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## Factors Associated with Decision Making in Treatment of Health Problems among Elderly People in Dhital, Kaski District

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### ABSTRACT

*Self-determination of one's own treatment process is one of the major decision makings of an individual's life. It is even more crucial among elderly population as old age brings multiple physical and mental challenges to overall well-being of an individual. This paper aims to find the factors associated with decision making in treatment of health problems of the elderly people. The study was conducted in Dhital Village of Kaski District. Out of 198 elderly people with aged 60 years and above, 131 respondents (at 5% margin of error and 5% level of significance) were randomly selected using simple random sampling techniques. The information was collected by using semi-structured questionnaires through interview techniques. Chi-squared test was used to find the factors associated with the decision making in treatment. The decisions of more than two-third (69.5%) of the respondents were taken by their family members whereas almost one-third (30.5%) of the decisions were self-made. The proportion of the females who made their decision for treatment themselves is less than that of males. The results of the study showed that gender, literacy level, family type, money expensed for treatment, and walking distance to health centers were the major factors associated with decision making in treatment of health problems. It is believed that the findings of this study can help facilitate the better use of health facilities and add a significant contribution in the formulation of aging-friendly policies.*

**KEYWORDS:** Aging-friendly policies, decision making, elderly population, health facilities, treatment

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### INTRODUCTION

Ageing is universal; people above sixty are considered to have entered into the old age. The Senior Citizens Acts, 2006 in Nepal calls old citizens as ‘senior citizens’ and defines them as “people who are sixty years old and above” (Nepal Law Commission, 2006). Aging is a progressive decline process, both in physiological and mental functions, leading to a condition of more dependency with decreasing rate of survival and reproduction as well as family and social burden of care and responsibility (Shrestha & Steven, 2012). United Nations and Affairs (2019) claims that the fastest

projected increase of elderly population between years 2019 and 2050 is expected to occur on the least developed countries. It is also estimated that a number of people aged sixty years and above in Asia will surpass the number of children by the years 2040 (World Population Prospects, 2006). The elderly population in this region would be increasing from 18.1% in 1995 to 21.4% of the world elderly population in 2025 (Wibow, 2007). This increasing trend in the aging population of countries in the South-East Asia region (SEAR) is capable of transforming these countries from "mature societies" to "aging societies". In the context of Nepal, the Central Bureau of Statistics (2003) states that there were 1.5 million elderly inhabitants, which constituted 6.5 percent of the total population in one and half decades ago. During the years 1991-2001, the annual elderly population growth rate was 3.39 percent as against the national population growth rate of 2.3 percent (CBS, 2003 & 1995). According to the 2011 census, the percentage of elderly population has increased to 8.13 percent (CBS, 2014).

In Nepal, the young age population is declining and the working age population is increasing (UNFPA Nepal, 2017). The World Health Organization (WHO) has taken various initiatives to draw attention of the government as well as the common people to be responsible to the elderly people's need and problems. With this sense of responsibility, WHO launched the "International Year of Older Persons" on October 1, 1998, and announced that the theme of year 1999 World Health Day would be "active aging." The UN International Day of older persons has been an important opportunity for the elderly people to have a day to determine and organize to make their own society and increase awareness to face challenges of aging in the present world. It appeals to celebrate the day with the slogan like "The Journey to the Age of Equality" which highlights its importance given to the elderly people.

Illness treatment essentials and treatment seeking process in the old age in a society that has still the common practice of living in a joint family has multiple facets. Since ageing brings profound changes in all facets of human life, tackling the challenges it creates is not an easy task. As a human being becomes old, physical movements and ability to do something in action gets gradually less active. Abilities to withstand the stresses and strains of life are diminished by developing more ailments to heal and more time to recover. The elderly people are vulnerable of chronic diseases and degenerative problems such as joint pains, dementia (Bishta, 2006). Since they are in need of both physical and mental care, members of the family, relatives, and neighbors are also directly and indirectly get involved for their assistance, care, and support. Therefore, governments of developing countries are in need to take some effective measures to tackle the needs such as accommodation, health treatment, psychological, and other logistic supports for the ageing population. It has to be taken urgently otherwise it will possibly generate hazard to the health care of the elderly population in future in the world (UN, 2007).

