Gynaecological Problems among Elderly Women Living in Old Age Homes of Kathmandu Valley

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ABSTRACT

Ageing is a natural process. The elderly population is increasing in Nepal.When there is presence of diseases, physical inability, and financial harshness, the elderly in Nepal have to face many problems. This study was thus conducted to assess the socio-economic milieu and spectrum of gynaecological problems among women living in old age homes of Kathmandu valley. For this a cross sectional study was conducted in 19 old age homes of three districts of Kathmandu valley. In this study, they were 234 particants. Privacy and confidentiality of information about the individual were strictly maintained. One-third of the aged women living in the old age homes belonged to 70-80 years.50.9% were from outside Kathmandu valley, while 49.1% were from the valley. The elderly were mostly not visited by their relatives and friends. Most of them (74.4%) were interested in praying than other activities. Out of the total Urine samples (190), 68.4% were normal, and 9.4% had a urinary tract infection. There were only 15.6% uterine prolapse cases. Out of total, 70.9% of Pap smear report was normal, while 25.1% had inflammatory smear. This study revealed that the old age homes have become a shelter for most of elderly women. The socio-economic condition was poor. Gynaecological probems like UTI, Urinary incontinence were not high but the prolapse cases (uterine proplase, cystocele, rectocele) were remarkably high. Cervical cancer screening through Pap smear showed negative results.

Keywords: Ageing, prolapse, geriatric population, pap smear, urinary incontinence.

1. INTRODUCTION

Ageing is a natural process and should be regarded as a normal, inevitable biological phenomenon(Park2013).According to World Population Prospects, in 2019, one in 11(9%) and by 2050, one-sixth of people (16%) will be over 65 years (UN 2020). Currently, an estimated 728 million persons aged 65 years or over in the world and the global population aged 65 years or over are expected to increase from 9.3 percent in 2020 to around 16.0 percent in 2050 (UN 2020).

In Nepal, life expectancy has increased from 63.9 years in 2000 to 71.7 years in 2020 (worldometer 2020). The elderly in Nepal have to face many physical, socio-economical, psychological problems, and many others (Chalise *et al.* 2020).Very little research is carried out focusing on issues of elderly people in Nepal (Chalise 2005). This study has therefore assessed

the socio-economic milieu and spectrum of gynaecological problems among older women living in old age homes of Kathmandu valley.

2. MATERIALS AND METHODS

2.1 Study Design

This cross-sectional study was conducted in 19 old age homes of three districts of Kathmandu valley. Among which thirteen were from Kathmandu, five from Lalitpur, and one from Bhaktapur. The study population comprised only women above 60 years of age. It was conducted from May 2012 to September 2012.

The participants were communicated in Nepali or Newari. The mentally disabled, those not available at the time of data collection, severely ill, unwilling to participate, and the unmarried older women (as vaginal examination is not done for this group)were excluded from the study. The sample size of the survey was determined using the following formula:

Population sample size (n) = $Z^2 pq/d^2$

where, z = level of confidence according to the standard normal distribution (for a level of confidence of 95%, z = 1.96)

p=prevalence of gynaecological problems =28%=0.28(Takkar et al., 2010),

d = tolerated margin of error=5%

Hence, the sample size (n) calculated=309.76.Considering 10% non-respondent, the sample size design for this research=n+10% of n=340.736≈341.

There were 354 women living in the old age homes we visited, out of which only 234 were the participants; 120 were unwilling to participate in this study. In each old age home, the study participants were included by a convenient sampling technique.

2.2 Data Collection Tools and Technique

For data collection, the tools used were pretested questionnaires and the instruments for a Gynaecological check-up. A semi-structured questionnaire was used, which comprised of different socio-demographic variables. Which was conducted in each of the old age homes. The interview lasted for 15-30 minutes for each woman and also sometimes more than 30 minutes. The interview was taken maintaining privacy. Only the interviewer and the participant were present at the time of the interview.

