Psycho-Social Problems among Elderly Residing in Chitwan

Submitted To

Nepal Health Research Council

Health Research Grant

Ramsah Path, Kathmandu

Nepal, 2023

Submitted By

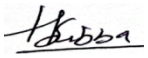
Assoc. Prof. Sunita Poudyal, Chitwan Medical College (Principal Investigator)
Prof. Dr. Kalpana Sharma, Chitwan Medical College (Co-Investigator)
Assoc. Prof. Hem Kumari Subba, Chitwan Medical College (Co-Investigator)
Prof. Ramesh Subba, Chitwan Medical College (Co-investigator)

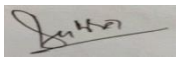
SELF-DECLERATION

We, hereby declare that this research entitled "Psycho-Social Problems among Elderly Residing in Chitwan**"** is our original work. Report contains no materials previously published or written by any other person for any purposes. In case of using such material, prior consent has been taken from the concerned authors/ publishers and has been acknowledge in the report accordingly. Further, this research report has not been submitted any published elsewhere for any other purposes. We declared that the intellectual content of this research paper is our own. We have no objection for the availability and use of this paper for the purpose of scholarly research by any other researchers.

Assoc. Prof. Sunita Poudyal, (Principal Investigator) 

Prof. Dr. Kalpana Sharma (Co-Investigator) 

Assoc. Prof. Hem Kumari Subba (Co-Investigator) 

Prof. Ramesh Subba (Co-Investigator) 

Date: 15/06/2023

ABSTRACT

Older people are vulnerable to various diseases that have profound impact on overall health and their quality of life and higher use of health services. Ageing is a period when person is withdrawn from daily activities especially their work, and feel unwanted and burden to their family. As a result, they suffer from different psycho-social problems such as depression, anxiety, insomnia, dementia, and loneliness etc. These psychosocial problems can also have an impact on physical health and disability. There is dearth of information in our country regarding the psychosocial problems of elderly so there is need to address the issues based on evidence. Hence, this study aimed to find out the psycho-social problems among elderly people residing in Bharatpur, Chitwan

A cross-sectional study was adopted and 388 elderly residing in different wards of Bharatpur Metropolitan city were selected using probability simple random sampling technique. Elderly aged 65 years and above were included in the study. Data were collected using interview schedule containing geriatric depression scale-15, Geriatric anxiety scale-10, University of California Loss Angels Loneliness Scale (UCLA-20), and Mini-Cog Test. Obtained data were analysed in SPSS version 20 for windows using descriptive and inferential statistics. Chi-square test was applied to measure the association between psychosocial problems and selected variables.

Findings of the study revealed that the mean age (± SD) of the elderly was 72.92 (±7.12) years. Almost all (93.6%) elderly had full functioning of activity of daily living and two third (66.5%) had other co-morbid conditions. More than two third (67.0%) of the elderly had depression, 60.3% had anxiety, 53.6% had moderate to high level loneliness, 47.2% had insomnia, and 33.3% had dementia. Age, functional dependency, sex, co-morbidity, financial dependence, education, and occupation are significantly associated with the psychosocial problems in the elderly.

In conclusion, psychosocial problems are common among elderly residing in Bharatpur, Chitwan. Hence, there is need to develop and implement health care strategy by local health care planner to prevent, treat and manage the psychosocial problems among this risk groups. Further, health care providers working in geriatric problems or psychosocial health need to conduct regular screening programs for the early diagnosis and treatment of these problems.

ACKNOWLEDGEMENTS

It is great pleasure and delight to express sincere and deepest gratitude to all those individuals who helped the researchers during the study for the completion of the research with their valuable advices, suggestions, motivation, recommendation, and inspiration.

First of all, researchers would like to express our deep gratitude to Nepal Health Research Council, Research Grant Project for providing us a golden opportunity to conduct this research study. Likewise, researchers would like to express our sincere appreciation to Chitwan Medical College for administrative support, encouragement and kind co-operation during study period. Researchers are also grateful to Chitwan Medical College Institutional Review Committee (CMC-IRC) for ethical approval to conduct the proposed study. Similarly, researchers' special thanks go to Chairman and staffs of respective wards of Bharatpur Municipality of Chitwan for their respective permission and support to conduct this research work.

Last but not the least, researchers would like to express our special thanks to all the participants, without their co-operation this study would not have been completed.

Principal Investigators and Co-investigators

TABLE OF CONTENTS

LISTS OF TABLES

CHAPTER I

INTRODUCTION

1.1 Background of the Study

The ageing population is increasing dramatically around the world, including in Nepal. In the last few decades, the number of elderly people in the world has been consistently and proportionally increasing. In 2019, the number of people aged 60 years and older was 1 billion and will increase to 1.4 billion by 2030 and 2.1 billion by 2050.[1] The rate of growth of the elderly in developing countries is much higher than that of developed countries[2] including Nepal. According to the 2011 census of Nepal, there were 2.1 million elderly inhabitants, which constitute 8.1 percent of the total population in the country.[3]

As people get older, there is increase in the number of risk factors and they face many problems such as diminished mobility, persistent pain, age related fragility, or other health issues, and unpleasant life experiences such as bereavement and financial dependency etc. These all may lead to isolation, loneliness, or emotional distress.[4] They experience psychosocial problems such as stress, anxiety, depression, social isolation, poor relationships, financial constraints, and a lack of social networks, which increase the risk of hypertension, stroke, and cardiovascular disease among the elderly.[5,6] Elderly people are at risk of developing chronic or debilitating somatic or physical conditions such as cancer, diabetes, arthritis, cardiovascular and/or respiratory diseases, and hearing loss, and all these conditions put the elderly at risk of loneliness and depression.[7,8,9,10]

The prevalence of physical and psychological health problems is high among the elderly.[11] Dementia and depression are the most common disorders, which affect approximately 5% and 7% of the world's older population, respectively. Dementia is the seventh leading cause of death among all diseases and one of the major causes of disability and dependency among older people globally.[1] Similarly, anxiety disorders affect 3.8% of the older population and around a quarter of deaths from self-harm.[4] In India, the overall prevalence of psychosocial problems was 45.6% in which 34.8%, had psychosocial disorders followed by functional impairment (12.4%), sad attitude towards life (13.4%), and low social adjustment (8.3%).[12]

Elderly people residing in Nepal are not far from psychosocial and physical health problems. The prevalence of depressive and anxiety symptoms ranged from 4.4% (in community) to 53.2% (in hospital), and 21.7% to 32.3% respectively.[13] Singh and colleges reported that 75.65% of senior citizens in geriatric homes had dementia

symptoms.[14] Further, evidence[15,16] showed that the severe psychosocial problems are higher in institutionalized elderly compared to elderly living in a family.

1.2 Justification of the Study

Aging is one of the greatest social and economic challenges of the twenty-first century.[17] Globally, increasing levels of chronic illness and diminished wellbeing become major health challenges in the old.[18] Research evidences showed that older people suffer from different psycho-social problems such as depression, dementia, agitation, anxiety, loneliness, social exclusion and burden to their family which have subsequent effects on their physical health.[19,20,21] Common physical problems reported were hypertension, stroke, and cardiovascular diseases [22,23] and higher levels of disability.[24]

Nepal is experiencing a rapid increase in the number of elderly population. The traditional family support is breaking down as family members are migrating out of country for the good opportunity, and the elderly people are left at home. Psychosocial problems are common among the elderly but these conditions are usually under diagnosed and undertreated due to their complex and multi factorial nature. In addition, there is a dearth of information regarding these issues in our context. Hence, this study aimed to find out the psycho-social problems among elderly people residing in Bharatpur, Chitwan which help to bridge the evidence gap for the successful implementation of program for the elderly regarding the issues.

1.3 Research Question

What was the prevalence of psychosocial problems among elderly people residing in Bharatpur, Chitwan?

1.4 Research Objective

1.4.1 General Objective

The general objective of the study was to find out the psycho-social problems among elderly people residing in Bharatpur, Chitwan

1.4.2 Specific Objectives

Specific objectives were:

- To find out the proportion of psychosocial problems among elderly people
- To measure the association between psychosocial problems and selected variables

1.5 Research Variables

1.5.1 Dependent Variable: Psychosocial problems (anxiety, depression, insomnia, dementia, and loneliness)

1.5.2 Independent Variables: Socio-demographic characteristics (age, sex, ethnicity, religion, educational status, marital status, family type, occupation), income sources (pension, old age allowance), personal habit (history of smoking and alcohol), history of co-morbidity, and activities of daily living (ADLs).

1.6 Operational Definitions

Psycho-social problems: It referred to emotional feelings or thoughts that an elderly people has reported at a given point in time or over a given time period. It included anxiety, depression, insomnia, loneliness, and dementia. It was measured using different tools such as Geriatric Anxiety Scale (GAS-10),[25] Geriatric Depression Scale (GDS),[26] Athens Insomnia Scale (AIS),[27] the revised UCLA Loneliness Scale[28] and Mini-Cog Test [29] respectively.

Depression: It referred to emotional feelings or thoughts that an individual experiences at a given point in time or over a given time period i.e. over the past week. It was measured by using Geriatric Depression Scale-15 (GDS-15)[26] containing 15 items. Each item rated to 0 to 1 score. Total score were calculated and further classified as: normal (0 to 4), mild depression (5-8); moderate depression (9-11) and severe depression (12-15). It was further categorized into 2 categories for the further analysis depression absent (0-4) and present (>4).

Anxiety: It referred to emotional feelings fear, dread, and uneasiness experienced by an elderly at a given point in time or over a given time period i.e. during the past week, including today**.** It was measured by Geriatric Anxiety Scale GAS-10)[25], containing 10 items, ranged from 0 to 3 (0- Not at all, 1- Sometimes, 2- Most of the time and 3- All of the time). The total score was calculated and classified as: Minimal anxiety (≤6); Mild (7-9); Moderate (10-12); and Severe anxiety (>12). It was further classified into 2 categories for the analysis as no anxiety symptom (≤6) and anxiety symptom (>6).

Insomnia: It referred to sleep difficulty among elderly people which was assessed in terms of sleep induction, awakening during the night, final awakening earlier than desired, total sleep duration, overall quality of sleep, sense of well-being during the day, functioning (physical and mental during the day), sleepiness during the day by using Anthens Insomnia Scale (AIS).[27] Each item rated to 0 to 3. The status of insomnia was assessed by calculating the score obtained from AIS scale and divided into 2 categories as: Insomnia (≥6) and Normal or Insomnia absent (<6).

Loneliness: It referred to subjective feelings of loneliness and isolation by elderly people which was measured by Revised UCLA Loneliness Scale[28] containing 20-items. Each item ranged from 1 (Never) to 4 (Often). The total score of loneliness was calculated and categorized as: Low (20-34), moderate (35-49), moderately high (50-64) and high (65-80). Further analysis, 2 categories were formed as low (20-34) and moderate to high (≥35).

Dementia: It referred to cognitive impairment (impaired ability to remember, think, or make decisions) which was measured by Mini-Cog Test in terms of ability to recall three words and draw a clock.[29] The recall test is graded on a scale of 0 to 3 and clock drawing test (CDT) scored 0 or 2. The total score was calculated and classified as score of 0-2 dementia and score of 3-5 No dementia.

Elderly: It referred to those people who were 65 years of age or older and reside in Bharatpur municipality of Chitwan district.

Activity of Daily Living: It referred to routine activities such as eating, bathing, dressing, toileting, transferring and continence. It was measured by Katz Index of Independence in Activities of Daily Living,[30] containing 6 items. Each item rated as 0 to 1 score with possible score 6. Total score was calculated and further classified as full functioning group (elderly who performed all routine activities were classified as full functioning group i.e. 6 score) and impaired group (those who were depended on caregivers/family members for any or all those tasks were classified as impaired group i.e. <6 score).

Ethnicity: Ethnicity referred to the "state of belonging to a social group with regard to local cultural tradition and classified into Dalit, Disadvantaged Janajatis, Relatively Advantaged Janajatis and Upper Caste. In this study, Dalit ethnicity includes Kami (Bishwokarma), Disadvantaged Janajatis refers to those people, who belonged to the ethnicities of Magar, Tamang, Rai, Limbu, and Tharu, Relatively Advantaged Janajatis included to those people of the ethnicities of Newar, Thakali, and Gurung and Upper Caste included those people who belonged to the ethnicities of Brahmin, Chhetri, and Thakuri.

Smoking status: Elderly were classified as never smoker (who had never smoked) ex-smoker (who ever smoked any tobacco products in his or her lifetime but has not smoked in the last 28 days) and current smoker (who smoked currently any tobacco products such as cigarettes, pipes or cigars).

Alcohol habit: Elderly were categorized as lifetime abstainer (never consumed alcohol in their lifetime), former drinker (used to drink alcohol but have abstained for the last 12 months), current drinker (consumed alcohol at least once during the last 12 months and who currently drink).

CHAPTER II

LITERATURE REVIEW

2.1 Introduction

This chapter deals with the review of related literature. Electronic sites such as PubMed, Google, Google Scholar, and Research Gate have been searched to collect the latest related literature on psychosocial problems among the elderly. The purpose of the literature review was to develop a thorough understanding and insight into the previous research works that related to the present study, so it helps to gain deeper insight about the subject matter and research methodology.

