

“Biopsychosocial Needs of Elderly Population in Selected Community Area of Doiwala, Dehradun, Uttarakhand”

Received: 12 February 2023, **Revised:** 14 March 2023, **Accepted:** 16 April 2023

Arpita Bali¹, Dr Grace M. Singh^{2*}, John Davidson³, Sandhya Negi⁴

1PG Student, Mental Health Nursing Department, Himalayan College of Nursing, Dehradun Uttarakhand, India.

2Associate Professor, Mental Health Nursing Department, Himalayan College of Nursing, Dehradun Uttarakhand, India.

3Nursing Tutor, Community Health Nursing Department, Himalayan College of Nursing, Dehradun Uttarakhand, India.

4Nursing Tutor, Mental Health Nursing Department, Himalayan College of Nursing, Dehradun Uttarakhand, India.

Corresponding author: Dr. Grace M. Singh^{2*}

Himalayan College of Nursing, Swami Rama Himalayan University, Jollygrant, Dehradun, Uttarakhand, India.

Email ID: gmadonnasingh@srhu.edu.in

Mobile Number: 6394781672

Keywords:

elderly, Biopsychosocial needs, community

Abstract

Objectives: The aim of the study to explore the Biopsychosocial needs of the elderly population in selected community area, to uncover the problems faced by the elderly population in day to day activities.

Methodology: This is the Quantitative Research Approach, survey research design was adopted to investigate the Biopsychosocial needs among elderly population. 135 elderly populations aged 60-90 years, were selected by total enumerative sampling technique and data was collected by structured interview schedule method.

Result: the finding revealed that Biopsychosocial need in elderly population was associated with demographic characteristics, As most of the sample (80.74%) had their biological needs arise in personal hygiene. Then the most of the participants (85.92%) had need arise under Psychological needs in the leisure time. Moreover, more than half of elderly population (57.77%) had sociological needs arise in the family relation/social environment. On determining the correlation between the biological, psychological and sociological needs it was find that there was moderate positive correlation among them. As non parametric test was applied and it was found that there was statistically association was found only in the group of previous knowledge regarding Biopsychosocial needs of elderly associated with socio demographic variable among elderly population.

Conclusion: In overall assessment of Biopsychosocial needs. It had all three needs that are falling more towards the needs arise in each component of items under each domains.

1. Acknowledgement

Authors would like to express their deepest gratitude to the lord all mighty and then to Professor Dr. Sanchita Pughzendi, Principal and Head of Community Health Nursing, Himalayan College of Nursing, Dehradun and Associate Professor, Dr Grace M. Singh Mental Health Nursing Department Himalayan College of Nursing, and special Thank you to Mr. John Davidson and Mrs Sandhya Negi Nursing Tutor Himalayan College of Nursing, Dehradun, and least to Mrs Upasana Bali and Mr. Anil Bali my beloved parents for giving me the opportunity to conduct this study I am thankful for their kind guidance, support, encouragement, and continuous care.

health is consider to be a fundamental human right and it is a social goal worldwide that is essential for the satisfaction of the human basic needs that has to be attained by all the people. So the global population of the elderly is estimated to be double from 12% to 22% population had increased to two billion, 60 years and above. As it has been seen that elderly population faces more physical, psychological and societal challenges which is need to be recognized.¹ This elderly population have their unique stages of life upbringing regarding about their particular needs that is (biological, psychological, and sociological) so that one may have better fulfillment of needs and can live there life in respectful way.²

Hence, these Biological needs are the essential part of the human life span; right from birth of the person, until

Journal of Coastal Life Medicine

he becomes old it especially focuses on a specific changes found in every aspects of life. So the biological changes in elderly population can lead to the impairment of structural changes and self- regulation, degeneration of cell, and functional changes in tissue or organs that may lead changes from physiological to psychological that had been seen among elderly population.³

Moreover, the Psychological needs of elderly population also pays the significant role to have a better place for their independence and to build up a strong emotional bond, which will help them to maintain their realistic setting and also help them to achieve personal growth and sense of security. If these needs are not fulfilled then, the behavior changes among elderly population may develop the tendency of certain changes. Hence, this could hinder their self-esteem and can lead in development of feeling of disrespect in their family.⁴

In terms of Sociological needs are the real factors that control the life of the elderly populations' health and welfare as well as it is an important issue to maintain their rights. These are defined as the physical, emotional and intellectual needs. As due to lack of participation as a family member, due to loss of their physiological system, also the loss of psychological systems lead to the exploitation in their rights, may leads them to be felt unwanted in the society.⁵

As the present crisis is an unprecedented in the global cases it can lead to the risk factors, which will add more impact on psychological effects in elderly populations and may provide effects on their physiological health as well that may impact on quality of life in social participation in our community.^{6,7}

2. The Research Question

What are the Biopsychosocial Needs of elderly populations in selected community area of Dheradhun?

What is presently on this subject?

The Biopsychosocial needs are the foremost requirement in today's scenario for the age group of elderly population as these needs are those which refers to needs of elderly arising due to physiological changes in their body for which they required assistance. In this study Biopsychosocial needs were expressed in terms of problem faced by them while carrying their day to day activities.

What does this article add to the existing knowledge?

Biopsychosocial needs among elderly may differ In terms of activities they performed in there day to day activities and also on the basis of the Biological, Psychological and Sociological needs

What are the implications for practice?

1. The present study will motivate the Nursing students to learn about the Biopsychosocial needs of elderly to educate them regarding the importance and health benefits of these needs among elderly.
2. The nurses of the various department can assess these needs among elderly
3. During and discharge the nurse administrator should insist staff nurses to conduct needs assessment before the discharge of patient
4. As this study will bring more new facts at different settings such as Hospital area, mentally ill elderly and also it can further take down in old age home in order to

3. Materials and Method

Design:

A quantitative research approach design along with Survey Research Design was adopted to determine the assessment of Biopsychosocial needs of elderly population. As the area was selected through lottery method was jolly grant area and under that there five sub villages were selected by lottery method for pretesting, reliability, pilot study and for main study.

Research Team

Three researchers were Final year Master's in Psychiatric & Mental Health Nursing Post graduate student, two researchers were working as research Guide faculty members (Dr. Grace M. Singh) of a nursing faculty in the department of mental health and psychiatric nursing. And (Nursing Tutor Mr. John Davidson) of a nursing faculty in the department of community health nursing Two of them have worked as supervisors in statistician part of the study i.e (Nursing Tutor Mrs.Sandhya Negi). The research team comprises three females and one male, two of whom are trained in quantitative research. The researchers were also acquainted with all of the participants.

Setting and Time

The data were collected in selected community area of Doiwala, Dehradun Uttarakhand between 4 January to 31 January 2022.

Sample

The target population was elderly population at the Doiwala Dehradun Uttarakhand. Inclusion criteria: The study included the elderly population who were 60 years and above : 1) presently residing in the selected community area 2) they could understand Hindi language 3) who were willing to participate in the study The study excludes the elderly population who were: 1) clinically diagnosed with any cognitive or neurological problems. The sample comprised 135 (n=135) students, 58 women and 77 men, who were selected via total enumerative sampling technique .