The instruments like Cusco's vaginal speculum, gloves and wooden spatula for a Pap smear used during the examination, were fully sterilized and used single time for each patient. After the vaginal examination, the instruments were disinfected and gloves packed in plastic, was handed over to old age homes staff for safe burial. During gynaecological check-up, Pap smear was done with a wooden spatula. The number was marked in each patient's slide and was dipped in ethyl alcohol for five minutes and was taken out and collected in a slide box. The collected slides were taken to the pathology lab, where those were examined. To collect the urine samples, sterilized urine bottles were collected from the lab and coded with numbers to identify the participant's sample. The collected urine was stored in a vaccine storage box with an icebox placed in every four corners. The samples were taken to the lab on the next day in the early morning hours.

2.3 Ethical Consideration

Ethical approval from the Institutional review committee of Kathmandu Medical College was taken. The objectives of the study were explained clearly to the authorized person of old age homes and the participants. Written informed consent was taken from those participants who can read and write, and for those who were unable to read and write, permission from old age home authority was taken. Information was taken only for study purposes only. No information was taken and published, which can break the anonymity of the respondents. Privacy and confidentiality of information about the individual were strictly maintained. In all aspects, the autonomy of the study participants was fully respected and ensured.

The data were analyzed using the Statistical Package for the Social Sciences software (SPSS) 20. Descriptive analysis was done. Frequency, mean, percentage, interquartile range was calculated.

3. RESULTS

3.1 Socio-demographic Profile

The total number of elderly participants in this study was 234. The median age of the elderly who participated was 75 years, and the interquartile range was 12.25. The majority in between 70-80 years were 78 (33.3%), and in the age group of 60-70 were 71 (30.3%). Out of total elderly participants, 50.9% belonged to outside Kathmandu valley, while 49.1% were from the valley. The majority of the participants (n=181, 77.4%) believed in Hinduism while (n=50) 21.4% in Christianity. Out of total participants,28.6 % were Brahmin while 24.4% were Newar and 21.8%

were Chettri, 14.1% were from combined janjatis. Among the participants living in old age homes 79% were illiterate while only 7.7% were literate. From the past occupational history 51.3%were engaged in agriculture, and 32.5% were housewives. In this study, 53.4% of participants were widows, 20.9% were married, 13.7% were separated, 9.8% were unmarried, and 2.1% were divorced. Most of the older women living in old age homes belonged to nuclear families (n=203, 87%), and only (n=31) 13% had joint families (Table1).

Table 1. Demographic profile of Elderly participants (n=234).

Variables	Frequency n(%)
Age	
60-70	71 (30.3)
71-80	78 (33.3)
81-90	75 (32.0)
90+	10 (4.4)
Address	
Inside valley	115 (49.1)
Outside valley	119 (50.9)
Religion	
Hindu	181 (77.4)
Christian	50 (21.4)
Buddhist	3 (1.2)
Ethnicity	
Brahmin	67 (28.6)
Chettri	51 (21.8)
Janajati	83 (35.6)
Others	33 (14.0)
Education	
Not literate	185 (79.0)
Literate	18 (7.7)
Primary	28 (11.9)
Above Primary	3(1.4)

Marital status	
Married	49 (21.0)
Unmarried	23 (9.8)
Widow	125(53.4)
Divorced	5 (2.1)
Separated	32 (13.7)
Past Occupation	
Agriculture	120 (51.3)
Housewife	76 (32.5)
Private service	9 (3.8)
Business	8 (3.4)
Others	21 (9.0)
Types of family	
Nuclear	203 (87)
Joint	31 (13)

3.2 Socio Economic Profile

The longest period of years spent in old age homes was 15 to 30 years by (n=14) 5.9%. The highest number of participants who lived for one to five years in those old age homes was 48.2%. 47.4% of the elderly participants did not have anyone to visit them while staying in old age homes, while 33.3% had monthly visitors. Regarding the source of economic support, 44% did not have any source, while 56% had some source of income from old age allowance, widow allowance, bank balance, home rent. A maximum number of older women living in old age homes spent their leisure time doing vajan-kirtan (45.7%) while 43% watched television. Elderly women living in old age homes were more interested in praying than any other activities (74.4%) while 19.2% were involved in meditation.