2.2 Literature Review

Psychosocial disorders are one of the major problems affecting the quality of life of the elderly. Over 20% of adults over the age of 60 had mental and neurological impairments, accounting for 6.6% of all disabilities.[4] The prevalence of mental illnesses was found to be significantly higher for people over the age of 75.[31] Globally, the most common psychosocial problems among older adults are dementia (5%) and depression (7%).[4] In China, the prevalence of anxiety and depression was 32.74% and 37.34%, respectively.[32] In Ethiopia, a systematic review and meta-analysis found that the overall prevalence of depression among older adults was 41.85%.[33] Similarly, in Mysore India, anxiety and insomnia were detected in 3.4% of the elderly (males 2.4% and females 4.1%), followed by somatic complaints 2.9%, social dysfunction 1.5% and severe depression 1.1%.[31]

Sisodia, Kumar and Kumar (2020) conducted a study on prevalence of various psychosocial problems of geriatric population in urban area of district-Hapur, India reported that the overall psychosocial problems were found in 45.6% of people. This includes 34.8% with psychosocial disorders, 12.4% with functional dependency, 13.4% with a depressed attitude toward life, and 8.3% with poor social adjustment. Further, study reported that females had greater psychological issues than males, and significantly associated with functional dependency, social adjustment, and attitude toward life.[12] Similarly Boralingaiah et al. (2012) in India revealed that elderly women in urban area had more psychological distress and somewhat higher functional impairment.[31]

In context of Nepal, the overall prevalence of mental health problems among older adults was 60.91%. Likewise, elderly people without land certificates had more than twice as many mental health issues as those

who did. Elderly who did not participate in various social and religious organizations had twice as many mental health problems as those who involved.[34] The prevalence of depression varied from 25.5% to 60.6% in the community, 53.2% to 57.1% in hospital settings, and 17.3% to 89.1% in aged-care facilities.[13] A cross sectional community survey in the Kavre district showed that the crude prevalence of geriatric depression was 56.0% and the prevalence was higher among females than among males (59.2% vs. 52.2%), age above 75 years (66.9% vs. 51.3%) and among those from rural areas compared to those from urban areas (63.5% vs. 48.4%).[35] Moreover, religion, a lack of physical activity, bodily pain, co-morbidities,[32] a BMI of less than 21.3, poor vision, and not having somebody to talk to about personal issues were all shown to be significant predictors of depression.[36]

A systemic review on prevalence of mental disorders among older people in Nepal showed that the prevalence of anxiety symptoms ranged between 21.7% and 32.3%.[13] Poudel and Ojha (2019) conducted a study on level of anxiety among the elderly adults at Western Regional Hospital, Pokhara, found an overall 68% had anxiety where the highest 65.7% of elderly had moderate anxiety and 2.2% had high anxiety.[37] Similarly, being female, being unemployed, not engaging in physical activity, having physical pain, and co-morbidities,[32,33,36] having a low level of education, having a BMI under 21.3, having poor dental health, not participating in social activities, and having no one to talk to about personal issues were all significant predictors of anxiety. While utilizing help and receiving subjective social support were important protective factors.[32]

Globally, dementia is the seventh leading cause of death and one of the major causes of disability and dependency among the elderly.[38] Dementia cases are expected to increase from 57.4 million in 2019 to 152.8 million by 2050. There were more women with dementia than men with dementia in 2019 (female-to-male ratio of 1·69) and this trend will continue to 2050 (female-to-male ratio of 1·67). Likewise, there was geographical variation across the countries and regions.[39] In Europe, the crude prevalence rates of dementia ranged from 5.9% to 9.4% among the elderly over the age of 65.[40] A study of Nepal also showed that prevalence of dementia was 11.4%.[41] Similarly, another study conducted among geriatric patients in outpatient department of Nepal Medical College Teaching Hospital, Kathmandu showed 26.31% of patients had mild dementia, 45.26% had moderate and 28.42% had severe dementia.[42] Old age, male gender, family history of dementia,[43] illiteracy, lack of physical activity and use of tobacco[44] are the risk factors for dementia.

The prevalence of loneliness among community-dwelling older adults differs between countries. According to national surveys, 7.68-9.88% of older individuals (aged 70 years) felt lonely in Sweden[45] 64% in Indonesia[46] and 11.6% of home-dwelling older persons (aged ≥ 65 years) often felt lonely in Norway.[47] Similarly, the prevalence of loneliness in community-dwelling older adults in Nepal was high where 38.7% (moderate level of loneliness) and 16.9% (severe level of loneliness).[48] Being female, lived with family, had fewer children, had a

poor health status, a poor oral status, no hearing problems, and had depression,[46] poor health status and more chronic diseases,[49] had poor cognitive function,[46,50] were predictors of loneliness in older adults. In addition, activities of daily living, [51, 46] cognitive functions, and depression were significantly associated with loneliness among older adults.[46]

Insomnia is another common sleep disorder among elderly. A study of Poland found that more than half of the respondents (52.76%) had insomnia.[52] In Nepal, a study conducted in Banepa municipality found the prevalence of insomnia was 71.1% in the older population and advanced age, not working, financially dependent on others, presence of co-morbid disease and taking regular medicine at present were factors associated with insomnia.[53] Chhantyal and Timalsina (2017) revealed 40.6% of the elderly had insomnia in community of Lalitpur.[54] Similarly, another study of Nepal showed insomnia was prevalent in 56.4% of older adults with night awakenings as the most common symptom.[55]

2.3 Summary of Reviewed Literature

The prevalence of psychosocial problems rises with increasing age. Unemployment before retirement age, lacking physical activity, having physical pain, co-morbidities, low education level, family history, no social support, and no social participation are all risk factors for psychosocial problems. The occurrence of psychosocial difficulties among the elderly has a negative impact on both physical and mental health, lowering an individual's quality of life. Therefore, assessment of psychosocial problems is needed for raising community awareness of mental health, encouraging social participation, and providing supportive counselling for combating psychosocial problems among the elderly, which ultimately improves the quality of life among older adults. Limited studies are conducted in Nepal and they address the anxiety, depression and dementia separately and none of the studies included all psychosocial problems in detail. Hence, this study bridges the gap in the literatures.

CHAPTER III

RESEARCH METHODOLOGY

3.1 Research Design

A cross-sectional survey was carried out to find out about psychosocial problems among elderly people residing in Chitwan. A cross-sectional study is a type of observational research that analyses data on variables collected at one given point in time across a sample population. It measures the prevalence and is therefore suitable for examining psychosocial problems among the elderly and is useful for planning health care services. Further, outcomes and exposure data are assessed at the same time; hence, there was no sample mortality, and our objectives were easily met.

3.2 Study Setting

This study was conducted in Chitwan district, which consists of seven municipalities. Out of which one is a metropolitan city, five are urban municipalities, and one is a rural municipality. Bharatpur metropolitan city is one of the fastest-growing cities in Nepal, consisting of 29 wards. People from different geographical areas shifted here for different purposes, so we found a mixture of people from different districts and cultures. Hence, this site was appropriate to assess the psychosocial problems among the elderly.

3.3 Study Population

Population of the study was 65 years and older people who were residing in Bharatpur Metropolitan City of Chitwan, Nepal.

3.4 Inclusion and Exclusion Criteria

This study included those people who were 65 years of age or older, willing to participate in the study, able to give consent and residing in Bharatpur, Chitwan. Those elderly people who were already diagnosed with mental illness and/or were chronically ill and who were unable to communicate were excluded from the study.

3.5 Sample Size and Sampling Technique

3.5.1 Sample Size

A needed sample size was calculated considering a confidence level of 95%, an allowable error of 5%, and 45.6% prevalence of various psycho-social problems among the elderly (Sisodia et al., 2020). The following formula was used to calculate the desired sample.

Sample Size (n_0) = $(z)^2pq/e^2$

$n_0 = (1.96)^2 x(0.45)(0.55)/(0.05)^2$

$n_0 = 380.31 = 381$

Where p is estimated prevalence rate=45.6%, d = 5% allowable error and z= confidence level standard value 1.96 at 5% level of significant, q=1-0.45=0.55

Now, there were total 4570 elderly people, where in ward no. 5 =938, ward no. 10=1707, ward no. 12=961 and ward no. 27=964[56]

For definite population, where total population (N) =4570

$$n = \frac{n_0}{1 + \frac{(n_{0-1})}{N}}$$

Sample (n) = 352

Considering 10% non-response error=35.2=≈36

Total required sample=352+36=388

388 Sample was chosen proportionately from each Ward.

From Ward No 5=938/4570x388=79.6=80

From Ward No 10 = 1707/4570x388=144.9=145

From Ward No 12 = 961/4570x388=81.5=81

From Ward No 27 = 964/4570x388=81.8=82

3.5.2 Sampling Technique

Two-stage sampling techniques were applied. Firstly, out of 29 wards in Bharatpur Metropolitan City, 4 wards were selected randomly (ward no 5, 10, 12, and 27). Secondly, a list of the elderly residing in those selected

wards was obtained. Thirdly, the desired sample was selected proportionately using simple random sampling techniques with random table method.

3.6 Research Instrument

For this study, structured interview schedule was used to collect socio-demographic information, behavior and lifestyle characteristics (alcohol consumption, smoking habit) and health related information. Physical measurement was done for height, weight, and blood pressure. Katz Index of Independence in Activities of Daily Living[30] was used to assess the participant's ability to perform activities of daily living independently. The Index ranks adequacy of performance in the six functions of bathing, dressing, toileting, transferring, continence, and feeding. A score of 4 to 6 indicates full function, 2.1 to 4 indicate moderate impairment, and 2 or less indicates severe functional impairment. For the assessment of psycho-social problems among elderly people five types of tools were used.

Geriatric Depression Scale-15 (GDS-15)[26] was used to measure the depression among elderly. GDS-15 is a valid and reliable screening tool for geriatric depression, the Cronbach alpha coefficient was0.920.[57] The Short Form GDS scale consist of 15 questions in which participants were asked to respond by answering yes or no in reference to how they felt over the past week. Of the 15 items, 10 indicated the presence of depression when answered positively, while the rest (question numbers 1, 5, 7, 11, 13) indicated depression when answered negatively. Scores of 0-4 are considered normal, 5-8 indicate mild depression; 9-11 indicate moderate depression; and 12-15 indicate severe depression.

Geriatric Anxiety Scale –10 Item versions (GAS-10) was used to measure the anxiety in elderly people. The Geriatric Anxiety Scale is a self-report measure of anxiety that was designed to address unique issues associated with anxiety assessment in older adults and GAS-10 had strong psychometric properties among older adults.[25] GAS-10 is 10 items scale ranged from 0 to 3 (0- Not at all, 1- Sometimes, 2- Most of the time and 3- All of the time). Items 1 through 10 were summed to provide a total score.

Revised UCLA Loneliness Scale [28] was used to measure the loneliness and social isolation among elderly. It was highly reliable, both in terms of internal consistency (coefficient alpha = .96) and test-retest reliability (r = .73). There were total 20-items including 10 positively worded and 10 negatively worded items designed to measure one's subjective feelings of loneliness as well as feelings of social isolation. Each item on a scale ranged from 1 (never) to 4 (often).The range of potential scores was 20 to 80. Negative items scores were reversed.

Anthens Insomnia Scale (AIS) [27] was used to find out the prevalence of insomnia. The Cronbach's alpha value was 0. 90. It consisted of eight sleep factors such as sleep induction, awakening during the night, final

awakening earlier than desired, total sleep duration, overall quality of sleep, sense of well-being during the day, functioning (physical and mental during the day) and sleepiness during the day. Each item was rated on a 0-3 scale. Total score was calculated and further classified into two groups as insomnia (6 or more than 6) and no insomnia group (0 to 6).

Mini-Cog Test**,** a brief cognitive test [29] was used to assess dementia which assesses the older person's ability to recall three words and draw a clock. The recall test was graded on a scale of 0 to 3 and Clock Drawing Test (CDT) scored 0 or 2. A score of 0-2 indicated a positive dementia screen and score of 3-5 indicates a negative dementia screening.

Content validity of the instruments was established by consulting subject expert and extensive review of the literature. Anthropometric and laboratory measurement was taken using standard protocol. Standard tools were used for the data collection. Pre-testing of the instrument was done among elderly of similar characteristics residing in ward number 7 and they were excluded from the final study. Reliability of the instrument was tested using data obtained from pre-test. Cronbach's alpha value >0.75 was considered as valid instrument for the final study.

3.7 Data Collection Procedure

This study was carried out over six-month periods, where data were collected in two months period from 15th March 2023 to 15th May 2023.After obtaining data collection permission, researchers with enumerators went to selected wards. Selected participants were identified with the help of social workers/community health volunteers. Objective of the study was explained to them and written informed consent was obtained from them. Those participate who gave consent were recruited in the study. Information related to socio-demographic, health related information and psychosocial problems were collected from the participants through face to face interview method using Nepalese version instruments. Each interview was taken 40-45 minutes and interview was done in separate room or corner of house with convenience of participants.

3.8 Data Management and Statistical Analysis

The collected filled forms were checked daily for completeness and accuracy. Some information was coded and collected information from participants was entered into Epi data 3.1 and exported to IBM SPSS (Statistical Package for Social Sciences) version 20 for window. The data were analyzed in terms of descriptive statistics such as frequency percentage, mean, standard deviation for the categorical data. Inferential statistics i.e. Chi-square test was applied to find out the association between psychosocial problems of elderly and selected variables.

3.9 Ethical and Safety Issues

Ethical clearance was taken from Chitwan Medical College, Institutional Review Committee (CMC-IRC, Ref no- CMC-IRC/079/080/095). Data collection permission was obtained from each ward office of 5, 7, 10 and 12, Bharatpur Municipality. Written Informed consent was taken from each respondent prior to data collection. There was no any type of physical and psychological harm to the participants during research. Dignity was maintained by giving option to discontinue from the research study at any time without any penalty. Privacy was maintained during data collection by interviewing them in room or corner of house. Confidentiality was maintained by not disclosing the information to others and using code number instead of name of participants.

CHAPTER IV

FINDINGS OF STUDY

This chapter deals with the analysis and interpretation of findings from the obtained data concerning psychosocial problem among 388 elderly residing in Bharatpur, Chitwan. All the data obtained were analyzed in terms of the objectives of the study. Findings are presented in tables and highlights of the table are described in the text.

Table 1: Socio-demographic Characteristics of Elderly

n=388

Variables	**Number**	**Percent**
Age groups in years		
Young old (65-74)	240	61.9
Middle old (75-84)	121	31.2
Old old (85 and above)	27	7.0
Mean ± SD=72.92 (± 7.12) year Min age:65 year Max age: 99 year		
Sex		
Male	204	52.6
Female	184	47.4
Caste		
Upper caste (Brahmin & Chhetri)	309	79.6
Relatively advantaged Janajati	40	10.3
Disadvantaged Janajati	37	9.5
Dalit	2	0.5
Religion		
Hindu	358	92.3
Christian	2	0.5
Buddhist	18	4.6
Kirat	10	2.6
Family type		
Nuclear	72	18.6
Joint	316	81.4
Marital status		
Married and living with spouse	285	73.5
Single (widow, widower)	103	26.5

Majority of the elderly were young old (61.9%), male (52.6%), and belonged to upper caste (79.6%), followed Hindu religion (92.3%), lived in joint family (81.4%), and married and living with spouse (73.5%) (Table 1).