Data Collection Tools

A structured interview method was adopted to reveal the assessments of Biopsychosocial needs of elderly population. The socio-demographic comprised of self-

structured questionnaire that includes the baseline data of 11 items that are - age, gender, religion, marital status, education status , previous occupation, family income, type of house, type of family, previous knowledge regarding biopsychosocial needs, & anthropometrics measurement.

The self structured likert scale was adopted to collect the needs of the elderly population. The tool consist of 3 domains and 104 items and the maximum score of the tool was 312 . The domains of the tool were, Biological needs domain which includes Physical abilities (eyesight, hearing, urinary continence, walking abilities, sleep schedule and memory) functional abilities(functional abilities, personal hygiene(bathing practice, oral practice, skin practice, grooming practice), diet and its preparation, exercise. The next domain is psychological needs includes psychological health, autonomy, lifestyle (leisure time, substance abuse intake) the last domain is sociological needs includes self independence, family/social environment, financial constraints, safety and security.

Data Collection

The 225 houses were visited by the researcher for main study data collection, out which 135 elderly population were selected by total enumeration sampling technique as 32 houses were taken from tarli jollygrant and 59 houses from Kothari Mohalla . The research study excluded houses were 43 from tarli and 91 from kothari mohalla due to exclusion criteria and non availability of elderly population and duration of data collection was of one month as the total time taken was 20-25 minutes for conducting structured interview and the data was collected from selected area within one month of time span.

Data Analysis

The present research data was processed and analyzed, as a systematic fashion, so that the trends and patterns of relationship can depict well. As statistical analysis is a method of ordering, categorizing, manipulating, and summarizing data obtain from the answers to the research question. In order to interpret the data in logical order both “descriptive and inferential statistics” were used. The collected data was organized and computed for statistical analysis according to the objectives, data distribution, and the number of participants as well as all the data were transferred with

Journal of Coastal Life Medicine

coding to the master data sheet for analyses using SPSS (statistical package trial version 20)

Trustworthiness

Trustworthiness was achieved through “credibility,” “transferability,” “dependability,” and “confirmability.” Credibility was achieved by the participants’ opportunity to provide information freely, confirm their statements, meet with the researchers frequently, describe the phenomenon in detail, and compare them with the literature. To ensure transferability, the study duration, sample, environment, data collection, and research process were presented clearly. The participants’ statements were quoted by verbatim to ensure dependability. The research activities and processes were examined by an authority who was not involved in the study. To ensure confirmability, the researchers provided comments that reflected the phenomenon under study, and multiple researchers coded the data.

Ethical Issues

The research was approved by the Ethics Committee of Swami Rama Himalayan University (31/12/2021–2022/270). The participants were told that they would be involved in this study at their home. They were also informed about the use of a recorded data during data collection will be kept confidential and it is their right to stop participating in the study at any time, that the information would be used purely for research and publication, and that their personal information would be kept confidential. At the end of the study, the recorded data will be destroyed.

4. Result

The findings are presented in Four sections. The first provides the findings related to the elderly socio-demographic characteristics and second section presents the findings of the assessment of Biopsychosocial needs. The third section comprises of the correlation of each domain. The fourth finding deals with the association of Biopsychosocial need with that of their socio demographic variables

I.Findings related to the description of socio-demographic profile:

The most of the sample (80%) were from the age group of 60-75 years more than two third were male (57.0%), and most of the samples belongs to Hindu religion (89.6%), the majority were married,(94.8%) educational level was more than two third of the sample(79.8%), were educated. As less than one third had pervious occupation belonged to government sectors (39.3%) with more than two third had monthly income of < 25000 (78.5%) more than two third of the samples live in their own house i.e. (78.8%), and also more than two third lives in a joint family type (65.9%), and most of the samples doesn’t had previous knowledge regarding the Biopsychosoical needs (88.1%). In anthropometrics measurements two third measure with height of 5.5-6.6feet (61.5%) followed by as two of third of theparticipants measure with the weight under 40-76kg i.e. (68.9%). While, the body mass index states, two third of the elderly population falls under normal weight category, more than one third of the sample are falling in the category of pre hypertensive phase B.P. > 120 -80mmHg systolic and > 80-89mmHg diastolic in Blood pressure readings. (Table 1).

Table 1: Frequency and Percentage distribution of elderly with their selected socio-demographic variables

n=135

S. No	VARIABLES	TOTAL NO OF PARTICIPANTS	FREQUENCY %
1.	Age:		
	a) 0-75 years	108	80%
	b) 76-90year	27	20%
2.	Gender		

Journal of Coastal Life Medicine

	a) Male	77	57%
	b) Female	58	43%
3.	Religion		
	a) Hindu	121	89.6%
	b) Sikh	5	3.7%
	c) Muslim	9	6.7%
4.	Marital status		
	a) married	128	94.8%
	b) widow	7	5.2%
5.	Education level		
	a) educated	107	79.3%
	b) neducated	28	20.7%
6.	Previous occupation		
	a) homemaker	40	29.6%
	b) private job	24	17.8%
	c) government	53	39.3%
	d) teacher	18	13.3%
7.	Monthly income		
	a) 25000	106	78.5%
	b) 25000	29	21.5%
8.	Type of house		
	a) own house	105	78%
	b) rented house	30	22%
9.	Type of family		

Journal of Coastal Life Medicine

	a) ingle	46	34.1%
	b) oint	89	65.9%
10.	Previous knowledge regarding Biopsychosocial needs of elderly		
	a)	119	88.1%
	b) es	16	11.9%
11.	c) nthropometric measurement		
	d) eight : 4.2-5.4 feet	52	38.5%
	e) 5.5- 6.6 feet	83	61.5%
	f) eight : 40-70kg	93	68.9%
	g) 77-112kg	42	31.1%
	Body Mass Index		
	Normal weight (18.5-24.9)	76	56.3%
	Pre obesity (25.0-29.9)	45	33.3%
	Obesity class I (30.0-34.9)	14	10.4%
	h) lood pressure		
	Normal B. P ($\leq 120/80$ mmHg)	41	30.4%
	Pre hypertensive ($\geq 120-139$ systolic) ($\geq 80-89$ diastolic)	65	48.1%
	Hypertensive (140/90 mmHg or higher than this)	29	21.5%

II. Findings Description of Assessment Biopsychosocial needs of elderly score of elderly population:

the data of this table represents that the data in Biological needs were divided into physical abilities and functional abilities under physical abilities

Journal of Coastal Life Medicine

eyesight, 70.37% elderly was able to watch TV while 62.22% were not able to do needle work, while 71.11% population were able to visualize things in sunlight.

Under hearing 74.07% elderly population were able to hear properly, while 64.40% of them were not able to hear when someone speaks in whisper, 71.11% religious activities were not hinder due to hearing, in the last 77.03% were the population who never got embraced in meeting new relative/people due to hearing problem.

In urinary continence/ fecal 68.8% of the elderly population was able control over the bowels, hence, 71.11% were never get worried when they are aren't able to reach toilet, 65.18% do not have involuntary loss of urine while 92.5% were the elderly population who do not void on the bed.

If we look to the walking abilities the elderly population was able to stand without support 65.18%, while 67.40% elderly population feels the use of cane, and 82.22% werethe elderly population who doesn't required the wheel chair for mobility and 67.40% of the elderly can walk 6 meters.

