Poor oral health among older people is manifested as tooth loss, dental caries, periodontal diseases and oral cancer [21]. Oral health status affects individuals'
physical and psychological aspect of life as well as their appearance, speech, chewing ability, the taste of food and socialization [22]. Very few oral health related study carried out in Nepal shows the majority of participants had a low perception of oral health which indicated the poor quality of life due to oral health problems [23,24]. Similarly, a study carried out in the old age home shows 4% of the elderly had eye problems [25]. A community based study shows 12.5% elderly had eye problems in Kathmandu [26] and the latest study shows 72.9% of residents of old age home had some problems related to eye [20].

This study is trying to get some information about the oral and eye health status of older adults living in an old age home of Kathmandu.

**Methodology**

Data for this cross sectional study was carried out from one survey research of Briddashram in Kathmandu in 2017 [19,20]. This paper presents the data of 188 elderly respondents living in Briddashram aged 65 years and above. The study was approved by the research committee of the Department of Population Studies in Ratna Rajya Laxmi Campus, Tribhuvan University. Data were analyzed using frequency and percentage table through SPSS software.

**Results**

The age of the respondents ranged from 65 years to 85 years. The mean age of respondents was 75.5 years with a standard deviation of 5.44 years. The proportion of women respondents was 62.8%, quite high numbers were widow/widower (61.7%), illiterate (86.1%) and unmarried (20.2%). The living arrangement of the elderly shows 39.4% elderly were living alone before they join the Briddashram. The main reason for living alone was no family member (67.6%), family abuse (18.9%), self will (12.2%) and other (0.5%) [19].

Table 1 shows the dental and eye problem of Nepali older persons living in old age homes in Kathmandu. More than three fourth (79.3%) elderly have teeth, slightly less than two-thirds (64.4%) brush teeth once a day, the majority (68.1%) of the respondents were not worried due to teeth problem and the majority of elderly use fluoride toothpaste (73.6%) to brush their teeth. Interestingly elderly who use a finger to brush their teeth is also 23.6%. Similarly, 54.9% of the elderly have eye irritation/itchiness, 44.4% use eye drops and 23.4% of the elderly were worried due to eye problems.

| Variable                        | Number | Percentage |
|---------------------------------|--------|------------|
| Having teeth                    |        |            |
| Yes                             | 149    | 79.3       |
| No                              | 39     | 20.7       |
| Teeth Brushing                  |        |            |
| Once                            | 96     | 51.7       |
| Twice                           | 26     | 13.8       |
| Thrice and more                 | 27     | 14.2       |
| Material used to brush teeth    |        |            |
| Fluoride tooth paste            | 109    | 58.3       |
| Coal                            | 4      | 2.2        |
| Finger                          | 35     | 18.8       |
| Worried due to teeth problem    |        |            |
| Yes                             | 60     | 32.2       |
| No                              | 128    | 67.8       |
| Eye irritation/ itchiness       |        |            |
| Yes                             | 122    | 65.6       |
| No                              | 66     | 34.4       |
| Use eye drops                   |        |            |
| Yes                             | 83     | 44.4       |
| No                              | 104    | 55.6       |
| Worried due to eye problems     |        |            |
| Yes                             | 44     | 23.4       |
| No                              | 144    | 76.6       |
irritation/itchiness problems. The elderly using eye drops are 44.4% and 23.4% elderly were found worried due to eye problems.

Discussion and conclusion

Nepal is in a stage of demographic transition [27] and a decline in fertility and improvement in mortality in older ages in the past decade has made the proportion of elderly to increase rapidly [28]. Since fertility is further declining in this decade [27], the elderly population is expected to increase rapidly in the coming days also. Moreover, with continuing advancements in medical science, longevity continues to increase and the population of the oldest old (that is those aged 80 years or more) is projected to increase at even faster rates.

This study older persons living in old age have oral and dental problems. 31.9% of older persons were worried due to dental problem and 64.9% older have eye problems. A community study of older adults from Nepal shows that 29.4% had eye problems and 20.4% had some dental problems [3]. A study from an old age home shows that older adults reporting some eye-related problems range from 4% [25] to 72.9% [20] in Nepal. In a study of elderly living in old age homes, Khanal et al., found poor oral health and unfilled treatment need was high [24]. Almost all the elderly (97%) required some sort of oral treatment [24].

This study shows quite a high number of older persons living in old age homes have eye problems but there seems that they are not aware of the problem. Similarly, many elderly are also not aware of dental problems and still, nearly 24% of the elderly use their finger to brush teeth. So Nepal needs more public health related dental and eye problem awareness programs to the elderly so that we can make our policy and it will imply for the healthy and happy longevity. Future, research needs to do more in-depth research focusing on the eye and oral health problem as well.

Contribution

SM collected the data, HNC developed the framework for the article, HNC & BRP analyzed the data, BRP developed the draft manuscript, HNC & SM supported to finalize it.

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Short Communication

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