Table 2: Education, Occupation and Sources of Income of Elderly

n=388

Variables	Number	Percent
Educational status		
Illiterate	187	48.2
Literate	201	51.8
Occupation		
Farmer	174	44.8
Homemaker	98	25.3
Service	72	18.6
Business	31	8.0
Others (Labour, daily wages)	13	8
Currently working		
No	106	27.7
Yes	282	72.7
Received pension		
No	329	84.8
Yes	59	15.2
Received old aged allowance		
No	173	44.6
Yes	215	55.4

In table 2, more than half (51.8%) of the elderly were literate, more than two third were farmer and home maker (70.1%) and 72.7% were involved in the work currently. Few elderly had pension (15.2%) whereas 55.4% received old aged allowance.

Table 3: Health Problems and Personal Habit of Elderly

n=388

Variables	Number	Percent
Presence of co-morbidity		
No	130	33.5
Yes	258	66.5
Type of co-morbidity**		
DM	87	22.4
HTN	157	40.5
COPD	44	11.3
Joint pain	42	10.8
Heart problem	40	10.3
Others (Hyper-lipidemia, CKD)	29	7.5
Smoking habit		
Never smoker	210	54.1
Ex-smoker	130	33.5
Current smoker	48	12.4
Alcohol habit		
Abstainer	353	91.0
Former drinker	26	6.7
Current drinker	9	2.3
Activity of Daily Living (ADLS)		
Impaired	25	6.4
Full functioning	363	93.6

Two third (66.5%) of the elderly had other co-morbid conditions and most common conditions were HTN (40.5%) followed by DM (22.4%). Few elderly were current smoker (12.4%) and current drinker (2.3%). Almost all (93.6%) elderly had full functioning activity of daily living (Table 3).

Table 4: Psychosocial Problems among Elderly

n=388

Psychosocial Problems	Number	Percent
Depression		
Normal (0-4)	128	33.0
Mild (5-8)	148	38.1
Moderate (9-11)	65	16.8
Severe (12-15)	47	12.1
Insomnia		
Normal (<6)	205	52.8
Insomnia (≥6)	183	47.2
Loneliness		
Low (20-34)	95	24.5
Moderate (35-49)	212	54.6
Moderately high (50-64)	75	19.3
High (65-80)	6	1.5
Dementia		
No dementia (3-5)	258	66.5
Dementia (0-2)	130	33.5
Anxiety		
Minimal (≤6)	154	39.7
Mild (7-9)	68	17.5
Moderate (10-12)	52	13.4
Severe (≥12)	114	29.4

Table 4 shows that out of 388 respondents,12.1% of elderly people had severe depression, less than half (47.2%) had insomnia, 1.5% had felt severe loneliness whereas more than half (54.6%) of elderly people felt moderate level of loneliness. Likewise, 33.5% of elderly had dementia and 29.4% of elderly had severe anxiety.

Table 5: Association between Depression with Selected Variablesof Elderly

n=388

Variables	Depression Status		$\chi 2$	p value
	Absent	Present		
Age groups in years				
Young old (65-74)	80 (33.3)	160 (66.7)	0.666	0.717
Middle old (75-84)	41 (33.9)	80 (66.1)		
Old old (85 and above)	7 (25.9)	20 (74.1)		
Sex				
Male	76 (37.3)	128 (62.7)	3.540	0.060
Female	52 (28.3)	132 (71.7)		
Marital status				
Married and living with spouse	102 (35.8)	183 (64.2)		
Single (widow and widower)	26 (25.2)	77 (74.8)	3.807	0.051
Family type				
Nuclear	23 (31.9)	49 (68.1)	0.044	0.834
Joint	105 (33.2)	211 (66.6)		
Education status				
Illiterate	50 (26.7)	137 (73.3)	6.382	**0.012**
Literate	78 (38.8)	123 (61.2)		
Previous occupation				
Farmer	58 (33.3)	116 (66.7)	10.495	**0.033**
Homemaker	24 (24.5)	74 (75.5)		
Service	33 (45.8)	39 (54.2)		
Business	11 (35.5)	20 (64.5)		
Others (Labour, daily wages)	2 (15.4)	11 (84.6)		
Receive pension				
No	98 (29.8)	231 (70.2)	10.037	**0.002**
Yes	30 (50.8)	29 (49.2)		
Receive old age allowance				
No	62 (35.8)	111 (64.2)	1.146	0.284
Yes	66 (30.7)	149 (69.3)		
Presence of co-morbidity				
No	50 (38.5)	80 (61.5)	2.648	0.104
Yes	78 (30.2)	180 (69.8)		
Activity of daily living				
Impaired (<6)	5 (20.0)	20 (80.0)	2.040	0.153
Full functioning (6)	123 (33.9)	240 (66.1)		
Smoking status				
Never smoker	74 (35.2)	136 (64.8)	2.572	0.276
Past smoker	36 (27.7)	94 (72.3)		
Current smoker	18 (37.5)	30 (62.5)		
Alcohol Drinker				
Abstainer	117 (33.1)	236 (66.9)	0.540	0.763
Former drinker	2 (22.2)	7 (77.8)		
Current drinker	9 (34.6)	17 (65.4)		

Educational status, occupation and receive pension were significantly associated with the presence of depression among elderly (Table 5).

Table 6: Association between Anxiety and Selected Variables of Elderly

n=388

Variable	Anxiety Status		χ^2	p value
	Absent	Present		
Age groups in years				
Young old (65-74)	90 (37.5)	150 (62.5)	1.793	0.408
Middle old (75-84)	54 (44.6)	67 (55.4)		
Old old (85 and above)	10 (37.0)	17 (63.0)		
Sex				
Male	83 (40.7)	121 (59.3)	0.178	0.673
Female	71 (38.6)	113 (61.4)		
Marital status				
Single (widow and widower)	37 (35.9)	66 (64.1)	0.832	0.362
Married and living with spouse	117 (41.1)	168 (58.9)		
Family type				
Nuclear	28 (38.9)	44 (61.1)	0.024	0.878
Joint	126 (39.9)	190 (60.1)		
Education status				
Illiterate	65 (34.8)	122 (65.2)	3.667	0.055
Literate	89 (44.3)	112 (55.7)		
Previous occupation				
Farmer	69 (39.7)	105 (60.3)	8.047	0.090
Homemaker	31 (31.6)	67 (68/4)		
Service	38 (52.8)	34 (47.2)		
Business	11 (35.5)	20 (64.5)		
Others (Labour, daily wages)	5 (38.5)	8 (61.5)		
Receive pension				
No	125 (38.0)	204 (62.0)	2.602	0.107
Yes	29 (49.2)	30 (50.8)		
Receive old age allowance				
No	71 (41.0)	102 (59.0)	0.238	0.626
Yes	83 (38.6)	132 (61.4)		
Presence of co-morbidity				
No	54 (41.5)	76 (58.5)	0.279	0.597
Yes	100 (38.8)	158(61.2)		
Activity of daily living				
Impaired (<6)	8 (32.0)	17 (68.0)	0.660	0.416
Full functioning (6)	146 (40.2)	217 (59.8)		
Smoking status				
Never smoker	83 (39,5)	127 (60.5)	0.415	0.813
Past smoker	50 (38.5)	80 (61.5)		
Current smoker	21 (43.8)	27 (56.2)		
Alcohol Drinker				
Abstainer	139 (39.4)	214 (60.6)	0.617	0.735
Former drinker	3 (33.3)	6 (66.7)		
Current drinker	12 (46.2)	14 (53.8)		

Table 6 shows that none of variables were significantly associated with the presence of anxiety among elderly.

Table 7: Association between Insomnia and Selected Variablesof Elderly

n=388

Variable	Insomnia Status		χ^2	p value
	Absent	Present		
Age groups in years				
Young old (65-74)	129 (53.8)	111 (46.2)	2.927	0.231
Middle old (75-84)	66 (54.5)	55 (45.5)		
Old old (85 and above)	10 (37.0)	17 (63.0)		
Sex				
Male	107 (52.5)	97 (47.5)	0.025	0.873
Female	98 (53.3)	86 (46.7)		
Marital status				
Single (widow and widower)	49 (47.6)	54 (52.4)	1.558	0.212
Married and living with spouse	156 (54.7)	129 (45.3)		
Family type				
Nuclear	43 (59.7)	29 (40.3)	1.683	0.195
Joint	162 (51.3)	154 (48.7)		
Education status				
Illiterate	104 (55.6)	83 (44.4)	1.119	0.290
Literate	101 (50.2)	100 (49.8)		
Previous occupation				
Farmer	96 (55.2)	78 (44.8)	4.470	0.346
Homemaker	43 (43.9)	55 (56.1)		
Service	41 (56.9)	31 (43.1)		
Business	17 (54.8)	14 (45.2)		
Others (Labour, daily wages)	8 (61.5)	5 (38.5)		
Receive pension				
No	171 (52.0)	158 (48.0)	0.641	0.423
Yes	34 (57.6)	25 (42.4)		
Receive old age allowance				
No	96 (55.5)	77 (44.5)	0.884	0.347
Yes	109 (50.7)	106 (49.3)		
Presence of co-morbidity				
No	82 (63.1)	48 (36.9)	8.229	**0.004**
Yes	123 (47.7)	135 (52.3)		
Activity of daily living				
Impaired (<6)	4 (16.0)	21 (84.0)	14.549	**<0.001**
Full functioning (6)	201 (55.4)	162 (44.6)		
Smoking status				
Never smoker	109 (51.9)	101 (48.1)	1.113	0.573
Past smoker	73 (56.2)	57 (43.8)		
Current smoker	23 (47.9)	25 (52.1)		
Alcohol Drinker				
Abstainer	185 (52.4)	168 (47.6)	1.070	0.586
Former drinker	4 (44.4)	5 (55.6)		
Current drinker	16 (61.5)	10 (38.5)		

Presence of co-morbidity and activity of daily living were significantly associated with the insomnia among elderly (Table 7).

Table 8: Association between Dementia and Selected Variables of Elderly

n=388

Variable	Dementia Status		$\chi 2$	p value
	No dementia	Dementia		
Age groups in years				
Young old (65-74)	170 (70.8)	70 (29.2)	6.174	**0.046**
Middle old (75-84)	74 (61.2)	47 (38.8)		
Old old (85 and above)	14 (15.9)	13 (48.1)		
Sex				
Male	155 (76.0)	49 (24.0)	17.373	**<0.001**
Female	103 (56.0)	81 (44.0)		
Marital status				
Single (widow and widower)	57 (55.3)	46 (44.7)	7.832	**0.005**
Married and living with spouse	201 (70.5)	84 (29.5)		
Family type				
Nuclear	54 (75.0)	18 (25.0)	2.870	0.090
Joint	204 (64.6)	112 (35.4)		
Education status				
Illiterate	97 (51.9)	90 (48.1)	34.647	**<0.001**
Literate	161 (80.1)	40 (19.9)		
Previous occupation				
Farmer	102 (58.6)	72 (41.4)	27.673	**<0.001**
Homemaker	58 (59.2)	40 (40.8)		
Service	62 (86.1)	10 (13.9)		
Business	28 (90.3)	3 (9.7)		
Others (Labour, daily wages)	8 (61.5)	5 (38.5)		
Receive pension				
No	208 (63.2)	121 (36.8)	10.403	**0.001**
Yes	50 (84.7)	9 (15.3)		
Receive old age allowance				
No	129 (74.6)	129 (60.0)	9.130	**0.003**
Yes	44 (25.4)	86 (40.0)		
Presence of co-morbidity				
No	85 (65.4)	45 (34.6)	0.108	0.742
Yes	173 (67.1)	85 (32.9)		
Activity of daily living				
Impaired (<6)	11 (44.0)	14 (56.0)	6.069	**0.014**
Full functioning (6)	247 (68.0)	116 (32.0)		
Smoking status				
Never smoker	147 (70.0)	63 (30.0)	2.636	0.268
Past smoker	82 (63.1)	48 (36.9)		
Current smoker	29 (60.4)	19 (39.6)		
Alcohol Drinker				
Abstainer	234 (66.3)	119 (33.7)	0.095	0.953
Former drinker	6 (66.7)	3 (33.3)		
Current drinker	18 (69.2)	8 (30.8)		

Age, sex, marital status, educational status, occupation, receive pension, receive old age allowance and activity of daily living were significantly associated with the presence of dementia among elderly (Table 8).

Table 9: Association between Loneliness and Selected Variables of Elderly

n=388

Variable	Loneliness Status		$\chi 2$	p value
	Low	Moderate to high		
Age groups in years				
Young old (65-74)	65 (27.1)	175 (72.9)	2.830	0.243
Middle old (75-84)	26 (21.5)	95 (78.5)		
Old old (85 and above)	4 (14.8)	23 (85.2)		
Sex				
Male	53 (26.0)	151 (74.0)	0.521	0.471
Female	42 (22.8)	142 (77.2)		
Marital status				
Single (widow and widower)	18 (17.5)	85 (82.5)	3.726	0.054
Married and living with spouse	77 (27.0)	208 (73.0)		
Family type				
Nuclear	21 (29.2)	51 (70.8)	1.048	0.306
Joint	74 (23.4)	242 (76.6)		
Education status				
Illiterate	36 (19.3)	151 (80.7)	5.347	**0.021**
Literate	59 (29.4)	142 (70.6)		
Previous occupation				
Farmer	39 (22.4)	135 (77.6)	5.724	0.221
Homemaker	23 (23.5)	75 (76.5)		
Service	25 (34.5)	47 (65.3)		
Business	5 (16.1)	26 (83.9)		
Others (Labour, daily wages)	3 (23.1)	10 (76.9)		
Receive pension				
No	76 (23.1)	253 (76.9)	2.242	0.134
Yes	19 (32,2)	40 (67.8)		
Receive old age allowance				
No	47 (27.2)	126 (72.8)	1.216	0.270
Yes	48 (22.3)	167 (77.7)		
Presence of co-morbidity				
No	29 (22.3)	101 (77.7)	0.501	0.479
Yes	66 (25.6)	192 (74.4)		
Activity of daily living				
Impaired (<6)	6 (24.0)	19 (76.0)	0.003	0.954
Full functioning (6)	89 (24.5)	274 (75.5)		
Smoking status				
Never smoker	56 (26.7)	154 (73.3)	2.156	0.340
Past smoker	31 (23.8)	99 (76.2)		
Current smoker	8 (16.7)	40 (83.3)		
Alcohol Drinker				
Abstainer	89 (25.2)	264 (74.8)	1.360	0.507
Former drinker	1 (11.1)	8 (88.9)		
Current drinker	5 (19.2)	21 (80.8)		

Table 9 shows that education status was significantly associated with the loneliness among elderly.