On the assessment of sleep schedule shows that 62.22% of the elderly were able to sleep properly, while 59.25% population cannot able to sleep in continuation at night, hence 59.25% population feels fresh and energetic, while 61.48% elderly feel frustrated due to impaired and 62.22% do not intake any sleep medication for sleep.

Memory the 60% of elderly population were able to remember the things, while 47.40% was able to remember the special events and 45.92% was able to retained learnedmaterial.

Then the functional abilities in which 69.92% was able to work independently, next 51.85% elderly population was able o travel alone, therefore 55.55% can able to clean their house daily, 45.92% doesn't need assistance in washing clothes, the amount of the elderly population who can use public transport was 45.18% and 57.77% was able to follow and can take their medication own.

Personal hygiene in bathing practice state that 63.07% do take bath daily, while 64.44% elderly population doesn't need assistance in bathing

In oral practice 63.07% elderly population was able to brush their teeth daily, while 42.2% do not brush their teeth in night after meal, hence 68.14% do not visit the dentist.

Skin practice 68.14% of the elderly do wash their hands before meal, while 71.11% of then also do hand washing after the meal, 71.11% doesn't clip/cut the nails in week, hence 54.81% was applying the moisture applicants.

The grooming practice concluded that 63.70% of the elderly population was changing their clothes daily, while 70.37% of them was able to comb their hairs.

Diet and its preparation revels that 59.25% of the elderly was able to cook their food, among them 62.96% of them were able get their food in plate, while 67.40% was able to eat food independently and 71.11% of the elderly population was not in need of anyone

to feed himself or herself, therefore 39.25% among them was not having any restrictionof the intake of food and 68.48% of them was eating green vegetables and fruits, 68.88% of the elderly was not eating big meals. As there was 51.11% of the elderly population was eating small meals, and 65.18% of the elderly was eating food three times a day.

In the last the last sub domain of biological needs was exercise in this 66.66% of the elderly was going out for the walk, among them 51.85% was spending 1 hour per day, while 34.07% was doing yoga and 46.66% was not doing any meditation.

Now the psychological needs under which psychological health 68.88% was able to enjoy life, also 68.88% was living life cheerfully, 65.18% was happy with themselves as a person, while 45.18% elderly population was not feeling anxious in life, therefore 37.77% of the elderly was not influenced by others people belief and opinion, 54.18% were the elderly who feel purpose in life. As the 49.62% of them was able to do things of their choice, thus 48.88% were use to get worry about things, hence 48.14% use to give importance to other judgments.

In autonomy 54.07% of the elderly population feel afraid to raise their voice inopposition about their

Journal of Coastal Life Medicine

opinions, while 45.92% elderly decision was influenced by others while was 45.92%, was influenced by others and 50.73% of the population was able to feel confidence in their own opinions. If we look to lifestyle of the elderly population as these are divided into two that is leisure time and substance abuse in leisure time 62.96% was use to listen music, as 58.51% among them do not use to participate in any of the handicrafts activates, while 67.40% never use to participate in sports, while 38.51% was fond of watching movie, and 37.77% do attend religious meetings.

In substance abuse 57.03% were not taking any substance, while 71.11% do not take any tobacco, or ganja, bhang, and also 70.37% were the elderly population do not intake bedi or cigarette, hence 55.55% elderly population was use to take excessive of the caffeine.

The sociological needs had self independence /freedom in which 62.22% was the elderly who use to go out for shopping of their choice, while 52.59% population use to go out, with friends and relative, also 52.59% of them were going for the family day out, and 52.59% were elderly who use to go out for buying grocery.

The family/ social environment depicts that 74.07% of the elderly population were happy with their family members, among them 65.18% were able to ask help from someone when their have problem, while 68.88%

were able to have warm and trustworthy relationship, therefore 68.14% of them were satisfied with their grand children and children, while 63.07% were able to satisfy with their life, and 64.44% were able to trust on their family members, 65.18% elderly population were able to enjoy with their family, also 65.92% was involve in the family decisions, and 63.70% was use to that that they were important in family, moreover 58.51% use to meet their relatives once a week, then 59.25% feel that they were close to their family, 56.29% was able to talk to their relative over a call, and 51.11% never use their social net working app, hence 65.18% population were feeling satisfied with social contact.

In the financial constraints 59.25% of the elderly was able to manage the finance for a month, while 54.18% do go for regular medical follow up and 55.55% population were having source of income, also 57.03% of them use to pay bills of the house, hence 51.11% were the elderly who were dependent on their children.

The last safety and security results presented that 74.07% were the elderly who use to feel safe with their family, the population who feel secure with the community around them was 74.81%, also 73.33% among them use like their environment and lifestyle in which they live and 71.11% were those elderly population who use to think important about themselves in community / society. (Table 2).

Table 2: Assessment Biopsychosocial needs of elderly score of elderly population

n=135

S.No	Statement	Yes	Sometime	Never
		frequency(%)	Frequency(%)	Frequency(%)
1.	BIOLOGICAL NEEDS			
i)	Eyesight			
a.	Are you able to watch TV,	95 (70.37%)	26 (19.25%)	14 (10.37%)
b.	Are you able to do needlework)	31 (22.9%)	20 (14.81%)	84 (62.22%)

Journal of Coastal Life Medicine

c.	Are you able to visualize the things in sunlight	96 (71.11%)	19 (14.07%)	20 (14.81%)
ii)	Hearing:			
a.	Can hear properly	100 (74.07%)	19 (14.07%)	16 (11.85%)
b.	Do you have any difficulty in hearing when someone speaks in a whisper?	19 (14.07%)	25 (18.51%)	91 (67.40%)
c.	Do the hearing problem hinders you to attend religious services less often than you would like?	12 (8.88%)	27 (20%)	96 (71.1%)
d.	Do the a hearing problems cause you to feel embarrassed in meet of new people/ relatives?	12 (8.8%)	19 (14.07%)	104 (77.03%)
C	Urinary Continence			
a.	Do you feel that you have no control over your bowels	93 (68.8%)	20 (14.81%)	22 (16.29%)
b.	Do you worried not able to get to toilet on time	15 (11.11%)	24 (17.77%)	96 (71.11%)
c.	Do you have involuntary loss of urine	28 (20.74%)	19 (14.07%)	88 (65.18%)
d.	Do you void on bed	2 (1.48%)	8 (5.92%)	125 (92.5%)
C.	Walking abilities			
a.	Are you able to stand without support of the wall	88 (65.18%)	12 (8.88%)	35 (25.9%)
b.	Do you feel need of using cane for a support to stand	26 (19.25%)	18 (13.33%)	91 (67.40%)
c.	Do you need wheelchair to have mobility	8 (5.92%)	16 (11.85%)	111 (82.22%)
d.	Are you able to cover 6 meters	91	21	23