An assessment of decision making capacity in medical treatment is difficult in our rural context. Since it is financially burdensome, and making a decision for treatment heavily depends mainly on the financial status of the ill person or the family. Besides that knowledge, information as well as the sense of responsibility of the family members in practical experience are other factors to influence in decision making. Alamet al. (2019) assert that decision making capacity for seeking treatment of illness, especially by elderly people is not age-or disease-related, nor does it depend on the decision itself. Rather it is related to cognition as well as emotion of the person in illness, and also the responsible member of the family. More than sixty percent of population in the rural parts of developing nations like India and Nepal, which face financial constraint as the commonest factor and lack of proper knowledge for the treatment process is also

remarkable one (Chakraborty, 2005). Similarly Waweruet al. (2003) concluded that the effects of ageing, low economic status, and inadequate access to health care contributed to the elderly poor health status. Lack of independent source of livelihood, feeling of loneliness, and lack of support from the near and dear ones, difficult transportations, etc. are some of the common restrains to the health seeking process and decision making capacity of the elderly people, particularly living in the countryside. Sex, educational level, economic status, and position in decision making were the factors associated with health care seeking behavior of elderly people (Dhungana, 2014). UNECE (2017) reports that maintaining strong community networks helps the domestic independence of older people in particular in the absence of family support. However, in the developing country like Nepal and in the rural background settlements where transportation to health centers are not easily accessible, the decision to take for treatment also gets adversely affected. Dhungana (2020) found that a female living alone with low economic status is highly suffered from depression with respect to males. Joshi (2020) asserts that elderly people are often on stress in life due to some unfulfilled expectations, physical inability to involve in social activities, abuse, living arrangements, ignored condition in decision making in the family, household size, and property ownership. Such things stand as prime factors to influence and determine the quality life along with decision making of elderly people.

As ageing brings profound changes in all facets of human life, making decisions on the need of treatment for health problems becomes harder for aged people. Seeking treatment for illness (except for the physiological process within body itself), is a nurtured behavior of human beings, it may differ individually, however. Furthermore, the members of the family, relatives, and neighbors are also directly/indirectly involved in decision making of the elderly population since most of the families in Nepali societies still practice joint family systems. This makes the treatment seeking process of senior citizens even more complicated to generalize. On top of it, limited access to health care facilities in the rural areas further add challenges to associate the factors affecting the decision makings with the type of decisions made on the treatment. Shaikh and Hatcher (2005) explored certain factors leading to the poor utilization of health care services such as poor economic status, lack of physical accessibility, cultural beliefs, and perceptions, low literacy level of mothers, and large family size (pp. 49-54). Studies (Abdulraheem, 2007; Adhikari & Rijal, 2014; Baral & Sapkota, 2018) have shown that some of the above mentioned factors also influence the health related decision made by the elderly people. The complexity associated with the determining factors along with the association derived between decision making and effective health care deliverance thus signify the need of assessment of the factors affecting decision making of elderly people. Such assessment would ultimately aid to strengthen current health care systems through rational aging-friendly policies. In this context, the main objective of this study is to find the factors associated with decision making intreatment of health problems of elderly people in the study area.

## **METHODS**

The descriptive cross-sectional study design was used as a primary method for this study. The multi-stage sampling technique was adopted for selecting the eligible elderly people. The study area for this research was Dhital (previously Village Development Committee, now Ward No. 6 of Machhapuchhre Rural Municipality) in Kaski District. Since taking decisions for getting health facilities is affected by various conditions such as geographic location, economic status, family type, and family member's position, the location for research was purposively selected because of two