CHAPTER V

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

This chapter deals with the discussion of findings followed by conclusion, limitations, implications and recommendations of the study. Findings are discussed in comparison with published studies. Conclusions and recommendations were drawn based on the findings of study.

5.1 DISCUSSION

This study aimed to explore the psychosocial problems among the elderly in a community setting. A descriptive cross-sectional design was adopted and the study populations consisted of 388 elderly people residing in Bharatpur Metropolitan City, Chitwan.

In this study, prevalence of depression was 66.8% among older adults where 38.1%, 16.8% and 12.1% were mild, moderate and severe depression respectively. This finding is closely approximates to the previous studies conducted in Nepal, which reported that 53.1% and 55.8% older adults were experienced depression in the community of Kavre district and Morang district respectively.[35,58] Similarly, systematic review reported 25.5% to 60.6% prevalence of depression in the elderly in the community setting of Nepal.[13] Our finding is higher than the studies in China,[32] Ethiopia,[33] Sri Lanka,[59] and Pakistan[60] which showed 37.34%, 41.85%, 27.8%, 40.6% depression respectively. It indicates that elderly depression is still high among older adults in our context than the global mean. This variation might be due to depression measurement tool variation and study population.

Our study revealed that 60.3% of older adults experienced anxiety symptoms where 17.5% mild, 13.4% moderate and 29.4% severe anxiety. This finding is higher than the studies conducted in Nepal, [13] Germany, [61] Turkey,[62] China,[32] and Myanmar,[36] which revealed 13.9%, 17.1%, 32.74%, and 39.4% of anxiety respectively. Similarly, a systematic review and meta-analysis showed that the anxiety ranged from 0.2% to 32.2% among older adults in low and middle income nations in Africa, Asia, and South America.[63] Another review found that the prevalence of anxiety disorders in late life ranged from 3.2% to 14.2% in Western countries.[64] These variations in anxiety prevalence may be attributable to various studied populations, study methodologies and attributed to different time frame.

Insomnia is one of the most frequent sleep disorders among elderly. Nearly half (47.2%) of elderly of this study had insomnia. This finding is consistent with the result of the reviewed article of Patel et al. (2018) which reported 30 to 48% of prevalence of insomnia among of elderly.[65] However, our finding is lower than the

studies conducted in Nepal,[53,66] India[67] and Egypt[68] and higher than the study done in Taiwan.[69] These differences might be due to lack of consistency in the concept of insomnia and variation in measurement of tool. Furthermore, the observed variation in prevalence could be attributed to a variety of factors such as interviewing methodologies, lifestyle, physical activities, and food; however, the current study did not account for those aspects.

Our study found the prevalence of dementia among 33.5% older adults. This finding is comparable with a study conducted in Indonesia, which showed dementia among 39.42% elderly people in rural areas and 29.15% in suburban areas.[40] Similarly, 36.6% of Iranians had dementia to some extent. However, lower prevalence of dementia was reported in other studies done in Nepal [41,70,71,72] and Jordan.[43.] Another meta-analysis reported that a substantial percentage of dementia were undiagnosed; more than 60% of those with dementia are not detected in the general population.[73]

Loneliness frequency among community-dwelling older people varies by country to country due to their nature of family structure and support system. Our study showed that the 75.5% older adult experienced moderate to high level of loneliness (moderate-54.6%, moderate tohigh-19.3% and high-1.5).The finding is quite similar to study conducted in Nepal which revealed 38.7% and 16.9% of elderly experienced moderate to severe level of loneliness.[48] Almost similar finding is also reported in the study done in Indonesia which showed 64% prevalence of loneliness among elderly.[46] However, studies reported lower prevalence of loneliness among elderly in Sweden,[45] Norway [47] and China.[74] The difference in findings might be due to breakdown of conventional family structures, insufficient social welfare, and a lack of mental health care which may contribute to loneliness among elderly.

Regarding associated factors of psychosocial problems, present study found that education, occupation and pension were all significantly associated with depression among elderly. Being illiterate is more prone to have depression than literate elderly people. This evidence agreed with the evidence of Thailand, [75] Ethiopia,[76] and Ezypt.[77] Similarly, low income generating occupation and not receiving pension (financial dependent) are the associated risk factors for depression among elderly of this study. This is similar to study done in Ethiopia which found that low income older adults were nearly 2 times more likely to have depression as compared to high income older adults.[78] Likewise, other studies in Asia (Myanmar) [36], North India,[79] and Portugal [80] reported similar result. Low-income elderly persons had a more difficult time accessing health services and care, which may have been linked to higher levels of depression.[78]

Insomnia has been linked to a number of chronic disorders, including coronary artery disease, chronic obstructive pulmonary disease, and brain hemorrhage.[81,82] In our study, co-morbidity and activity of daily living were significantly associated with the insomnia of elderly. The older adult who had co-morbid diseases has

higher chance for insomnia compared to elderly without co morbidity. This finding is agreed with other studies done in Northern Taiwan[83] and Nepal.[53] It has also been noted that medications have a deleterious effect on sleep among the elderly.[53]

5.2 Conclusions

Based on the findings, it is concluded that psychosocial problems such as anxiety, depression, loneliness, insomnia and dementia are common among the elderly. Among them, higher proportions of elderly suffer from depression, loneliness and anxiety. Age, functional dependency, sex, co-morbidity, financial dependence, education, and occupation are risk factors for psychosocial issues in the elderly. Therefore, local health care provider must organize and carry out routine screening, counselling, and awareness programs for the elderly in the community. Further, there is need to develop and implement health care strategy by local health care planner to prevent, treat and manage the psychosocial problems among this risk groups.

5.3 Implications

The finding of this study would be used as supporting document for better planning and delivering services to the elderly people for the prevention, early diagnosis and treatment of psychosocial problems which is important in reduction of the burden of psychosocial problems in elderly. Further, findings would be helpful to local health care planner and policy makers for planning and implementation of preventive and curative strategies on psychosocial problems for elderly people.

3.4 Limitations

This is a cross-sectional study, it cannot definitively any causal pathway; it can only determine the links between psychosocial problems and the associated factors. All the psychosocial assessment tools were self - reported tool and some of the reports were from the past, which is subject to recall bias. This study is conducted in community dwelling older adults' psychosocial problems, so results cannot be generalized to other setting such as hospital.

5.5 Recommendations

Psychosocial problems such as depression, anxiety, dementia, insomnia and loneliness are very common among elderly people. Hence, regular screening, counselling and awareness programs are needed to promote their health and wellbeing of elderly adult.

Similar study need to be conducted in a large scale to make the generalizations of the findings.

REFERENCES

1. WHO. Ageing and Health. Fact sheet. Geneva: World Health Organization, 2022 October. https://www.who.int/news-room/fact-sheets/detail/ageing-and-health

2. Preston SH, Stokes A. Sources of Population Aging in More and Less Developed Countries. Popul Dev Rev. 2012; 38(2):221-236. https://doi.org/10.1111/j.1728-4457.2012.00490.x.

3. Central Bureau of Statistics. Population census 2011, National Report. Kathmandu: His Majesty's Government National Planning Commission Secretariat, 2012. https://unstats.un.org/unsd/demographic-social/census/documents/Nepal/Nepal-Census-2011-Vol1.pdf

4. WHO. Mental health of older adults. [Online]. Fact sheet. Geneva: World Health Organization, 2017. https://www.who.int/news-room/fact-sheets/detail/mental-health-of-older-adults

5. Jr JW, Gordon JR, Jr RJ. Psychosocial issues near the end of life. Aging & mental health. 2002 Nov 1;6(4):402-12. https://doi.org/ 10.1080/1360786021000007027

6. Brady M. Pre-hospital psychosocial care: changing attitudes. J of Paramedic Practice. 2012 Sep 9;4(9):516-25. https://doi.org/ 10.12968/jpar.2012.4.9.516.

7. Bisschop MI, Kriegsman DM, Deeg DJ, Beekman AT, Van Tilburg W. The longitudinal relation between chronic diseases and depression in older persons in the community: the Longitudinal Aging Study Amsterdam. J of clinical epid. 2004 Feb 1;57(2):187-94. https://doi.org/ 10.1016/j.jclinepi.2003.01.001

8. Bruce ML. Psychosocial risk factors for depressive disorders in late life. Biological psychiatry. 2002 Aug 1;52(3):175-84. https://doi.org/ 10.1016/S0006-3223(02)01410-5.

9. Pronk M, Deeg DJ, Smits C, Twisk JW, van Tilburg TG, Festen JM, Kramer SE. Hearing loss in older persons: does the rate of decline affect psychosocial health? J Aging Health. 2014 Aug;26(5):703-723. https://doi.org/ 10.1177/0898264314529329.

10. Kramer SE, Kapteyn TS, Kuik DJ, Deeg DJ. The association of hearing impairment and chronic diseases with psychosocial health status in older age. J of aging and health. 2002 Feb; 14(1):122-37. https://doi.org/ 10.1177/089826430201400107.

11. Sidik SM, Rampal L, Afifi M. Physical and mental health problems of the elderly in a rural community of sepang, selangor. Malays J Med Sci. 2004; 11(1):52-59. https://pubmed.ncbi.nlm.nih.gov/22977360/

12. Sisodia MS, Kumar U, Kumar G. A study of the prevalence of various psychosocial problems of geriatric population in urban area of district-Hapur. Int J Community Med Public Health 2020;7:4947-51. https://dx.doi.org/10.18203/2394-6040.ijcmph20205167

13. Thapa DK, Visentin D, Kornhaber R, Cleary M. Prevalence of mental disorders among older people in Nepal: a systematic review. Kathmandu Univ Med J. 2018 Apr 1;16(62):181-90.https://pubmed.ncbi.nlm.nih.gov/30636762/

14. Singh DR, Parajuli P, Hug J, Nath D, Koirala R, Mandal R. Dementia Symptoms among Senior Citizens Living in Geriatric Homes of Kathmandu Valley. Kathmandu University Medical Journal. 2021 Jun 30;19(2):195-9.

15. Ashish D. A Study of Mental Health among Old People Living In Old Age Home and Within Family Set-Up in Uttrakhand. Int J Indian Psychol. 2016;3(4).

16. Timalsina R, Sherpa PD, Dhakal DK. Factors Associated with Depression among Elderly Living in Old Age Homes in Kathmandu Valley. J of institute of medicine. 2014 Apr 1;36(1). https://oa.mg/work/3034323955

17. Pun DP, Subedi BP, Pandey R, Pokhrel S. Social change and the senior citizen in Nepal: Their socio-spatial exclusion. Unpublished research report, Social Inclusion Research Fund (SIRF), Kathmandu. 2009.

18. Naja S, Makhlouf MM, Chehab MA. An ageing world of the 21st century: a literature review. Int J Comm Med Public Health. 2017 Dec;4(12):4363-9. https://dx.doi.org/10.18203/2394-6040.ijcmph20175306

19. Kourkouta L, Iliadis C, Monios A. Psychosocial issues in elderly. Progress in health sciences. 2015; 5(1):232-7. https://www.umb.edu.pl/photo/pliki/progress-file/phs/phs_2015_1/232

20. Singh R, Singh B, Lall BS, Jain V. Psychosocial problems: An issue among the elderly in Kathmandu, Nepal. Inter j of health sci and research. 2013 Jun;3(6):48-53. https://www.ijhsr.org/IJHSR_Vol.3_Issue.6_June2013/9.pdf

21. Adeleke RO, Adebowale TO, Oyinlola O. Profile of elderly patients presented with psychosocial problems in Ibadan. MOJ Gerontol Ger. 2017;1(1):26-36. https://doi.org/10.15406/mojgg.2017.01.00006

22. Willis L, Goodwin J, Lee KO, Mosqueda L, Garry P, Liu P, Linn R, Wayne S. Impact of psychosocial factors on health outcomes in the elderly. A prospective study. J Aging Health. 1997 Aug;9(3):396-414. https://doi.org/10.1177/089826439700900307.

23. Everson-Rose SA, Lewis TT. Psychosocial factors and cardiovascular diseases. Annu Rev Pub Health. 2005;26:469-500. https://doi.org/10.1146/annurev.publhealth.26.021304.144542.

24. Kang HJ, Bae KY, Kim SW, Shin HY, Shin IS, Yoon JS, Kim JM. Impact of anxiety and depression on physical health condition and disability in an elderly Korean population. Psychiatry investigation. 2017 May;14(3):240. https://doi.org/10.4306/pi.2017.14.3.240.

25. Mueller AE, Segal DL, Gavett B, Marty MA, Yochim B, June A, Coolidge FL. Geriatric Anxiety Scale: item response theory analysis, differential item functioning, and creation of a ten-item short form (GAS-10). Int Psychogeriatr. 2015 Jul;27(7):1099-111. https://doi.org/10.1017/S1041610214000210.

26. Sheikh JI, Yesavage JA. Geriatric Depression Scale (GDS): Recent Evidence and Development of a Shorter Version. Clinical Gerontologist: The J of Aging and Mental Health, 1986; 5: 165-173. https://doi.org/10.1300/J018v05n01_09.