Journal of Coastal Life Medicine

		(67.40%)	(15.55%)	(17.03%)
D.	Sleep schedule			
a.	Are you able to sleep in night properly	84 (62.22%)	27 (20%)	24 (17.77%)
b.	Are you able to sleep in continuation at night	80 (59.25%)	26 (19.25%)	29 (21.48%)
c.	Do you feel fresh and more energetic in morning	80 (59.25%)	35 (25.92%)	20 (14.81%)
d.	Do you feel irritated or frustrated due to impaired sleep	29 (21.48%)	23 (17.03%)	83 (61.48%)
e.	Do you take any sleep medications to have sleep	34 (25.18%)	17 (12.59%)	84 (62.22%)
E.	Memory			
a.	Are you able to remember the things like : money, wallet, keys, switching off electric appliances	81 (60%)	28 (20.74%)	26 (19.25%)
b.	Are you able to remember the special events like: birthday, anniversary, death	64 (47.40%)	41 (30.37%)	30 (22.22%)
c.	Are you able to retained learned material	62 (45.92%)	44 (32.59%)	29 (21.48%)
2a.	Functional abilities			
a.	Are you able to do work independently	94 (69.62%)	13 (9.62%)	28 (20.74%)
b.	Are you able to travel alone for far distance	70 (51.85%)	24 (17.7%)	41 (30.37%)
c.	Are you able to clean your house daily	75 (55.55%)	30 (22.22%)	30 (22.22%)
d.	Do you need someone assistance in your washing of clothes	44 (32.59%)	29 (21.48%)	62 (45.92%)

Journal of Coastal Life Medicine

e.	Are you able to use public transportation	61 (45.18%)	33 (24.44%)	41 (30.37%)
f.	Are you able to take own medication and follow diet	78 (57.77%)	23 (17.03%)	34 (25.18%)
B.	Personal hygiene			
i)	Bathing practice :			
a.	Do you take bath everyday	86 (63.70%)	30 (22.22%)	19 (14.07%)
b.	Do you need someone to assist in bathing	37 (27.40%)	11 (8.14%)	87 (64.44%)
ii)	Oral practice:			
a.	Are you able to perform your oral hygiene practice daily	86 (63.70%)	16 (11.85%)	33 (24.44%)
b.	Do you brush your teeth in night after meal	61 (45.1%)	17 (12.59%)	57 (42.2%)
c.	Do you go for regular follow up to the dentist	26 (19.25%)	17 (12.59%)	92 (68.14%)
iii)	Skincare practice:			
a.	Do you wash your hands before the meal	92 (68.14%)	25 (18.51%)	18 (13.33%)
b.	Do you wash your hands after the meal	96 (71.11%)	19 (14.07%)	20 (14.81%)
c.	Are you able clip/cut your nails in a week	20 (14.81%)	19 (14.07%)	96 (71.11%)
d.	Are you able to put moisture applicants cream to make it smooth	74 (54.81%)	20 (14.81%)	41 (30.37%)
iv)	Grooming practice :			
a.	Do you change your clothes everyday	86	26	23

Journal of Coastal Life Medicine

		(63.70%)	(19.25%)	(17.03%)
b.	Are you able to comb your hair	95 (70.37%)	15 (11.11%)	25 (18.51%)
C.	Diet and its preparation			
a.	Do you cook your food alone	80 (59.25%)	18 (13.33%)	37 (27.04%)
b.	Are you able to get food in your plate	85 (62.96%)	19 (14.07%)	31 (22.96%)
c.	Are you able to eat food independently	91 (67.40%)	19 (14.07%)	25 (18.51%)
d.	Do you need help of someone in making you feed	24 (17.77%)	15 (11.11%)	96 (71.11%)
e.	Do you have any restriction on food intake(because of medical condition	43 (31.85%)	39 (28.88%)	53 (39.25%)
f.	Do you eat fruits and green vegetable daily	83 (61.48%)	27 (20%)	25 (18.51%)
g.	Do you eat big meals	24 (17.77%)	18 (13.33%)	93 (68.88%)
h.	Do you take small meals	43 (31.85%)	23 (17.03%)	69 (51.11%)
i.	Are you able to have meal three times a day	31 (22.96%)	16 (11.85%)	88 (65.18%)
D.	Exercise			
a.	Do you take a walk outside of your home (For example, for fun or exercise, walking to work, walking the dog, in any sports etc,)	90 (66.66%)	17 (12.59%)	28 (20.74%)
b.	Do you spend 1 hour in walking per day	70 (51.85%)	41 (30.37%)	24 (17.77%)
c.	Are you able to do yoga	46	45	44

Journal of Coastal Life Medicine

		(34.07%)	(33.33%)	(32.59%)
d.	Do you do meditation	31 (22.96%)	41 (30.37%)	63 (46.66%)
3.	PSYCHOLOGICAL NEEDS			
A.	Psychological health			
a.	Are you able to enjoy your life	93 (68.88%)	22 (16.29%)	20 (14.81%)
b.	Do you feel cheerful in your life	93 (68.88%)	23 (17.01%)	19 (14.07%)
c.	Do you feel happy with yourself as a person	88 (65.18%)	25 (18.51%)	22 (16.29%)
d.	Do you feel anxious in your life	46 (34.07%)	28 (20.74%)	61 (45.18%)
e.	Are you influenced by others people about your own belief and opinions	40 (29.62%)	44 (32.59%)	51 (37.77%)
f.	Are you able to feel that you have a purpose or meaning in life	74 (54.81%)	39 (28.88%)	22 (16.29%)
g.	Do you feel to do things of your choice	67 (49.62%)	39 (28.88%)	29 (21.48)
h.	Do you tend to worry about what other people think of you	66 (48.88%)	29 (21.48%)	40 (29.62%)
i.	Do the values of what others think is important for your judgment about yourself or what you think is important	65 (48.14%)	43 (31.85%)	27 (20%)
B.	Autonomy			
a.	Does u feel afraid to voice your opinions even when they are in opposition to your opinions	73 (54.07%)	28 (20.74%)	34 (25.18%)

Journal of Coastal Life Medicine

b.	Do your decisions are usually influenced by anyone else	62 (45.92%)	44 (32.59%)	29 (21.48%)
c.	Does you tend to be influenced by the others opinions	62 (45.92%)	37 (27.40%)	36 (26.66%)
d.	Do you feel confidence in your own opinions	68 (50.37%)	43 (31.85%)	24 (17.77%)
C	Lifestyle			
i)	Leisure time:			
a.	Do listen music in leisure time	85 (62.96%)	19 (14.07%)	31 (22.96%)
b.	Do you participate in sitting activities such as doing handcrafts	32 (23.70%)	24 (17.77%)	79 (58.51%)
c.	Do you participate in any sport	19 (14.07%)	25 (18.51%)	91 (67.40%)
d.	Do you like to watch movies in leisure time	52 (38.51%)	35 (25.92%)	48 (35.55%)
e.	Do you attend religious meetings in leisure time	51 (37.77%)	43 (31.85%)	41 (30.37%)
ii)	Substance abuse :			
A	Do you drink any alcohol abuse or drug abuse	42 (31.11%)	16 (11.85%)	77 (57.03%)
B	Do you take tobacco , pan masala, ganja, bhang etc.	27 (20%)	12 (8.88%)	96 (71.11%)
C	Do you do smoking cigarette, bedi	30 (22.22%)	10 (7.40%)	95 (70.37%)