Regarding the living environment of old age homes where they lived, 85% were satisfied with the quality of food given while 13.7% complained of being dominated and the same percentage had felt the problems of theft of their goods. When the older women were asked about their perception of old age and its impact on their lives, 53% expressed old age had affected their day-to-day life, and 20.5% felt that their family members neglected them.53.8% of the older women living in old age homes felt satisfied with their lives, while 46.2% were unhappy (Table2).

Table 2. Socio-economic profile of the elderly women (n=234).

Socio-economic profile	Frequency n (%)
Source of economic support	
No	103 (44)
Yes	131(56)
From government (allowances)	100 (76.34)
Siblings	4 (3.05)
Self-earned	16 (12.21)
Children	2 (1.53)
Others	9 (6.87)
Leisure time spent in old age homes*	
Watching TV	101(43)
Talking with friends	59 (25)
Bhajan-kirtan	107 (45.7)
Reading holy books	1 (0.43)
Making batter for pooja	29 (12.4)
Listening to music or vajan	35 (15)
General activities*	
Prayers	174 (74.4)
Meditation	45 (19.2)
Yoga	31 (13.2)
Exercise	14 (6)
The living environment of old age home*	
Satisfy with the quality of food	199 (85.0)
The feeling of being dominated	32 (13.7)
Problem of theft	32 (13.7)
Satisfaction in Life	
Yes	126 (53.8)
No	108 (46.2)

We could not find elderly / disabled friendly infrastructure in these old age homes we visited according to our check list. Most of the old age homes were a 2-3 storey constructed building. The elderlies had difficulty to do up and down. Next was the distance of the toilet and hand washing facility. Except in 2 of the old age homes (with attached bathrooms), we observed that the distance between the living room of the elderlies and the toilet facility was noticeable. For this reason, the elderly used to skip night meals and drinking water. The number of hand washing facilities and toilet facilities was not according to the number of the old aged peple. Similarly, in most of the old age homes, the regular visiting doctors or staff nurses were lacking, but few of the old age homes had hired nursing staff for daily duty and visiting doctors weekly or monthly where the old aged peple could get health care and benefit.

3.3 Gynaecological Problems

In this study, the complain of urinary incontinence among the elderly population, were reported by 23% only. There were 21 uterine prolapsed cases among 134 cases seen. Of which 33.3% were categorized in grade I, 52.3% as grade II, 14.4 % as grade III. Similarly, 27.6% had cystocele and rectocele. (Table.3)

Table 3. Cases of uterine prolapse.

Cases seen among(n=134) elderly	Frequency n (%)
Uterine prolapse	**21 (15.6)**
Grade I	7 (33.3)
Grade II	11 (52.3)
Grade III	3 (14.4)
Cystocele	**37(27.6)**
Grade I	33(89.1)
Grade II	4(10.9)
Grade III	0
Rectocele	**37(27.6)**
Grade I	34(91.8)
Grade II	3(8.2)
Grade III	0

The urine routine report showed that 68.4% were normal, 9.4% of the sample had urine infection (i.e. pus cells were plenty).Out of 131 Pap smear reports, 70.9% were normal and 25.1% were inflammatory (Table 4).