27. Soldatos CR, Dikeos DG, Paparrigopoulos TJ. Athens Insomnia Scale: validation of an instrument based on ICD-10 criteria. J Psychosom Res. 2000 Jun;48(6):555-60. https://doi.org/10.1016/s0022-3999(00)00095-7.

28. Russell DW. UCLA Loneliness Scale (Version 3): reliability, validity, and factor structure. J Pers Assess. 1996 Feb;66(1):20-40. https://doi.org/10.1207/s15327752jpa6601_2.

29. Borson S, Scanlan J, Brush M, Vitaliano P, Dokmak A. The mini-cog: a cognitive 'vital signs' measure for dementia screening in multi-lingual elderly. Int J Geriatr Psychiatry. 2000 Nov;15(11):1021-7. https://doi.org/10.1002/1099-1166(200011)15:11<1021::aid-gps234>3.0.co;2-6.

30. Katz S, Ford AB, Moskowitz RW, Jackson BA, Jaffe MW. Index of independence in activities of daily living. JAMA: Journal of the American Medical Association. 1970. https://doi.org/10.1037/t04004-000

31. Boralingaiah P, Bettappa P, Kashyap S. Prevalence of Psycho-Social Problems among Elderly in Urban Population of Mysore City, Karnataka, India. Indian J Psychol Med 2012; 34:360-4. https://doi.org/ 10.4103/0253-7176.108221.

32. Lu L, Shen H, Tan L, Huang Q, Chen Q, Liang M, He L, Zhou Y. Prevalence and factors associated with anxiety and depression among community-dwelling older adults in Hunan, China: a cross-sectional study. BMC Psychiatry. 2023 Feb 15;23(1):107. https://doi.org/10.1186/s12888-023-04583-5.

33. Kasa AS, Lee SC, Chang HR. Prevalence and factors associated with depression among older adults in the case of a low-income country, Ethiopia: a systematic review and meta-analysis. BMC Psychiatry. 2022 Nov 1;22(1):675. https://doi.org/10.1186/s12888-022-04282-7.

34. Kunwar T. Physical and Mental Health Problems of Elderly People at Nagarjun Municipality in Kathmandu. Humanities and Social Sci J. 2021 Aug 1;13(1):201-16. https://www.nepjol.info/index.php/hssj/article/view/44564/33552.

35. Manandhar K, Risal A, Shrestha O, Manandhar N, Kunwar D, Koju R, Holen A. Prevalence of geriatric depression in the Kavre district, Nepal: Findings from a cross sectional community survey. BMC psychiatry. 2019 Dec;19:1-9. https://doi.org/10.1186/s12888-019-2258-5.

36. Cho SM, Saw YM, Saw TN, Than TM, Khaing M, Khine AT, Kariya T, Soe PP, Oo S, Hamajima N. Prevalence and risk factors of anxiety and depression among the community-dwelling elderly in Nay Pyi Taw Union Territory, Myanmar. Sci Rep. 2021 May 7;11(1):9763. https://doi.org/10.1038/s41598-021-88621-w.

37. Poudel R, Ojha J. Level of Anxiety among the Elderly Adults at Western Regional Hospital, Pokhara, Nepal. Journal of Health and Allied Sciences. 2019 Dec 8;9(1):7-10.

38. WHO. Dementia. Fact sheet. [Online]. 15 March 2023. Available from: https://www.who.int/news-room/fact-sheets/detail/dementia.

39. Nichols E, Steinmetz JD, Vollset SE, Fukutaki K, Chalek J, Abd-Allah F, Abdoli A, Abualhasan A, Abu-Gharbieh E, Akram TT, Al Hamad H. Estimation of the global prevalence of dementia in 2019 and

forecasted prevalence in 2050: an analysis for the Global Burden of Disease Study 2019. The Lancet Public Health. 2022 Feb 1;7(2):e105-25.

40. Ong PA, Annisafitrie FR, Purnamasari N, Calista C, Sagita N, Sofiatin Y, Dikot Y. Dementia Prevalence, Comorbidities, and Lifestyle Among Jatinangor Elders. Front Neurol. 2021 Jul 23;12:643480. https://doi.org/10.3389/fneur.2021.643480.

41. Nepal S, Sapkota N, Kumar R, Deo BK, Mishra S. Psychiatric disorders in elderly patients attending OPD of tertiary care centre in eastern region of Nepal. J of Psychiatrists' Asso of Nepal. 2016;5(1):43-8.

42. Gautam S, Singh PM. A Study of Dementia in the Geriatric Patients Attending the Out Patient Department of Nepal Medical College Teaching Hospital. Ann. Int. Med. Den. Res. 2018; 4(4):PY01-PY04.
43. Kofahi R, Aljezawi M, Abdalrahim A, Al Qadire M, Obiedat D, Aqaileh S. Annual Period Prevalence and Risk Factors of Dementia Among Older Jordanian Hospitalized Patients. Int J Gen Med. 2021 Feb 25;14:641-647. https://doi.org/10.2147/IJGM.S299353.
44. Livingston G, Huntley J, Sommerlad A, Ames D, Ballard C, Banerjee S, Brayne C, Burns A, Cohen-Mansfield J, Cooper C, Costafreda SG, Dias A, Fox N, Gitlin LN, Howard R, Kales HC, Kivimäki M, Larson EB, Ogunniyi A, Orgeta V, Ritchie K, Rockwood K, Sampson EL, Samus Q, Schneider LS, Selbæk G, Teri L, Mukadam N. Dementia prevention, intervention, and care: 2020 report of the Lancet Commission. Lancet. 2020 Aug 8; 396(10248):413-446. https://doi.org/10.1016/S0140-6736 (20)30367-6.
45. Dahlberg L, Agahi N, Lennartsson C. Lonelier than ever? Loneliness of older people over two decades. Arch Gerontol Geriatr. 2018 Mar-Apr;75:96-103. https://doi.org/10.1016/j.archger.2017.11.004.
46. Susanty S, Chung MH, Chiu HY, Chi MJ, Hu SH, Kuo CL, Chuang YH. Prevalence of Loneliness and Associated Factors among Community-Dwelling Older Adults in Indonesia: A Cross-Sectional Study. Int J Environ Res Public Health. 2022 Apr 18;19(8):4911. https://doi.org/10.3390/ijerph19084911.
47. Tomstad S, Dale B, Sundsli K, Saevareid HI, Söderhamn U. Who often feels lonely? A cross-sectional study about loneliness and its related factors among older home-dwelling people. Int J Older People Nurs. 2017 Dec;12(4). https://doi.org/10.1111/opn.12162.
48. Devkota R, Mishra K, Shrestha S. Loneliness and Depression among Older People Living in a Community of Nepal. J Nepal Health Res Counc. 2019 Aug 4;17(2):185-192. https://doi.org/10.33314/jnhrc.v0i0.1561.
49. Yanguas J, Pinazo-Henandis S, Tarazona-Santabalbina FJ. The complexity of loneliness. Acta Biomed. 2018 Jun 7;89(2):302-314. https://doi.org/10.23750/abm.v89i2.7404.
50. Lara E, Martín-María N, De la Torre-Luque A, Koyanagi A, Vancampfort D, Izquierdo A, Miret M. Does loneliness contribute to mild cognitive impairment and dementia? A systematic review and meta-analysis of longitudinal studies. Ageing Res Rev. 2019 Jul;52:7-16. https://doi.org/10.1016/j.arr.2019.03.002.
51. Perissinotto CM, Stijacic Cenzer I, Covinsky KE. Loneliness in older persons: a predictor of functional decline and death. Arch Intern Med. 2012 Jul 23;172(14):1078-83. https://doi.org/10.1001/archinternmed.2012.1993.
52. Cybulski, M., Cybulski, L., Krajewska-Kulak, E. *et al.* Sleep disorders among educationally active elderly people in Bialystok, Poland: a cross-sectional study. *BMC Geriatr* **19**, 225 (2019). https://doi.org/10.1186/s12877-019-1248-2

53. Dangol M, Shrestha S, Rai Koirala SK. Insomnia and its associated factors among older people of selected ward of Banepa municipality, Nepal. Nurs Open. 2019 Oct 23;7(1):355-363. https://doi.org/10.1002/nop2.396.

54. Chhantyal A, Timalsina R. Factors associated with insomnia among elderly of a selected community of Lalitpur. J Gerontol Geriatr Res. 2017;6:410.

55. Pokharel B, Sharma B, Acharya A. Insomnia, its Prevalence, Associated Factors and Effects on Old Age: A Cross-Sectional Study. Journal of Lumbini Medical College. 2018 Dec 30;6(2):112-6.

56. Annual Health Report. [Online] Bharatpur Metropolitan City Office of Municipal Executive Health and Social Development Division Public Health Section, Bharatpur, Chitwan; 2077/078. https://bharatpurmun.gov.np/en/content/bmc-annual-health-report-2077-78

57. Durmaz B, Soysal P, Ellidokuz H, Isik AT. Validity and reliability of geriatric depression scale-15 (short form) in Turkish older adults. North Clin Istanb. 2018 Sep;5(3):216-220. https://doi.org/10.14744/nci.2017.85047.

58. Yadav UN, Thapa TB, Mistry SK, Pokhrel R, Harris MF. Socio-demographic characteristics, lifestyle factors, multi-morbid conditions and depressive symptoms among Nepalese older adults. BMC Psychiatry [Internet]. 2020;20(1):261. http://dx.doi.org/10.1186/s12888-020-02680-3.

59. Malhotra R, Chan A, Ostbye T. Prevalence and correlates of clinically significant depressive symptoms among elderly people in Sri Lanka: findings from a national survey. Int Psychogeriatr. 2010 Mar;22(2):227-36. https://doi.org/10.1017/S1041610209990871.

60. Bhamani MA, Karim MS, Khan MM. Depression in the elderly in Karachi, Pakistan: a cross sectional study. BMC Psychiatry. 2013 Jul 3;13:181. https://doi.org/10.1186/1471-244X-13-181.

61. Maatouk I, Herzog W, Böhlen F, Quinzler R, Löwe B, Saum KU, Brenner H, Wild B. Association of hypertension with depression and generalized anxiety symptoms in a large population-based sample of older adults. J Hypertens. 2016 Sep;34(9):1711-20. https://doi.org/10.1097/HJH.0000000000001006.

62. Kirmizioglu Y, Doğan O, Kuğu N, Akyüz G. Prevalence of anxiety disorders among elderly people. Int J Geriatr Psychiatry. 2009 Sep;24(9):1026-33. https://doi.org/10.1002/gps.2215.

63. Edwards N, Walker S, Paddick SM, Prina AM, Chinnasamy M, Reddy N, Mboya IB, Mtei M, Varghese M, Nakkasuja N, Guerra M, Sapkota N, Dotchin C. Prevalence of depression and anxiety in older people in low- and middle- income countries in Africa, Asia and South America: A systematic review and meta-analysis. J Affect Disord. 2023 Mar 15;325:656-674. https://doi.org/10.1016/j.jad.2023.01.068.

64. Wolitzky-Taylor KB, Castriotta N, Lenze EJ, Stanley MA, Craske MG. Anxiety disorders in older adults: a comprehensive review. Depression and Anxiety. 2010;27(2):190-211. https://doi.org/10.1002/da.20653.

65. Patel D, Steinberg J, Patel P. Insomnia in the Elderly: A Review. J Clin Sleep Med. 2018 Jun 15;14(6):1017-1024. https://doi.org/10.5664/jcsm.7172.

66. Shrestha S, Roka T, Shrestha S, Shakya S. Prevalence and contributing factors of insomnia among elderly of Pashupati old aged home (Briddhashram). Mathews Journal of Psychiatry & Mental Health. 2017 Apr 11;2(2):1-0.

67. Ahmad E, Ansari AH, Khan RM. Prevalence of Bekhwabi (Insomnia) among the elderly patients attending Nium Hospital, Bangalore. India. J Community Med Health Educ. 2016 Oct 21;6(476):2161-0711. https://doi.org/10.4172/2161-0711.1000476.

68. El-Gilany AH, Saleh NM, Mohamed HN, Elsayed EB. Prevalence of insomnia and its associated factors among rural elderly: a community based study. International J of Adv Nursing Studies. 2017;6(1):56. https://doi.org/10.14419/ijans.v6i1.7415.

69. Peng YT, Hsu YH, Chou MY, Chu CS, Su CS, Liang CK, Wang YC, Yang T, Chen LK, Lin YT. Factors associated with insomnia in older adult outpatients vary by gender: a cross-sectional study. BMC Geriatr. 2021 Dec 7;21(1):681. https://doi.org/10.1186/s12877-021-02643-7.

70. Tiwari SC, Pandey NM, Singh I. Mental health problems among inhabitants of old age homes: A preliminary study. Indian J Psychiatry. 2012 Apr;54(2):144-8. https://doi.org/10.4103/0019-5545.99533.

71. Shakya DR. Psychiatric morbidities of elderly psychiatry outpatients in a tertiary-care hospital. J of College of Medical Sci Nepal. 2011;7(4):1-8. https://www.nepjol.info/index.php/JCMSN/article/view/6735.

72. Khattri JB, Nepal MK. Study of depression among geriatric population in Nepal. Nepal Med Coll J. 2006 Dec;8(4):220-3. https://pubmed.ncbi.nlm.nih.gov/17357635/

73. Lang L, Clifford A, Wei L, Zhang D, Leung D, Augustine G, Danat IM, Zhou W, Copeland JR, Anstey KJ, Chen R. Prevalence and determinants of undetected dementia in the community: A systematic literature review and a meta-analysis. BMJ Open. 2017 Feb 03; 7 (2): e011146. https://doi.org/10.1136/bmjopen-2016-011146.

74. Teh JKL, Tey NP. Effects of selected leisure activities on preventing loneliness among older Chinese. SSM Popul. Health. 2019;**9**:100479. https://doi.org/10.1016/j.ssmph.2019.100479.