Journal of Coastal Life Medicine

D	Do you take excessive caffeine (tea, coffee, cola)	75 (55.55%)	25 (18.51%)	35 (25.92%)
4.	SOCIOLOGICAL NEEDS			
A.	Self independence / freedom			
a.	Do you go out for shopping of your choice	84 (62.22%)	20 (14.81%)	31 (22.96%)
b.	Do you go out with your friends/relatives	71 (52.59%)	27 (20%)	37 (27.40%)
c.	Do you go out for family day out	71 (52.29%)	38 (28.14%)	26 (19.25%)
d.	Do you go in week out for outing for buying grocery	71 (52.59%)	25 (18.51%)	39 (28.88%)
B.	Family/social environment			
a.	Are you happy with your family members	100 (74.07%)	10 (7.40%)	25 (18.51%)
b.	Are you able to ask someone for help when u have problem	88 (65.18%)	24 (17.77%)	23 (17.03%)
c.	Do you feel that you have warm & trustworthy relationships with others	93 (68.88%)	18 (13.33%)	24 (17.77%)
d.	Are you your satisfied with your children / grandchildren	92 (68.14%)	26 (19.25%)	17 (12.59%)
e.	Are you are satisfy with the way life you live	86 (63.70%)	28 (20.74%)	21 (15.55%)
f.	Do you have trust on your family members(regarding security, respect, importance, care, emotions)	87 (64.44%)	16 (11.85%)	32 (23.70%)
g.	Do you enjoy being with your family	88 (65.18%)	26 (19.25%)	21 (15.55%)

Journal of Coastal Life Medicine

h.	Do you gets involve in taking decisions in family	89 (65.92%)	13 (9.62%)	33 (24.44%)
i.	Do you think you are important to your family	86 (63.70%)	25 (18.51%)	24 (17.77%)
j.	Do you meet your relatives once a week	79 (58.51%)	17 (12.59%)	39 (28.88%)
k.	Are you are close to family people	80 (59.25%)	32 (23.70%)	23 (17.03%)
l.	Do you talk to relatives or friends over a call	76 (56.29%)	24 (17.77%)	35 (25.92%)
m.	Do you interact with your close relative or friends	79 (58.51%)	31 (22.96%)	25 (18.51%)
n.	Do you use any social net working app	57 (42.22%)	9 (6.66%)	69 (51.11%)
o.	Do you feel satisfied with your social contact	88 (65.18%)	24 (17.77%)	23 (17.03%)
C.	Financial constraints			
a.	Are you able to managed your finance for month	80 (59.25%)	20 (14.81%)	35 (25.92%)
b.	Do you go for regular medical follow up	74 (54.81%)	42 (31.11%)	19 (14.07%)
c.	Do you have any source of income	75 (55.55%)	24 (17.77%)	36 (26.66%)
d.	Do you get pension	79 (58.51%)	14 (10.37%)	42 (31.11%)
e.	Do you pay your bills of the house	77 (57.03%)	17 (12.59%)	41 (30.37%)

Journal of Coastal Life Medicine

f.	Are you dependent on your children/ grand children	69 (51.11%)	19 (14.07%)	47 (34.81%)
D.	Safety and security			
a.	Do you feel safe in your family	100 (74.07%)	11 (8.14%)	24 (17.77%)
b.	Are you feeling secure with community around you	101 (74.81%)	11 (8.14%)	23 (17.03%)
c.	Do you like your environment and lifestyle in which you live	99 (73.33%)	13 (9.62%)	23 (17.03%)
d.	Do you think your important in community / society	96 (71.11%)	15 (11.11%)	24 (17.77%)

Description of Table 3: Area wise Mean ± SD and Mean percentage of Biopsychosocial needs:

The above data result shows that the highest needs found under biological needs was in personal hygiene with mean± SD (24.79 ± 6.28) and frequency percentage was(71.12%) followed by the sociological

needs in family relation /social environment the mean± SD (36.18 ± 9.98) and frequency percentage was (80.4%) and least was in psychological needs in psychological health the mean± SD (20.53 ± 5.29) and frequency percentage was (11.4%) and in all these needs were found that mean± SD was high under each domain (Table 3).

Table 3: Area wise Mean ± SD and Mean percentage of Biological Need

n=135

1. BIOLOGICAL NEEDS					
S.No.	Items	No. of Items	Range Min-Max	Mean + SD	Mean%
1a.	Eyesight	3	3-9	6.77 ± 1.66	75.2%
1 b	Hearing	4	4-12	6.79 ± 1.83	56.58%
1 c	Urinary continence	4	4-12	6.57 ± 1.75	54.75%
1 d	Walking abilities	4	4-12	7.65 ± 1.83	63.75%

Journal of Coastal Life Medicine

1 e	Sleep schedule	5	5-15	10.50 ± 2.66	70%
1 f	Memory	3	3-9	6.90 ± 2.21	76.66%
1g	Functional abilities	6	6-18	13.38 ± 4.00	74.33%
1 h	Personal hygiene	11	11-33	24.79 ± 6.28	75.12%
1 I	Diet and its preparation	9	9-27	17.90 ± 4.31	66.29%
1 j	Exercise	4	4-12	8.58 ± 2.54	71.5%
3	PSYCHOLOGICAL NEEDS				
3 a.	Psychological health	9	9-18	20.53 ± 5.29	11.4%
3 b.	Autonomy	4	4-12	9.05 ± 2.58	75.41%
3 c.	Leisure time	5	5-15	9.62 ± 2.75	64.13%
3d.	Substances and drug abuse	4	4-12	7.04 ± 2.35	58.66%
4	SOCIOLOGICAL NEEDS				
3 a	Self independence	4	3-12	9.21 ± 3.026	76.75%
3 b	Family/social environment	15	15-45	36.18 ± 9.98	80.4%
3 c	Financial constraints	6	6-18	13.73 ± 4.14	76.27%

Journal of Coastal Life Medicine

3 d	Safety and security	4	4-12	10.24 ± 2.99	85.33%
-----	---------------------	---	------	--------------	--------

Description of Bar graph of frequency percentage distribution of Biological needs, Psychological needs and sociological needs Fulfilled among elderly population:

(Figure 1) The graph depicts the Biological needs fulfilled that the highest needs fulfilled under was in hearing 74.07% two fifth of the samples 71.11% in personal hygiene while 70.30% needs fulfilled in eyesight, two third of the needs were in the functional abilities 69.62%, therefore 68.80% in urinary continence/fecal, in diet and its preparation, then two third of the participants 67.40% had needs fulfilled in exercise and then 66.66% needs that were in sleep schedule 62.22% and least was found in the memory 60% where need were fulfilled.

(Figure 2) The graphical representation of the Psychological needs fulfilled the highest needs fulfilled were more than two third of the population 77.78% in Substance abuse while two third samples had 68.88% fulfilled needs in psychological health, next 60.96% had in leisure time, and least needs fulfilled 54.07% was in autonomy.

(Figure 3) depicts the bar graph that highest Sociological need fulfilled was among the more than three fourth of the population, 74.81% in safety and security, three fourth needs 74.07% in family and social environment, therefore, two third of the population 62.22% samples had fulfilled needs under self independence and least was found in the more than half of the elderly population 59.25% in financial constraints.