main reasons; the one is that the number of aging population in the study area is increasing but caring members in the family is decreasing due to increased migrations (Speck, 2017). The second is that the area is remotely located despite being only 20 km away from the district headquarter. Besides, no other research is done regarding decision making in treatments of health problems of elderly people in the study area. There were 198 elderly people of age sixty years and above in randomly selected three wards (Ward No. 3, 4, 6, and 7). Out of 198 respondents, 131 (at 5% margin of error and 5% level of significance) elderly people were selected randomly for data collection. The semi-structured questionnaire was used for data collection. Before collecting the data, informed consents from the respondents were taken. Decision making in treatment of health problems was categorized into self- made and family members-made decisions. Finally, Chi-squared test was used to find the factors associated with decision making in treatment and care the elderly population. For this, decision making in treatment i.e. self and family members, was taken as dependent variable and other factors (gender, education, economic status, family type, living arrangement, money expensed for treatment, and walking distance to health center) were taken as independent variables.

## RESULTS

The results presented are based on the information collected from one hundred and thirty one elderly people aged sixty years and above. The analysis of the respondents' characteristics shows that the majority of them were female, illiterate, had medium economic status, nuclear family, and had their family members to spend money for treatment. In addition, the majority of the respondents' walking distance to reach to the local health center was at least one hour. Table 1 presents the results of the study as well as the factors associated with decision making for treatment based on chi-squared test.

**Table 1**

*Factors Associated with Decision Making in Treatment of Health Problems*

variables	Decision making in treatment of health problems			P-value
	Self No. (%)	Family Members No. (%)	Total No. (%)	
<b>Gender</b>				
Male	24(18.3)	31(23.7)	55 (42)	0.006*
Female	16(12.2)	60(45.8)	76(58)	
<b>Education</b>				
Literate	17(13)	13(9.9)	30(22.9)	0.0001*
Illiterate	23(17.6)	78(59.5)	101(77.1)	
<b>Economic Status</b>				
Lower Class	14(10.7)	20(15.3)	34(26)	0.117
Medium Class	26(19.8)	71(54.2)	97(74)	
<b>Types of Family</b>				
Nuclear	27(20.6)	40(30.5)	67(51.1)	0.013**
Joint	13(9.9)	51(38.9)	64(48.9)	
<b>Living Arrangement</b>				
Alone	9(6.9)	18(13.7)	27(20.6)	0.723
With family members	31(23.7)	73(55.7)	104(79.4)	
<b>Money expensed for treatment</b>				

Self	35(26.7)	9(6.9)	44(33.6)	0.0001*
Family members	5(3.8)	82(62.6)	87(66.4)	
<b>Walking distance to health center</b>				
Less than 1 hour	6(4.5)	34(26)	40(30.5)	0.010**
At least one hour	34(26)	57(43.5)	91(69.5)	

\* Shows P-values significant at 1% level of significance

\*\* Shows P-values significant at 5% level of significance

It is found that the proportion of the females who make their own decisions for treatment is less than that of males. This finding is significant at one percent level of significance ( $P < 0.01$ ). So, there is an association between gender and decision making in treatment of health problems. The proportion of literate elderly people who make their decision for treatment themselves as well as of those whose decisions are made by their family members is found to be less than that of the illiterate elderly people. It is also significant at one percent level of significance ( $P < 0.01$ ). Further, the proportion of elderly people with lower class economic status shows that a low level of income also does have an important role in influencing the power of making decision in treatment. The sounder is the economic condition, the higher is the level of self-decision making for health treatment service. Contrary to this, the elderly people living in solitary arrangement is less in managing their decision making in treatment themselves. The elderly people living in such conditions are not able to do self-decision confidently in comparison to the aged people who are living with other family members or in joint family. Likewise old people with relatively low income are also less strong in self-decision making for their own treatment in comparison to old ones with medium income level even if it is not significant. The proportion of elderly people from the joint family who make their decision for treatment themselves is less than that of elderly people from the nuclear family. It is also significant at five percent level of significance ( $P < 0.05$ ). The proportion of elderly people spending money for treatment themselves, who make the decisions themselves is higher than that of the elderly people expensing money for treatment by their family members. It is significant at one percent level of significance ( $P < 0.01$ ). Further, the proportion of the elderly taking less than one hour to walk to the health center and making their decision in treatment themselves is less than that of the elderly people taking at least one hour walking distance to reach the health center. It is significant at five percent level of significance ( $P < 0.05$ ).