75. Charoensakulchai S, Usawachoke S, Kongbangpor W, Thanavirun P, Mitsiriswat A, Pinijnai O, Kaensingh S, Chaiyakham N, Chamnanmont C, Ninnakala N, Hiri-O-Tappa P, Ponginsee V, Atichatpongsuk V, Asawathepmetha EO, Thongprayoon C, Mao MA, Cheungpasitporn W, Varothai N, Kaewput W. Prevalence and associated factors influencing depression in older adults living in rural Thailand: A cross-sectional study. Geriatr Gerontol Int. 2019 Dec;19(12):1248-1253. https://doi.org/10.1111/ggi.13804.

76. Girma M, Hailu M, Wakwoya A, Yohannis Z, Ebrahim J. Geriatric depression in Ethiopia: prevalence and associated factors. J Psychiatry. 2016;20(1):1000400. https://doi.org/10.4172/2378-5756.1000400.

77. Odejimi O, Tadros G, Sabry N. A systematic review of the prevalence of mental and neurocognitive disorders amongst older adults' populace in Egypt. Middle East Curt Psy. 2020;27(1):1–12. https://doi.org/10.1186/s43045-020-00055-8.

78. Anbesaw T, Fekadu B. Depression and associated factors among older adults in Bahir Dar city administration, Northwest Ethiopia, 2020: Cross-sectional study. Plos one. 2022 Aug 23;17(8):e0273345. https://doi.org/10.1371/journal.pone.0273345

79. Sharma K, Gupta A, Sharma RC, Mahajan N, Mahajan A, Sharma D, Mazta SR. Prevalence and risk factors for depression in elderly North Indians. J of Geri Mental Health. 2016 Jul 1;3(2):158. https://doi.org/ 0.4103/2348-9995.195673.

80. de Sousa RD, Rodrigues AM, Gregório MJ, Branco JDC, Gouveia MJ, Canhão H, Dias SS. Anxiety and Depression in the Portuguese Older Adults: Prevalence and Associated Factors. Front Med (Lausanne). 2017 Nov 20;4:196. https://doi.org/10.3389/fmed.2017.00196.

81. Wang P, Song L, Wang K, Han X, Cong L, Wang Y, Zhang L, Yan Z, Tang S, Du Y. Prevalence and associated factors of poor sleep quality among Chinese older adults living in a rural area: a population-based study. Aging Clin Exp Res. 2020 Jan;32(1):125-131. https://doi.org/10.1007/s40520-019-01171-0. Epub 2019 Mar 27.

82. Wang YM, Chen HG, Song M, Xu SJ, Yu LL, Wang L, Wang R, Shi L, He J, Huang YQ, Sun HQ, Pan CY, Wang XY, Lu L. Prevalence of insomnia and its risk factors in older individuals: a community-based study in four cities of Hebei Province, China. Sleep Med. 2016 Mar; 19:116-22. https://doi.org/10.1016/j.sleep.2015.10.018.

83. Tsou MT. Prevalence and risk factors for insomnia in community-dwelling elderly in northern Taiwan. Journal of Clinical Gerontology and Geriatrics. 2013 Sep 1;4(3):75-9.

APPENDICES

Appendix A

Participants Information Sheet

Namaskar,

We are working in Chitwan Medical College, Bharatpur, Chitwan. The purpose of this study is to find out to find out the psycho-social problems among elderly people residing in Bharatpur, Chitwan. For this, we selected people who were 65years and above and residing in Bharatpur- Chitwan. We would like to give you some information of this study and we humbly request you to participate in this study. If in any place you find it difficult to understand, please stop us so that we can explain in detail.

Title: Psycho-Social Problems among Elderly Residing in Chitwan.

Purpose of the Study: Find out the psycho-social problems among elderly people residing in Bharatpur, Chitwan.

Methods: Researchers will ask few questions related to your socio-demographic and disease related information as well as lifestyle factors. Further, they will ask your psychosocial problems. After that they will request you to word registration, word recall and to draw clock to measure your cognitive impairment.

Expected duration of the participation and frequency of contact: Researcher will ask your information for 40-45 minutes through structured interview schedule in separate room or corner of house with your convenience in one point of time.

Benefits: You are selected as a potential participant for this particular study. There will not be direct benefit for you but the information obtained will be helpful to health care provider to plan regular screening, counseling and awareness program for the elderly in the community. Therefore, we would like to request you to take active participation in the study and provide the accurate and reliable information.

Risk: There will not be any risk to you during and after participation. If any problem arises, you will refer for the immediate management.

Payment: Your participation in this study is voluntarily and you have the full right to withdraw from this study at any time, without any penalty.

Use of Data: All the information provided by you will be kept confidential and use only for this study purpose. Privacy will be maintained by conducting an interview separately in corner /room.

Contact Details: If you need further information, please feel free to express your feeling and you can contact Sunita Poudyal (Principal Investigator), Associate Professor of Chitwan Medical College, Bharatpur on 9845199152 if necessary. The researchers will be obliged to the each respondent for giving your valuable time and information for this study.

This study is funded by NHRC Provincial Research Grant 2079/2080.

Contact detail

Nepal Health Research Council, Ramshah Path, Kathmandu

Tel no: 977-4254220

Thank You Very Much!!!!

Informed Consent

Title of this Study: Psycho-Social Problems among Elderly Residing in Chitwan

Background and Purpose: Find out the psycho-social problems among elderly people residing in Bharatpur, Chitwan.

The general nature of this study entitled “find out the psycho-social problems among elderly people residing in Bharatpur, Chitwan" conducted by Assoc. Prof. Sunita Poudyal and team has been well explained to me. I understand that my responses will be confidential and there is no any potential risks resulting from my participation in this study. I know that I may refuse to answer any question asked and that I may discontinue participation at any time. I have also been informed that I need not have to pay in this study participation.

I confirm that the purpose of the research, the study procedures, the possible risks and discomforts as well as benefits is well explained to me and I agree to participate in the study.

_____ _____

Signature Date

Appendix B

Interview Schedule on Psycho-social Problems among Elderly People

Direction for Interviewer: This interview schedule has three major parts. Part I is related to socio-demographic information. Part II consisted of Katz Index to assess functional status of the participant. Part III consists of psychosocial problems of respondents. There is only one appropriate response which needs to be ticked (√) in the provided box.

Code Number: …….. Place of Interview:……

Interview:……..

Part 1: Socio-demographic Information

1. Age …….. (in years)
2. Sex: ☐ Male ☐ Female
3. Residence: ……

4. Ethnicity:…… 5. Religion:…….

6. Marital Status: ☐ Married ☐ Unmarried ☐ Widow ☐ Widower
7. Type of Family: ☐ Nuclear ☐ Joint

8. Currently living with: ☐ Single ☐ Family ☐ Others……..
9. Educational Status: ☐ Illiterate ☐ Literate

If Literate,

☐ Just read and write
☐ Basic level
☐ Secondary level
☐ Bachelor and above

10. **Occupation**	Previous	Current	Remarks
☐ Farming	……	……..	……..
☐ Home Maker	……	……	……
☐ Service	……	……	……
☐ Business	……	……	…….
☐ Labour/daily wages	……	…….	…….
☐ Others……..	……	……..	…….

11. Economic Status:

☐ Not enough to eat for one year

☐ Just enough to eat for one year

☐ Surplus for future

12. Do you receive a pension?

☐ Yes ☐ No

13. Do you receive an old age allowance?

☐ Yes ☐ No

14. Do you have any other health problems?

☐ Yes ☐ No

14.1 If yes, which of the following conditions do you have?

S. N.	Types of Diseases	Yes	No
1.	High blood pressure		
2.	High cholesterol level		
3.	Heart disease		
4.	Asthma		
5.	Others (if specify)	……	……

15. Who takes care of you when you are sick?.....

16. Do you currently smoke any tobacco products such as cigarettes, pipes or cigars?

☐ Yes ☐ No

17. Do you currently smoke tobacco products daily?

☐ Yes ☐ No

18. In the past, did you **ever smoke** any tobacco products?

☐ Yes ☐ No

19. In the past, did you **ever** smoke **daily**?

☐ Yes ☐ No

20. Alcohol status:

☐ Current drinker (last 30 days)

☐ Drank alcohol in last 12 months, not current (within 12 months)

☐ Abstainer (have not consumed alcohol in the last 12 months)

☐ Never drink

Part 2: Katz Index of Independence in Activities of Daily Living

Activities Points (1 or 0)	**Independence** (1 Point) **NO** supervision, direction or personal assistance.	**Dependence** (0 Points) **WITH** supervision, direction, personal assistance or total care.
BATHING Points: _____	**(1 POINT)** Bathes self completely or needs help in bathing only a single part of the body such as the back, genital area or disabled extremity	**(0 POINTS)** Need help with bathing more than one part of the body, getting in or out of the tub or shower. Requires total bathing.
DRESSING Points: _____	**(1 POINT)** Get clothes from closets and drawers and puts on clothes and outer garments complete with fasteners. May have help tying shoes.	**(0 POINTS)** Needs help with dressing self or needs to be completely dressed
TOILETING Points: _____	**(1 POINT)** Goes to toilet, gets on and off, arranges clothes, cleans genital area without help.	**(0 POINTS)** Needs help transferring to the toilet, cleaning self or uses bedpan or commode
TRANSFERRING Points: _____	**(1 POINT)** Moves in and out of bed or chair unassisted. Mechanical transfer aids are acceptable.	**(0 POINTS)** Needs help in moving from bed to chair or requires a complete transfer.
CONTINENCE Points: : _____	**(1 POINT)** Exercises complete self control over urination and defecation.	**(0 POINTS)** Is partially or totally incontinent of bowel or bladder
FEEDING Points: _____	**(1 POINT)** Gets food from plate into mouth without help. Preparation of food may be done by another person.	**(0 POINTS)** Needs partial or total help with feeding or requires parenteral feeding.
TOTAL POINTS: _____ SCORING:		

Part 3: Psychosocial Problems

A. Geriatric Depression Scale - Short Form (GDS-15)

Instructions: Choose the best answer for how elderly felt over the past week.

No.	**Questions**	**Answer**	
1.	Are you basically satisfied with your life?	Yes	**No**
2.	Have you dropped many of your activities and interests?	**Yes**	No
3.	Do you feel that your life is empty?	**Yes**	No
4.	Do you often get bored?	**Yes**	No
5.	Are you in good spirits most of the time?	Yes	**No**
6.	Are you afraid that something bad is going to happen to you?	**Yes**	No
7.	Do you feel happy most of the time?	Yes	**No**
8.	Do you often feel helpless?	**Yes**	No
9.	Do you prefer to stay at home, rather than going out and doing new things?	**Yes**	No
10.	Do you feel you have more problems with memory than most?	**Yes**	No
11.	Do you think it is wonderful to be alive?	Yes	**No**
12.	Do you feel pretty worthless the way you are now?	**Yes**	No
13.	Do you feel full of energy?	Yes	**No**
14.	Do you feel that your situation is hopeless?	**Yes**	No
15.	Do you think that most people are better off than you are?	**Yes**	No
*Total Score*_____			

B. Geriatric Anxiety Scale – 10 Item Versions (GAS-10)

Instructions: Please indicate how often you have experienced each symptom during the **PAST WEEK, INCLUDING TODAY** by checking under the corresponding answer.

	Statements	Not at all (0)	Sometimes (1)	Most of the time (2)	All of the time (3)
1	I was irritable.				
2	I felt detached or isolated from others.				
3	I felt like I was in a daze (confused).				
4	I had a hard time sitting still.				
5	I could not control my worry.				
6	I felt restless, keyed up, or on edge				
7	I felt tired.				
8	My muscles were tense.				
9	I felt like I had no control over my life.				
10	I felt like something terrible was going to happen to me.				

C. **Revised UCLA Loneliness Scale**

Instructions: Indicate how often each of the statements below is descriptive of you.

Statement		Never (1)	Rarely (2)	Sometimes (3)	Often (4)
1	I feel in tune with the people around me				
2	I lack companionship				
3	There is no one I can turn to				
4	I do not feel alone				
5	I feel part of a group of friends				
6	I have a lot in common with the people around me				
7	I am no longer close to anyone				
8	My interests and ideas are not shared by those around me				
9	I am an outgoing person				
10	There are people I feel close to				
11	I feel left out				
12	My social relationships arc superficial				
13	No one really knows me well				
14	I feel isolated from others				
15	I can find companionship when I want it				
16	There are people who really understand me				
17	I am unhappy being so withdrawn				
18	People are around me but not with me				
19	There are people I can talk to				
20	There are people I can turn to				

D. Athens Insomnia Scale (AIS):

Instructions: This scale is intended to record your own assessment of any sleep difficulty you might have experienced. Please circle the appropriate number below to indicate your estimate of any difficulty, provided that it occurred at least three times per week during the last month.

1. Sleep induction (time it takes you to fall asleep after turning off the light)
   0 1 2 3
   No problem slightly delayed markedly Very or didn't sleep at all

2. Awakening during the night
   0 1 2 3
   No problem Minor Considerable serious or did not sleep at all
3. Final awakening earlier than desired
   0 1 2 3
   Not earlier A little earlier markedly Much earlier or didn't sleep at all
4. Total sleep duration
   0 1 2 3
   Sufficient Slightly Markedly Very insufficient or didn't sleep at all
5. Quality of sleep (no matter how long you slept)
   0 1 2 3
   Satisfactory Slightly Markedly Very unsatisfactory or didn't sleep all
6. Sense of well-being during the day
   0 1 2 3
   Normal Slightly Markedly Very decreased
7. Functioning (physical and mental)during the day
   0 1 2 3
   Normal Slightly decreased markedly decreased Very decreased
8. Sleepiness during the day
   0 1 2 3
   None Mild Considerable Intense

E. Mini-Cog Test

Instructions for Administration & Scoring

Step 1: Three Word Registrations: Look directly at person and say, "Please listen carefully. I am going to say three words that I want you to repeat back to me now and try to remember. The words are [select a list of words from the versions below]. Please say them for me now." If the person is unable to repeat the words after three attempts, move on to Step 2 (clock drawing).

Version 1	**Version 2**	**Version 3**	**Version 4**	**Version 5**	**Version 6**
Banana	Leader	Village	River	Captain	Daughter
Sunrise	Season	Kitchen	Nation	Garden	Heaven
Chair	Table	Baby	Finger	Picture	Mountain

Step 2: Clock Drawing: Say: "Next, I want you to draw a clock for me. First, put in all of the numbers where they go." When that is completed, say: "Now, set the hands to 10 past 11." Use preprinted circle for this exercise. Repeat instructions as needed as this is not a memory test. Move to Step 3 if the clock is not complete within three minutes.