FIGURES:

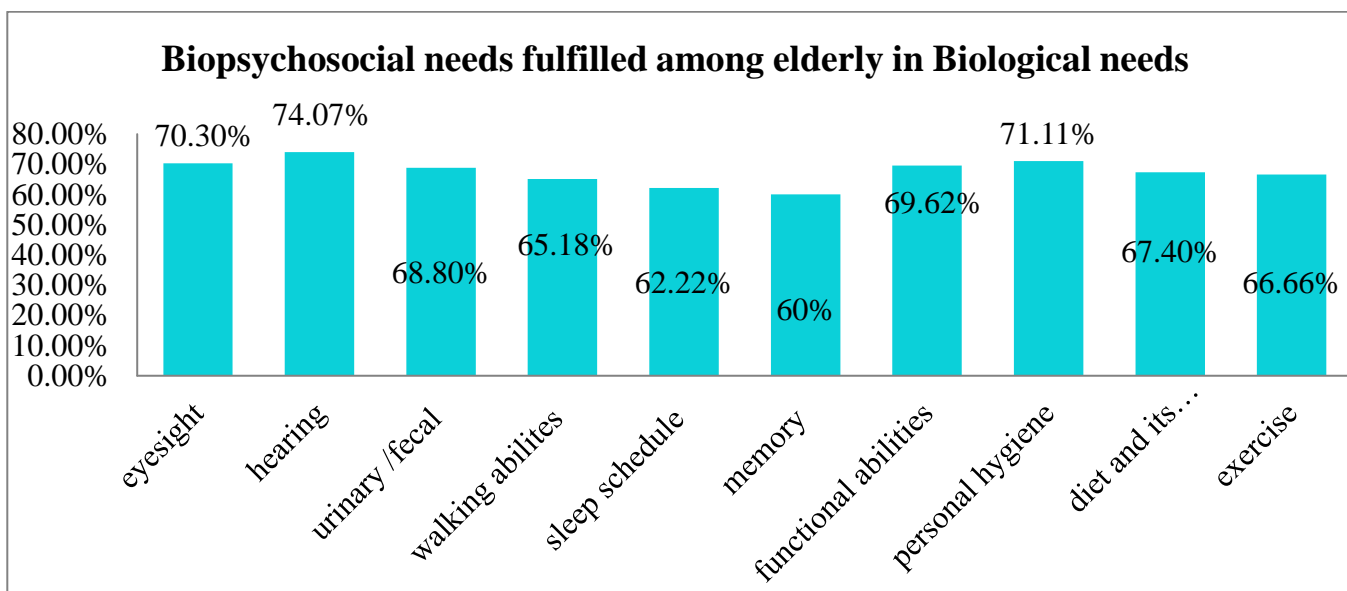


Figure :1

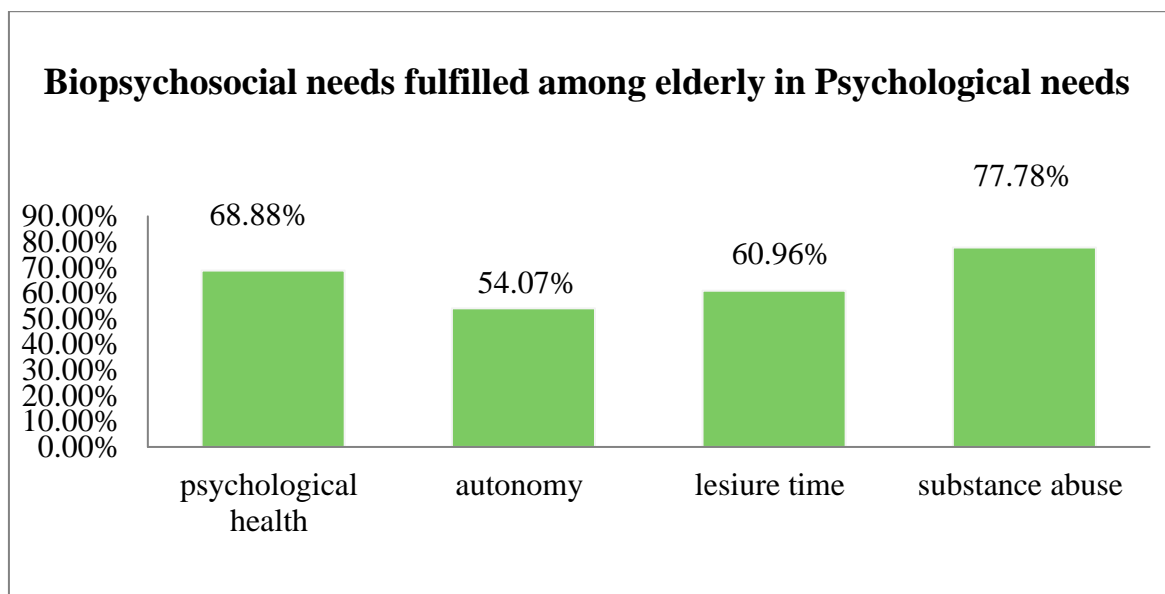


Figure :2

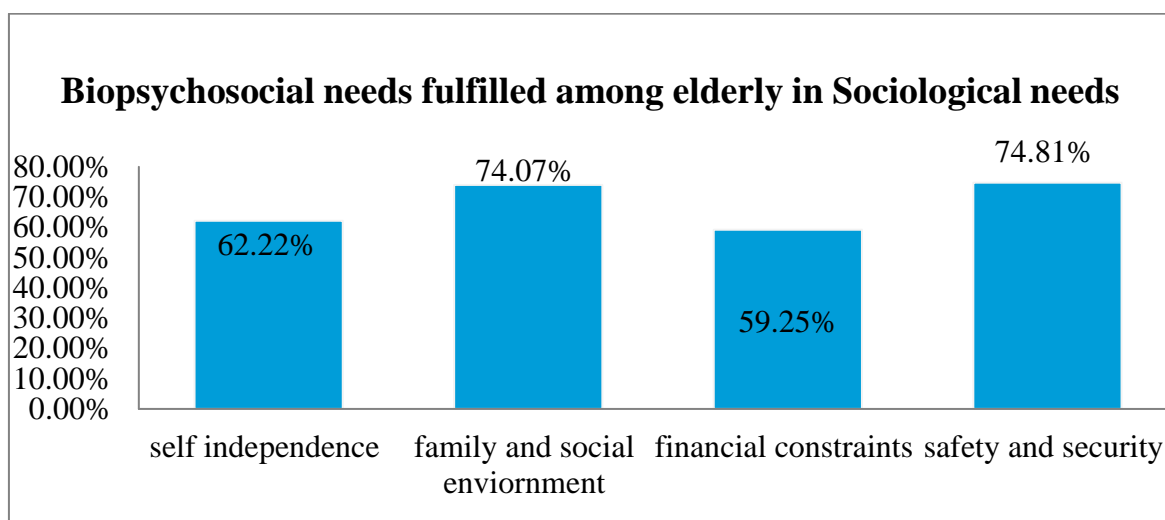


Figure: 3

Description Bar graph of frequency percentage distribution of Biological needs, Psychological needs and sociological needs Arise among elderly population:

(Figure 4) the Biological needs arise was that the most of the in the Personal hygiene (80.74%) and then in eyesight 77.10% followed by the exercise 77.03% then in functional abilities 67.41% more than half of the elderly had need arise in memory 54.07% while these least were arise in diet and its preparation 17.77%, sleep schedule 25.18%, urinary continence/fecal, hearing and last was in walking abilities 5.92%.

(Figure 5) The Psychological needs arise was that the most of the in the lesiure time 85.92% and then three fourth in psychological health 70.37% followed by the more than half in autonomy 54.07% and least arise in substance abuse 20.00%.