Therefore, it is found that there is a close and influential association of gender, education, types of family, money expensed for treatment, and walking distance to the health center with the treatment seeking process.

## DISCUSSION

The analysis of the findings specifically concerned with the study area reveal that in both nuclear and joint family types, decisions on health care are made by the respondent's family members. Although both genders are supported by their family members in taking the decisions, more influence can be seen on the female populations' decisions. It is also interesting to note that despite being illiterate, some people make their own decisions about health care. These observations can be vital intervening policy formulations and effective utilizations of health facilities in the study area.

Comparisons made with other studies conducted in different regions of Nepal show both similar and contrasting results. The study in Bharatpur Municipality by Baral et al. (2018) concluded that the family type and the accessibility (in terms of availability

and distance) to health facility were not found statistically significant ( $p < 0.05$ ) in regards to the decision making process; the results are in contrast to the findings of this study. The contradictory results occur because of the reasons such as different educational status of respondent/family members, awareness campaigning programs, and a better provision of transport and health care facilities in Bharatpur Municipality as compared to that of Machhapuchhre Rural Municipality.

In a similar study done among elderly people of Dharan, Adhikari and Rijal (2014) showed a significant association ( $p < 0.001$ ) of socio-economic status of the respondents with the use of health care services. Although this study at Dhital shows no significant association of decision making process with the economic status as seen in Dharan, here, the money spent in treatment is found to be significantly associated ( $p < 0.01$ ) to the decisions made. Similarly, the results from this study show that the literary condition of elderly people about health care facilities is found to be significantly associated as shown by Adhikari and Rijal (2014). However, the significant level varies in both studies.

The study by Adhikari et al. (2018) on factors associated with the quality of life of senior citizens in Kathmandu indicates the contrasting result from this study in relation to the health care facilities. Since their study is related to access of the quality of life in the old age, and its dependency is directly related to the economic, educational, and other social and psychological factors of the locality, it does not support finding of this research in Dhital. The difference seems due the privileged conditions such as economic, educational, and other social and individual family facilities, which add the quality of life and decision making power of the people. Of the people living in Kathmandu and such factors in comparison to the people of the study area, the difference is not unusual.

The findings of Moye and Marson (2007) support the present research finding particularly in the area of financial condition of the family or the elderly individuals, their information about the treatment procedures. The declarative power of the people in the old age is found decisive in their findings and it is related much to the elderly respondents of the research area. Coulter et al. (2008) based on European patients on the process of decision making for their own care found that health literacy is the major power to enhancing the involvement of patients in their health treatment and care. This finding supports the present research to some extent, particularly in the area of respondent's knowledge in the treatment process. This study has the result that those elderly people who do not have good knowledge about the facilities and availability of the health care are less strong in their decision making.

Therefore, this study as well as other studies related to this subject to a great extent provide clues that strategies to improve and strengthen patient engagement in better decision making should be focused on improving health literacy and economic status so that the elderly people do have less dependency to the other family members, relatives or social agents. When the patients are more active in their decision, do have knowledge and understanding about where, when, and how treatment should be taken and followed, it leads to better outcomes.

## CONCLUSION

Decisions made on treatments by the elderly people of Dhital is found to have a close and influential association with gender, education, types of family, money expended for treatment, and walking distance to the health center. The factors are found more or less similar with the study areas with almost similar characteristics. However, this study also shows that behavioral aspects differentiated by each factor also play a

significant role in decision making in treatment. For instance, more females are influenced by family members on their decisions than the male population. In that case, health awareness programs targeted to the female population could help them be independent on their health related decisions. Since these behavioral aspects vary as per characterizing population of the area, detailed assessment of elderly needs should be taken into consideration for the effective strategy formation. It is recommended that responsible authorities must make strategies for informing, empowering, and facilitating elderly people. More responsibly, health care delivery systems should be prioritized in policy agenda and actions implementation.

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