Step 3: Three Word Recall: Ask the person to recall the three words you stated in Step 1. Say: "What were the three words I asked you to remember?" Record the word list version number and the person's answers below.

Word List Version: _____ Person's Answers: _____ _____ _____

Word Recall: _____ (0-3 points)	1 point for each word spontaneously recalled without cueing.
Clock Draw: _____ (0 or 2 points)	Normal clock = 2 points. A normal clock has all numbers placed in the correct sequence and approximately correct position (e.g., 12, 3, 6 and 9 are in anchor positions) with no missing or duplicate numbers. Hands are pointing to the 11 and 2 (11:10). Hand length is not scored. Inability or refusal to draw a clock (abnormal) = 0 points
Total Score: _____ (0-5 points)	Total score = Word Recall score + Clock Draw score

Thank you!!

Appendix C

सहभागीको लागि जानकारी फारम

नमस्कार,

हामी चितवन मेडिकल कलेजमा काम गर्ने कर्मचारीहरु हौं । यस अनुसन्धानको विषय भरतपुर, चितवनमा बसोबास गर्ने वृद्धवृद्धाहरुमा देखिएका मनोसामाजिक समस्याहरुको खोजी गर्नु यस अध्ययनको उद्देश्य हो । यसका लागि हामीले ६५ वर्षभन्दा माथिका र भरतपुर-चितवनमा बसोबास गर्ने व्यक्तिहरूलाई छनोट गरिएको छ । यसको लागि हामी तपाईलाई आवश्यक जानकारी दिन चाहान्छौ र यस अनुसन्धानमा सहभागि हुनको लागि अनुरोध गर्दछौं । यदि तपाईलाई केही बुझ्न कठिनाई भएको खण्डमा हामीले अझै विस्तृत रुपमा जानकारी दिनेछौ ।

अनुसन्धानको शीर्षक: चितवनमा बसोबास गर्ने ज्येष्ठ नागरिकमा (वृद्धवृद्धाहरुमा) मनोसामाजिक समस्याहरु ।

अनुसन्धानको उद्देश्य: भरतपुर, चितवनमा बसोबास गर्ने वृद्धवृद्धाहरूमा रहेका मनोसामाजिक समस्याहरू पत्ता लगाउने ।

अनुसन्धानमा गरिने कार्यको जानकारी : यस अध्ययनका लागि अनुसन्धानकर्ताहरुले तपाईंको सामाजिक जनसांख्यिकीय र रोग सम्बन्धी जानकारीका साथै जीवनशैली कारकहरूसँग सम्बन्धित केही प्रश्नहरू सोध्नेछन्। थप रूपमा, तिनीहरूले तपाईंको मनोसामाजिक समस्याहरू सोध्नेछन्। त्यस पछि तपाईंको संज्ञानात्मक कमजोरी मापन गर्न तपाईंलाई शब्द दर्ता, शब्द सम्झना र घडी कोर्न अनुरोध गर्नेछन्।

अनुमानित समय र सख्या: यस अध्ययनका लागि अनुसन्धानकर्ताहरुले एकै पटक मात्र तपाईंको सुविधा अनुसार छुट्टै कोठा वा घरको कुनामा संरचित अन्तर्वार्ता तालिका मार्फत ४०-४५ मिनेटको लागि तपाईंको जानकारी सोधिनेछ ।

फाइदाहरु:: तपाईंलाई यस विशेष अध्ययनको लागि सम्भावित सहभागीको रूपमा चयन गरिएको छ। यस अध्ययन बाट तपाईलाई प्रत्यक्ष फाइदा हुने छैन तर प्राप्त जानकारीले स्वास्थ्य सेवा प्रदायकलाई समुदायका वृद्धवृद्धाहरूका लागि नियमित जाँच, परामर्श र सचेतना कार्यक्रमको योजना बनाउन मद्दत गर्नेछ। तसर्थ, हामी तपाईंलाई अध्ययनमा सक्रिय सहभागिता लिन र सही र भरपर्दो जानकारी प्रदान गर्न अनुरोध गर्न चाहन्छौं।

जोखिम : यस अनुसन्धानमा सहभागी हुँदा तपाइँलाई कुनै किसिमको जोखिम हुने छैन ।

दस्तुर :तपाइको सहभागिता स्वैच्छिक हुनेछ र यस अनुसन्धानमा भाग लिँदा तपाइहरुले कुनै प्रकारको रकम दिनुपर्ने छैन ।

सहभागिता: तपाइको सहभागिता स्वैच्छिक हुनेछ र तपाइलाई सहभागी हुन बाध्य गरिने छैन । तपाइ कुनै पनि समय यसबाट बाहिरिन सक्नुहुनेछ ।

जानकारीको प्रयोग : तपाइको सहयोगको प्रशंसा गर्दै तपाइले दिएको जानकारीहरु गोप्य रहने र यस अनुसन्धानको लागि मात्र प्रयोग गर्ने प्रतिबद्धता जनाउँछौं ।

सम्पर्क : अनुसन्धानकर्ताहरुले तपाइले दिनुभएको जानकारीको लागि आभार व्यक्त गर्दछौं । यस अध्ययनको समय भरी तपाइलाई कुनै थप जानकारी चाहिएको खण्डमा सहप्राध्यापक सुनिता पौड्याल लाई ९८४५१९९१५२ मा सम्पर्क गर्न सक्नुहुनेछ ।

यस अध्ययनको लागि खर्च NHRC Provincial Research Grant 2078/2079 ले उपलब्ध गराएको हो ।

सम्पर्क :
नेपाल स्वास्थ्य अनुसन्धान परिषद्, रामशाह पथ, काठमाडौं
फोन नम्बर–९७७-४२५४२२०

धन्यवाद!!

मञ्जुरीनामा पत्र

अनुसन्धानको शीर्षक: चितवनमा बसोबास गर्ने ज्येष्ठ नागरिकमा (वृद्धवृद्धाहरुमा) मनोसामाजिक समस्याहरु ।

अनुसन्धानको उद्देश्य: भरतपुर, चितवनमा बसोबास गर्ने ज्येष्ठ नागरिकमा (वृद्धवृद्धाहरूमा) रहेका मनोसामाजिक समस्याहरू पत्ता लगाउने ।

मलाइ यस "चितवनमा बसोबास गर्ने ज्येष्ठनागरिकमा (वृद्धवृद्धाहरुमा) मनोसामाजिक समस्याहरु" नामक अनुसन्धानमा सहभागि गराइएको कुरा थाहा छ । मैले यस अनुसन्धानको बारेमा जानकारी पाइसकेको छु । प्रश्न सोध्न अवसर पाउने, मेरो सहभागिता स्वैच्छिक हुने, सहभागी हुन बाध्य नगरिने, र कुनै पनि समय यसबाट बाहिरिन सक्नुहुनेछ कुराको बारेमा मलाई पूर्ण जानकारी छ । म यस अध्ययनमा सहभागी हुन इच्छुक छु ।

यस अध्ययनको समय भरी मलाई कुनै जानकारी चाहिएको खण्डमा चितवन मेडिकल कलेजमा काम गर्ने सहप्राध्यापक सुनिता पौड्याललाई फोन नं. ९८४५१९९१५२ मा सम्पर्क गर्न गर्नसक्नेछु ।

_____	_____
सहभागिताको हस्ताक्षर	अनुसन्धानकर्ताको हस्ताक्षर
मिति:	मिति:

Appendix D

ज्येष्ठ नागरिकमा मनोसामाजिक समस्या**हरू**

निर्देशन: यो अन्तर्वार्ता तालिकामा तीन प्रमुख भागहरू छन्। भाग १ सामाजिक जनसांख्यिकीय जानकारीसँग सम्बन्धित छ, भाग **२** सहभागीको कार्यात्मक स्थिति मूल्याङ्कन (Katz) सूचकांकसँग समावेश छ र भाग ३ उत्तरदाताहरूको मनोसामाजिक समस्याहरू समावेश छ । जसमा एउटा मात्र उपयुक्त प्रतिक्रियामा प्रदान गरिएको बाकसमा √ चिन्ह लगाउनुहोस्।

कोड नम्बर: ..... अन्तर्वार्ताको स्थान: .....

अन्तर्वार्ताको मिति: .....

भाग – एक: सामाजिक- जनसांख्यिकीय जानकारी

१. उमेर..... (पूरा वर्षमा)
२. लिंग: पुरुष/महिला
३. ठेगाना: .....
४. जाती.....
५. धर्म.....
६. वैवाहिक स्थिति: विवाहित/अविवाहित/विधवा/विधुर
७. परिवारको प्रकार: एकल/संयुक्त
८. अहिले तपाइँ को संग बस्दै हुनुहुन्छ: एक्लै/ पति वा पत्नी/ छोरा/छोरी/ अन्य.....
९. शैक्षिक स्तर: अशिक्षित/ साक्षर/आधारभूत/ माध्यमिक/ स्नातक र माथि

१०. पेशा:	अघि (Previous)	पछि (Current)	कैफियत
☐ खेती	.....	.....	.....
☐ गृहिणी	.....	.....	.....
☐ सेवा जागीर	.....	.....	.....
☐ व्यापार	.....	.....	.....
☐ श्रम / दैनिक ज्याला	.....	.....	.....
☐ अरू.....	.....	.....	.....

११.आर्थिक स्थिति: एक वर्षसम्म खान पुग्दैन/एक वर्षसम्म खान पुग्छ/भविष्यको लागि अधिकशेष

११.१ प्रति महिना आम्दानी:.....

१२. के तपाइँ पेन्सन पाउनुहुन्छ? हो/होइन
१३. के तपाइँ वृद्ध भत्ता पाउनुहुन्छ? हो/होइन
१४. के तपाइँ सँग कुनै स्वास्थ्य समस्याहरू छन्? छ/छैन
१४.१. यदि छ भने, तपाइँसँग निम्न मध्ये कुन स्वास्थ्य समस्याहरू छन्?

मधुमेह	**छ/ छैन**	दम	**छ/ छैन**
उच्च रक्तचाप	**छ/ छैन**	मृगौला समस्या	**छ/ छैन**
उच्च कोलेस्ट्रोल स्तर	**छ/ छैन**	घुडा दुख्ने समस्या	**छ/ छैन**
मुटुरोग	छ**/ छैन**	अन्य (यदि निर्दिष्ट गर्नुहोस्)	**.....**

१५. तपाइँलाई बिरामी हुँदा कसले हेरचाह गर्छ?.....
१६. के तपाइँ हाल चुरोट, पाइप वा चुरोट जस्ता कुनै सुर्तीजन्य उत्पादनहरू पिउनुहुन्छ? हो /होइन
१७. के तपाइँ हाल दैनिक सुर्तीजन्य पदार्थहरू धुम्रपान गर्नुहुन्छ? हो/होइन
१८. विगतमा, तपाईंले कहिल्यै कुनै सुर्तीजन्य पदार्थ सेवन गर्नुभएको थियो? हो/होइन

१९. विगतमा, तपाईंले दैनिक धुम्रपान गर्नुहुन्थ्यो? हो/होइन

२०. मध्यपान स्थिति:

क) हाल पिउने (पछिल्लो ३0 दिन भित्र)

ख) पछिल्लो १२ महिनामा रक्सी पिउने, हाल होइन

ग) परित्याग गरेको (पछिल्लो १२ महिनामा मदिरा सेवन नगरेको)

घ) कहिल्यै नपिउने

भाग – २: दैनिक जीवनका गतिविधिहरू

	स्वतन्त्रता (१ अंक)	निर्भरता (0 अंक)
गतिविधिहरूअंक: _____	दैनिक जीवनका गतिविधिहरू पर्यवेक्षण, निर्देशन वा व्यक्तिगत सहायता बिना गर्न सक्छ ।	दैनिक जीवनका गतिविधिहरू पर्यवेक्षण, निर्देशन, व्यक्तिगत सहयोग वा पूर्ण हेरचाहमा गर्न सक्छ ।
नुहाउनेअंक:____	आफै पूर्ण रूपमा नुहाउँन सक्छ वा शरीरको एक भाग मात्र नुहाउन मद्दत चाहिन्छ जस्तै पछाडि, गोप्यअंग वा असक्षम चरम।	एक भन्दा बढी भाग नुहाउन, टब भित्र वा बाहिर निस्कन वा सम्पूर्ण शरीर नुहाउन सहयोग चाहिन्छ।
लुगालगाउनेअंक___	कपडाहरू दराजबाट निकाल्न र लगाउन सक्छ। जुत्ता बाँध्न मद्दत चाहिन्छ।	आफैं लुगा लगाउन वा पूर्ण रूपमा लुगा लगाउनमा मद्दत चाहिन्छ ।
शौचालय अंक:____	शौचालय जान र बन्द गर्न, लुगा मिलाउँन जननांग क्षेत्र सहयोग बिना सफा गर्न सक्छ ।	शौचालयमा जान, स्वयं सफाई गर्न, बेडप्यान वा कमोड प्रयोग गर्न मद्दत चाहिन्छ ।
स्थानान्तरण अंक:___	सहयोग बिना ओछ्यान भित्र र बाहिर गर्न सक्छ वा कुर्सीमा बस्न सक्छ । सहायता उपकरण जस्तै ट्रली, छडी स्वीकार्य छन्।	ओछ्यान देखि कुर्सी सम्म सर्न मद्दत चाहिन्छ वा पूर्ण स्थानान्तरण गर्न सहयोग चाहिन्छ।
कन्टिनेंस अंक: ___ ____	दिसा र पिसाब नियन्त्रण गर्न सक्छ।	दिसा र पिसाब आंशिक वा पूर्ण रूपमा नियन्त्रण गर्न सक्दैन ।
खुवाउने अंक: __	मद्दत बिना प्लेटबाट खाना खान सक्छ। खानाको तयारी अर्को व्यक्तिले गर्न सक्छ ।	खाना खुवाउन आंशिक वा पूर्ण रूपमा सहयोग वा मद्दत चाहिन्छ।