(Figure 6) The Sociological needs arise was that more than half was arise in family and social environment 57.77% and financial constraints 51.11% then in self independence 47.40% and least was in safety and security 28.88%

Journal of Coastal Life Medicine

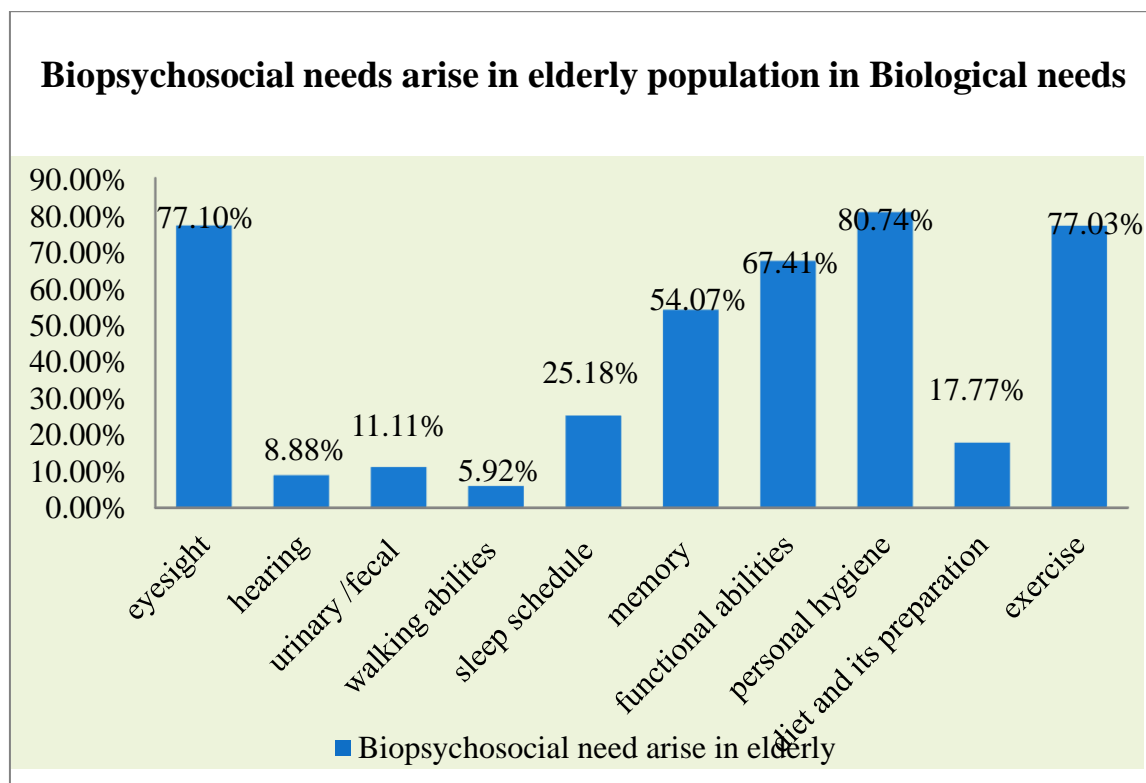


Figure: 4

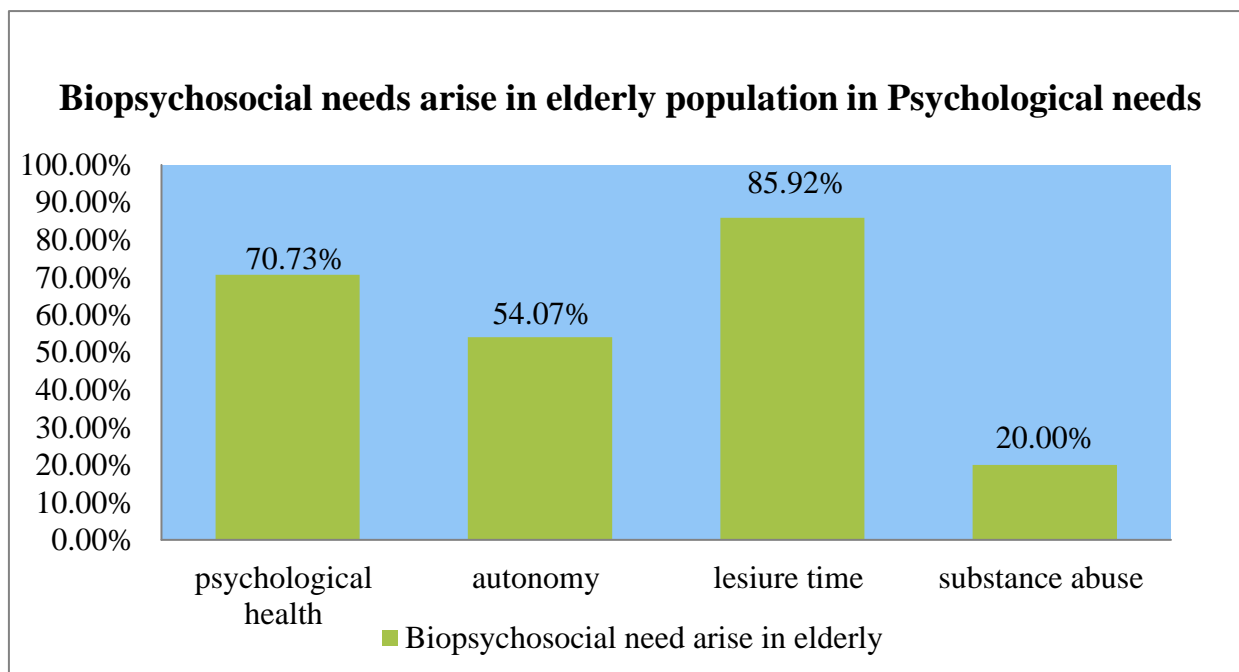


Figure :5

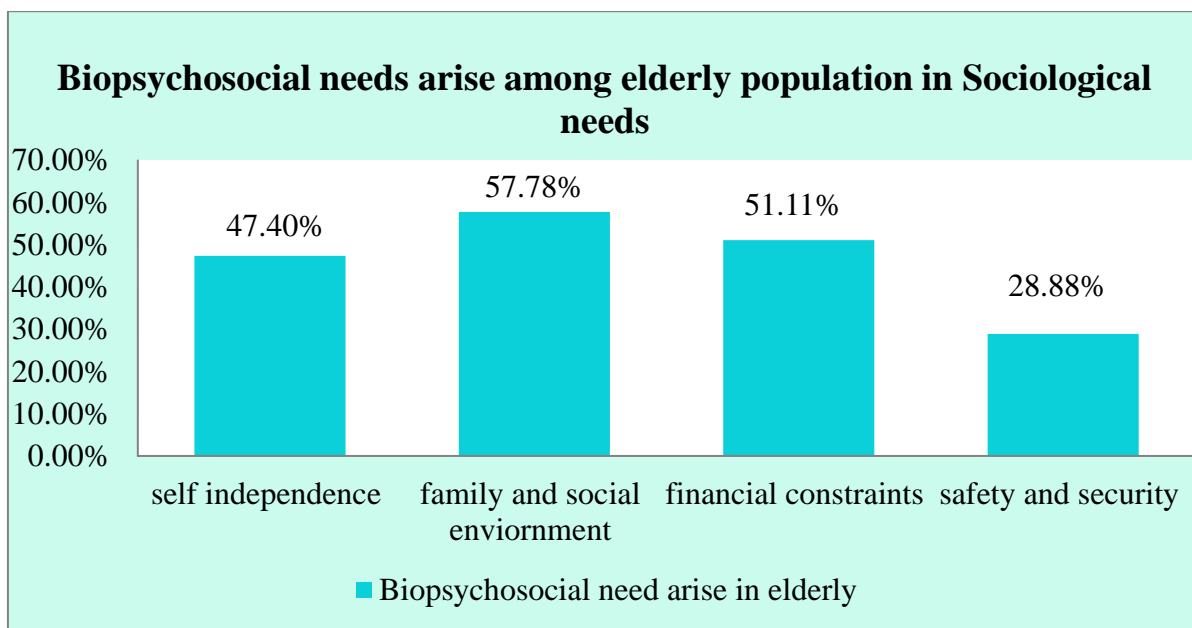


Figure: 6

III. Correlation between biological needs, psychological needs among elderly population :

There was moderate positive correlation between biological needs, psychological needs and sociological needs among the elderly population there it can be define as the biological needs increased simultaneously the psychological needs will also increased and so there was increased in sociological needs hence they were statically significant.

IV. Association between the biopsychosocial needs of elderly with that of their socio-demographic variable.

The only groups which was associated is previous knowledge regarding Biopsychosocial needs of elderly population, which is significant at level of < 0.05 *p value. Hence, “the null hypothesis was rejected and the research hypothesis was accepted” (Table 4).

Table 4: Association between level of Biopsychosocial Needs among elderly people and selected demographic variable $n= 135$

S.No	Demographic Variable	Below median (≤ 248)	At and Above median (≥ 248)	χ^2 / Fisher exact / Yates correction	“p”
1.	Age	60-75 years	5355	0.67#	0.796
		76- 90 years	1413		
2.	Gender	Male	3344	3.288 x	0.70
		Female	3424		

Journal of Coastal Life Medicine

3.	Religion	Hindu	6259	5.093#	0.89
		Sikh	05		
		Muslim	54		
4.	Marital status	Married	6167	2.474¥	0.116
		Widow	61		
5.	Educationlevel	Educated	5057	1.736 _x	0.188
		Uneducated	1711		
6.	Previous occupation	Homemaker	2515	5.584 _x	0.134
		Private job	1311		
		Government	2330		
		Teacher	612		
7.	Monthlyincome	Less than 25000/-	4748	0.03 _x	0.95
		More than 25000/-	2020		
8.	Type of house	Own house	5550	1.43 _x	0.232
		Rented house	1218		
9.	Type of family	Single	1828	3.077 _x	0.079
		Joint	4940		
10.	Previous knowledge regarding Biopsycho social needs of elderly :	Yes No	412	4.405 _x	0.036*
		No	6356		

* - Chi square

- fishers exact test

*p<0.05, significant

¥ - Yates correction

Journal of Coastal Life Medicine

5. Discussion

This study examined the Biopsychosocial needs of the elderly the assessment were grouped under three domains as the purpose of this study to assess the Biopsychosocial needs of elderly population, Findings reveal in the socio-demographic variable was males were more as compare to female hence the Supportive study in 2019 Aziza Magda, (etal) Biopsychosocial needs of elderly post renal transplant. It states that the supportive study results shows males were more as compare to females.⁸

The Correlation between biological, psychological, and sociological needs elderly population There was moderate positive correlation between sociological needs and biological needs among the elderly population there it can be define as the sociological needs increased simultaneously the biological needs will also increased as they were statically significant. Further similar findings shows by the Wild B. et al (2008-2010) that there was statically significant correlation between physical to mental and then to mental to social and last was in social to physical with ($p < 0.0001$).⁹