Table 4. Reports of pap smear test(n= 131)

	A	B	C	D	E	F	G
Frequency(n)	93	33	1	1	1	1	1
Percent (%)	70.9	25.1	0.7	0.7	0.7	0.7	0.7

Note: A=Normal smear report, B= Inflammatory, C= Inflammatory with bacterial vaginosis

D= Inflammatory with reactive atypia, E= Atrophic without inflammation, F= Low grade squamous intraepithelial lesions, G= Atrophic with inflammation

4. DISCUSSION

Old age people are a vulnerable group and therefore need more attention and care. Globally population growth of older people is expected to continue growing more rapidly than any other group. The present study conducted at different old-age homes reveals various details regarding health and socio-economic aspects among the elderly.

In this study majority (33.3%) of the older women were between the age group of 70-80 years, and the median age of the respondents was 75 years. A similar result was found in a study done in old age homes in Kaski District and Kathmandu (Lamichhane 2017, Khanal 2018). A little different trend was seen in the study done in different cities in India (Zalavadiya 2018, Mishra 2016, Brahmbhatt 2019, Rao 2015, Patel 2015) where the mean age was slightly different as 72 years and the majority of women age was in between 60-70 years, but the common trend in all these studies was females outnumbered the males. Regarding educational status, most elderlies were illiterate (79%) in this study. A similar result was seen in the old age homes of Kaski (Lamichhane 2017), where all-female elderlies were illiterate, and the study of old age homes in Kathmandu and India also showed higher illiteracy (Khanal 2018 &Patel 2015). In the study done in South Gujrat, 36.7% were illiterate (Mishra 2016). Compare to ours, the study in old age homes in Gujarat showed the least illiteracy (23.87%) among females (Brahmbhatt 2019). The question raised here that whether illiteracy could be one of the major causes for the old aged people to settle down in old age homes because they could not speak for their rights. The highest number of participants who lived in those old age homes was 48.2% for 1-5 years. Similar findings were found in a study done in old age homes in Kathmandu and India (Khanal 2018, Mishra 2016, Rao 2015 and Patel 2015), but in a study done in old age homes in Gujrat, majorities were living there for 6-10 years (Brahmbhatt 2019). Most of the older women who were living in old age homes belonged to nuclear families. The contrast was seen in a study done at old age homes in Ahmedabad (Rao 2015), where most of them were from joint families.

Regarding the source of economic support, 56% did not have any source. Only 44% had some source of income from old age allowance, widow allowance, bank balance, home rent. The study of old age homes in Kaski and Kathmandu also showed that many old aged people do not have any source of income (Lamichhane 2017 & Khanal 2018). The same case was seen in a study done in India (Rao 2015). A maximum number of older women living in old age homes spent their leisure time doing vajan-kirtan and watching television. Similarly, in old age homes of Kaski, old aged people enjoy vajan kirtan and Yoga (Lamichhane 2017). Regarding the living environment of old age homes where they lived, most were satisfied with the quality of food given. This regularity was in contrast to the case of old age homes in Kaski (Lamichhane 2017). Only few elderlies were satisfied with the food provided in old age homes .

This study was focused on older women and their health problems. So regardless of other common geriatric problems, the study focused on gynaecological problems, which were quite similar to a hospital-based study in India (Takkar *et al.* 2010); most of the other studies reviewed showed the general geriatric health problems (Mishra 2016; Chalise 2020; Mishra 2018; Banker 2011).

Due to the lack of a proper database of the old age homes in the Kathmandu Valley, it was not easy to involve all old age homes to achieve the required sample size. This study could have been complete if more diagnostic technical tools like ultra sonography and urine culture were also done.

5. CONCLUSION

This study explored that the old age homes have become a shelter for most of elderly women and more than half of them were satisfied with their life. The socio-economic conditions was poor. Physical infrastructures and health facilities of existing old age homes were insufficient. Gynaecological probems like UTI, Urinary incontinence were not high but the prolapse cases (uterine proplase, cystocele, rectocele) were remarkably high. Cervical cancer screening through Pap smear showed negative results.

Physical infrastructures and facilities and regular health services in each old age home should be in accordance with standard guidelines, which need to be prepared by the government. Healthy activities like yoga and other recreational programs should be encouraged.

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