भाग – ३: ज्येष्ठ नागरिकमा मनोसामाजिक समस्याहरू

क. **जेरियाट्रिक डिप्रेसन स्केल:**

निर्देशन: पछिल्लो हप्तामा तपाईंले कस्तो महसुस गर्नुभयो भन्ने राम्रोसँग वर्णन गर्नुहोस् ।

क्र.सं	**प्रश्नहरू**	**छ**	**छैन**
१	के तपाईं आफ्नो जीवनसँग साधारणतया सन्तुष्ट हुनुहुन्छ?		
२	के तपाईंले आफ्नो धेरै जसो गतिविधि र इच्छाहरु छोड्नुभएको छ ?		
३	के तपाईंले आफ्नो जीवनमा खालीपन छाएको महसुस गर्नु भएको छ?		
४	के तपाईंले धेरैजसो दिक्क भएको अनुभव गर्नु भएको छ?		
५	के तपाईं धेरैजसो सक्रिय रहनु भएको छ?		
६	के तपाईं लाई केही नराम्रो वा डरलादो घटना घट्छ कि भनेर भनेर मनमा डरलाग्ने भएको छ?		
७	के तपाईंले धेरैजसो खुसी भएको महसुस गर्नुहुन्छ?		
८	के तपाईं प्रायजसो असहाय वा लाचार भएको महसुस गर्नु भएको छ?		
९	के तपाईं बाहिर जान र काम गर्न भन्दा घरमै काम नगरिकन बसिरहन रुचाउनु हुन्छ?		
१०	के तपाईंलाई स्मरण शक्तिमा पहिले भन्दा बढी ह्रास भएको महसुस गर्नु भएको छ?		
११	के तपाईं आफु जिउँदो भएकोमा अचम्म महसुस गर्नु भएको छ?		
१२	के तपाई ले आफुलाई बेकार महसुस गर्नुहुन्छ?		
१३	के तपाई आफु उर्जाले वा शक्तिले भरिएको महसुस गर्नुहुन्छ		
१४	के तपाईंले आफ्नो अवस्था आशाहीन भएको महसुस गर्नु भएको छ?		
१५	के तपाईंलाई आफू भन्दा अरु मानिसहरू प्रायः सक्षम छन् भन्ने महसुस गर्नु भएको छ?		

ख. **जेरियाट्रिक एन्जाइटी स्केल:**

निर्देशन: तपाईंले आज लगायत गत हप्तामा कति पटक निम्न लक्षणको अनुभव गर्नुभएको छ, कृपया सम्बन्धित जवाफ अन्तर्गत जाँच गरेर संकेत (√) गर्नुहोस् ।

क्र. सं		पटक्कै भएन(0)	कहिलेकाहीँ (१)	अधिकांश समय (2)	सबै समय (3)
१	आफुलाई चिडचिडापन वा छटपटी भएको महसुस कति पटक गर्नु भयो				
२	आफु अरूबाट टाढा वा अलग्गिएको महसुस कति पटक गर्नु भयो ।				
३	आफु चकित / भ्रमित भएको महसुस कति पटक गर्नु भयो ।				
४	चुप लागेर बस्न गार्हो भएको महसुस कति पटक गर्नु भयो।				
५	आफ्नो चिन्ता नियन्त्रण गर्न असमर्थ भएको महसुस कति पटक गर्नु भयो।				
६	बेचैनी, छटपटी, अत्तालिएको र एक्लिएको महसुस कति पटक गर्नु भएको छ।				
७	थकित वा तागत नभएको अनुभव कति पटक गर्नु भयो।				
८	मांशपेशी सिथिल भएको अनुभव कति पटक गर्नु भयो।				
९	जीवनमा कुनै नियन्त्रण छैन भन्ने महसुस कति पटक भयो।				
१०	केही डरलादो घटना घट्छ कि भनेर मनमा डरलाग्ने कति पटक भयो।				

ग. **संशोधित UCLA एक्लोपन स्केल:**

निर्देशन: तलका प्रत्येक कथनहरू तपाईंले कति पटक अनुभव गर्नुभएको छ संकेत (√)गर्नुहोस्।

क्र.सं	तपाईंले निम्न अनुभव कति पटक गर्नुभएको छ,	कहिल्यै (१)	विरलै (२)	कहिलेकाहीं (३)	प्रायः (४)
१	म मेरो वरिपरिको मान्छेहरुसँग मिलेको महसुस गर्दछु।				
२	म संग साथी सँगतिको कमी छ।				
३	मलाई फर्काउन सक्ने कोही छैन ।				
४	म एक्लोपन महसुस गर्दिनँ।				
५	म साथीहरुको एक हिस्सा महसुस गर्दछु।				
६	म वरिपरिका मान्छे हरु संग धेरै मिल्दो जुल्दो छ।				
७	म अब कसैको नजिक छैन।				
८	मेरो चासो र विचारहरू मेरो वरिपरिका मान्छेहरु सँग व्यक्त गर्दिन।				
९	म सबै संग घुलमिल र कुरा राख्न सक्ने मान्छे हुँ।				
१०	मैले नजिकको महसुस गर्ने मान्छेहरू धेरै छन्।				
११	मलाई सबैले लत्याएको महसूस हुन्छ।				
१२	मेरो सामाजिक सम्बन्ध हल्का छ।				
१३	मलाई साँच्चै कसैले राम्रो संग चिन्दैन।				
१४	म अरूबाट एक्लो महसुस गर्छु।				
१५	मैले चाहेको बेला साथी बनाउन सक्छु।				
१६	मलाई वास्तविक रुपमा बुझ्ने मानिसहरू छन्।				
१७	म आफु अलग्गिन पर्दा दुखी छु।				
१८	मेरो वरिपरि मान्छेहरू छन् तर मेरो साथमा कोही पनि छैनन्।				
१९	मैले कुरा गर्न सक्ने मान्छेहरू छन्।				
२०	त्यहाँ म फर्कन सक्ने मानिसहरू छन्।				

घ. **एथेन्स इन्सोम्निया स्केल (अनिद्रासँग सम्बन्धित प्रश्नहरू)**

निर्देशन: गत महिनामा प्रति हप्ता कम्तिमा तीन पटक भएको कुनै पनि कठिनाईको आफ्नो अनुमान संकेत गर्न तलको उपयुक्त नम्बरमा सर्कल गर्नुहोस्,

क्र.सं	प्रश्नहरु
१	बत्तीहरु बन्द गरे पछि निदाउन समय लाग्छ ०) कुनै समस्या छैन १) हल्का ढिलो २) अलि बेर लाग्छ ३) धेरै ढिलो भयो वा सुतैसुत्दिन
२	रातको समयमा ब्युझने ०) कुनै समस्या छैन १) हल्का समस्या छ २) अलिअलि समस्या छ ३) धेरैसमस्या वा निदाएको छैन
३	बिहान समय भन्दा पहिले ब्युझने/चाडै उठ्ने ०) चाडै उठदिन १) अली अगाडी उठ्छु २)अली कति चाडो उठुछु ३) धेरै पहिलेउठ्छु वा पटक्कै निद्रा लाग्दैन
४	कुल निद्रा अविधी ०) पर्याप्त १) अपर्याप्त २) अलि कम ३) निद्रा पुग्दैन/ पटक्कै निद्रा लाग्दैन
५	तपाईं जतिसुकै सुत्नु भए पनि निद्राको गुणस्तर ०) सन्तोषजनक १) अलिकति असन्तुष्ट २) एकदमै असन्तुष्ट ३) धेरै असन्तुष्ट वा सबै सुत्न सकेन

६	दिनको समयमा स्वस्थ अनुभति ०) सामान्य १) अलिकति कम २) एकदमै कम ३) धेरै कम
७	दिनको समयमा शारीरिक र मानसिक कार्य ०) सामान्य १) अलिकति कम २) एकदमै कम ३) धेरै कम
८	दिनको समयमा निद्रा महसुस गर्नुहुन्छ? ०) लाग्दैन १) हल्का लाग्छ २) अलिबढि लाग्छ ३) धेरै लाग्छ

ङ. डिमेन्सिया स्क्रीनिंग स्केल (Mini-Cog Test)

निर्देशन: चरण १: तीन शब्दहरू: व्यक्तिलाई सीधै हेर्नुहोस् र भन्नुहोस्, "कृपया ध्यानपूर्वक सुन्नुहोस्। म तीन शब्दहरू भन्न जाँदैछु जुन म चाहन्छु कि तपाईं अब मलाई दोहोर्याउनुहोस् र सम्झने प्रयास गर्नुहोस्। शब्दहरू हुन्:

संस्करण १	संस्करण २	संस्करण ३
केरा	नेता	गाउँ
सूर्योदय	सिजन	भान्सा
कुर्सी	तालिका	बच्चा

कृपया अब शब्दहरू भन्नुहोस्। यदि व्यक्ति तीन प्रयास पछि शब्दहरू दोहोर्याउन असमर्थ छ भने, चरण २ (घडी रेखाचित्र) मा जानुहोस्।

चरण २: घडी रेखाचित्र: भन्नुहोस्: " यस पछी तपाईं घडी कोर्नुहोस्। पहिले, संख्याहरू जहाँ जान्छन् सबै नम्बरहरू राख्नुहोस्।" जब त्यो पूरा हुन्छ, भन्नुहोस्: "अब, १० बजे ११ मा हातहरू सेट गर्नुहोस्।" यस अभ्यासको लागि पूर्वमुद्रित सर्कल प्रयोग गर्नुहोस्। आवश्यकता अनुसार निर्देशनहरू दोहोर्याउनुहोस् किनकि यो मेमोरी परीक्षण होइन। यदि घडी तीन मिनेट भित्र पूरा भएन भने चरण **३** मा सार्नुहोस्।

चरण ३: तीन शब्द सम्झना: तपाईंले चरण **१** मा भन्नुभएका तीन शब्दहरू सम्झन व्यक्तिलाई सोध्नुहोस्। भन्नुहोस्: "मैले तपाईंलाई सम्झन भनेको तीन शब्दहरू के थिए?" शब्द सूची संस्करण नम्बर र व्यक्तिको जवाफ तल रेकर्ड गर्नुहोस्।
शब्द सूची संस्करण: _____ व्यक्तिका उत्तरहरू: _____ _____ _____

शब्द सम्झना:_____ (०-३ अंक)	प्रत्येक शब्दको लागि **१** अंक बिना संकेत ।
घडीको रेखाचित्र:____(० वा २ अंक)	सामान्य घडी = २ अंक। सामान्य घडीमा सबै नम्बरहरू सही क्रम र लगभग सही स्थितिमा राखिएको हुनपर्छ (जस्तै, १२, ३, ६ र ९) कुनै हराइरहेको वा नक्कल संख्याहरू बिना। हातहरू ११ र २ (११: १०) लाई संकेत गरिएको हुनपर्छ । हातको लम्बाई स्कोर गरिएको छैन। अक्षमता वा घडी कोर्न अस्वीकार (असामान्य) = ० अंक
जम्मा अंक:_____ (०-५ अंक)	कुल स्कोर = शब्द सम्झना स्कोर + घडी रेखाचित्र स्कोर

धन्यवाद!!

Ref: CMC-IRC/079/080-095

Date: March 10, 2023

To,
Assoc. Prof. Sunita Poudyal (PI)
Prof. Kalpana Sharma (Co-I)
Assoc. Prof. Hem Kumari Subba (Co-I)
Prof. Ramesh Subba (Co-I)
School of Nursing
Chitwan Medical College

Ref: Ethical Approval of Research Proposal

Dear Ms. Poudyal

The Institutional Review Committee of Chitwan Medical College (CMC-IRC) has reviewed and discussed your research proposal entitled **"Psycho-Social Problems among Elderly Residing in Chitwan"**

I am pleased to inform you that after careful evaluation, the above-mentioned research proposal has been approved by Institutional Review Committee of Chitwan Medical College (CMC-IRC), Standard Operating Procedures Section "11" point no. 1.1 through Expedited Review Procedures.

This CMC-IRC is organized and operates in accordance with the Guidelines of Nepal Health Research Council (NHRC) and Standard Operating Procedures (SOP) of CMC-IRC.

The standard conditions of this approval are:

- Conduct the project strictly in accordance with the proposal submitted and granted ethics approval, including any amendments made to the proposal required by the CMC-IRC
- Report immediately of any complaints or other issues in relation to the project which may warrant review of the ethical approval of the project (Email: irc.secretary@cmc.edu.np)
- Make submission for approval of amendments to the approved project before implementing such changes
- Submit a 'progress report' on three monthly basis or more frequently as the committee feels it.
- Required to apply for renewal of ethical clearance if the study is not completed at the end of this clearance. This approval is valid for **one year** from the date of approval.
- CMC-IRC may conduct an audit of the project at any time.
- Provide a copy of '**FINAL REPORT**' to CMC-IRC when the project is complete
- Abide by the principles of good clinical practice and ethical conduct of research.

Please note that failure to comply with the conditions of approval may result in withdrawal of approval for the project. If you have any questions, please contact the IRC Section at CMC. You may now commence your project.

I wish you all the best for the conduct of the project.

.....
Prof. Raj Kumar Mehta
Member-Secretary
Institutional Review Committee (CMC-IRC)

Government of Nepal
Nepal Health Research Council (NHRC)
Estd. 1991

Ref. No.: 2257

16th March 2023

Ms. Sunita Poudyal
Chitwan Medical College

Subject: Approval letter for Grant

Dear Ms. Sunita Poudyal,

We would like to express our congratulations on the approval of the Provincial Health Research Grant FY 2079/080 offered by Nepal Health Research Council (NHRC). Our approved amount is Nrs 100000 for the purpose of your research entitled **"Psycho-Social Problems among Elderly Residing in Chitwan ".** Please proceed further with the ethical approval process.

We hope that your research is a success and results in benefitting the entire society.

If any further discussion is needed in regard to this matter, please do not hesitate to contact Capacity Building Section.

.....

Dr. Pradeep Gyanwali
Member-Secretory (Executive Chief)
NHRC