Association between the biopsychosocial needs score of elderly with that of their socio demographic variable The results depicts in present study shows that previous knowledge regarding Biopsychosocial needs is the only group which was found to be associated with socio-demographic variables among elderly population. While the Opposite Study concluded by Lotte A, H. Hermsen et al (2017) The result presented that the statistically significant association was found between the “age group of the elderly population”.¹⁰

Implication of Practices

- The present study will motivate the students to learn about the Biopsychosocial needs of elderly to educate them regarding the importance and health benefits of these needs among elderly,
- The nurses of the various department can assess these needs in hospitalized elderly population.
- More over the nurse administrator should insist staff nurses to conduct needs assessment before the discharge of patient .
- As this study will bring more new facts at different

settings such as Hospital area, mentally ill elderly and also it can further take down in old age home in order to provide healthy lifestyle to elderly population.

6. Conclusion

As most of the sample i.e. (80.74%) had their biological needs arise in personal hygiene. Then the most of the participants (85.92%) had need arise under the leisure time. Moreover, more than half of elderly population (57.77%) had sociological needs arise in the family relation/social environment.

Hence the Biopsychosocial needs were not fulfilled among elderly population.

DECLARATION

Funding: None

Conflict of interest: None interested

Ethical approval: Taken

References

- [1] Ageing and health [Internet]. Who.int. [cited 2021 Nov 25]. Available from: <https://www.who.int/news-room/fact-sheets/detail/ageing-and-health>
- [2] Who.int. [cited 2021 Nov 25]. Available from: http://www.who.int/elena/life_course/en/
- [3] Cristina Yáñez Á, Masalan Apip MP, Kellogg GL. The elderly population and implications of their Biopsychosocial needs for health care in Latin America. *MOJ gerontol geriatr.* 2019;4(6):62–5..
- [4] Buck R. What are the psychological needs of the elderly? [Internet]. *Homecareassistanceanchorage.com.* 2020 [cited 2021 Nov 25]. Available from: <https://www.homecareassistanceanchorage.com/seniors-psychological-needs/>
- [5] Moradi S, Fekrazad H, Mousavi MT, Arshi M. The study of relationship between social participation and quality of life of old people who are member of senior association of Tehran city in 2011. *Iranian Journal of Ageing.* 2013;7:41–6

Journal of Coastal Life Medicine

- [6] M DA, F MS. Social Participation of Older Adults: A Concept Analysis. *Int J Community Based Nurs Midwifery*. 2020;Jan;8(1):55-72
- [7] Kk Gulani Community Health Nursing. Download free pdf or Buy Books [Internet]. [cited 2022 Jul 7]. Available from: <https://www.ebooknetworking.net/ebooks/kk-gulani-community-health-nursing.html>
- [8] The elderly and implications of their biopsychosocial needs for health care in Latin America. person [Internet]. 2019 Nov 6 [cited 2022 Jul 28];Volume 4(Issue 6). Available from: <https://medcraveonline.com/MOJGG/MOJGG-04-00210.pdf>
- [9] Wild B, Heider D, Maatouk I, Slaets J, König HH, Niehoff D, et al. Significance and Costs of Complex Biopsychosocial Health Care Needs in Elderly People: Results of a Population-Based Study. *Psychosomatic Medicine*. 2014 Sep;76(7):497-502.
- [10] Hermsen LAH, Hoogendijk EO, Wouden JC van der, Smalbrugge M, Leone SS, Horst HE van der, et al. Self-perceived care needs in older adults with joint pain and comorbidity. *Aging Clinical and Experimental Research*. 2018;30(5):449.