



**A Study to Assess The Effectiveness of Family Focused Nursing Interventions on Knowledge and Functional Health Problems among older Adults and Their Caregivers at Selected Rural Community Setting (Part 1)**

**Ms. Nisha Verma, Ph.D Scholar,**

**Dr. Khem Chand, Professor,**

Department Of Community Health Nursing, DBU, Mandi Gobindgarh

nishasingh4686@gmail.com

**ABSTRACT:**

Normal aging brings about certain changes that are both inevitable and irreversible. These changes due to ageing are partially responsible for the increased risk of developing health related problems within the elderly population. With this aim, the study was conducted to evaluate the effectiveness of family focused nursing interventions on knowledge and functional health problems among older adults and their caregivers at selected rural community setting. Quantitative approach with a Pre Experimental One Group Pre-test Posttest Research Design was used. By using probability simple random sampling technique, 165 older adults and their caregivers were selected from village Madara and Kapoor Pind, Distt. Jalandhar Punjab in the month of August 2023. The data were collected using the performa for selected socio-demographic variables and Modified Fulmer SPICES (Sleep disturbances, Problems with eating, Incontinence, Confusion, Evidence of fall and Skin breakdown) Screening tool among the older adults and Structured Interview Schedule (Checklist) regarding knowledge on Functional Health Problems among caregivers. Findings of the study revealed that maximum 53 (32.1%) of older adults were between age group of 66-70 years, 88 (53.3%) were males, 62 (37.6%) were Muslims, 87 (52.7%) were non vegetarian, maximum 123 (74.5%) were married, 60 (36.4%) had no formal education, 111 (67.3%) of older adults were unemployed, 119 (72.1%) belonged to nuclear family, 139 (84.2%) had 4-5 family members and majority 90 (54.5%) had monthly income between Rs. 20,001/- to 30,000/-. Among caregivers, maximum 53 (32.1%) of caregivers of older adults were between age group of 26-30 years, 90 (54.5%) were males, 107 (64.8%) were graduated and above, 113 (68.5%) were government employees, 90 (54.5%) had monthly income between Rs. 20,001/- to 30,000/-. 90 (54.5%) of caregivers spend 5-6 hours with older adults, and 128 (77.6%) caregivers were unmarried. Among the older adults, the mean pre-test score of the functional health problems was high ( $98.81 \pm 4.528$ ) whereas mean post-test score for the same group was less ( $84.18 \pm 2.823$ ). Calculated paired 't' value ( $t_{(0.05)} = 36.803, < 0.001$ ) of experimental group shows highly significant at 0.05 level. Hence, the research hypothesis was accepted. After the administration of family focused nursing intervention among the caregivers, the mean pre-test functional health problems score was less ( $5.65 \pm 3.005$ ) whereas mean post-test functional health problems score for the same group was high ( $15.1 \pm 3.47$ ). Calculated paired 't' value ( $t_{(0.05)} = 26.723, < 0.001$ ) shows highly significant at 0.05 level. Hence, the research hypothesis was accepted. There was an association of pre-test functional health problems with the socio-demographic variables among older adults with their socio-demographic variables such as family size. There was no association of pre-test knowledge scores with age, gender, educational status, occupational status, family income per month, duration of time spending with older adults and marital status among the caregivers. Hence, it was concluded that family focused nursing intervention was an effective intervention to reduce the functional health problems among older adults to some extent and in increasing the level of knowledge regarding functional health problems among caregivers to a great extent.

**Keywords:** Family focused nursing intervention, functional health problems.

## **INTRODUCTION:**

Living is a process of continual change which consists of three phases in a human's life. They are childhood, middle age and old age. Childhood is a wonderful period and youth is considered to be an energetic phase. The charm of this phase starts getting vanished as the individual transits from the middle age towards the old age. Elderly (or) Geriatrics (or) older adults consist of age nearing (or) surpassing the average life span of human being. The Government of India adopted National policy on older person in January 1999. The National policy defines senior citizen (or) elderly (or) older adults as a person who is of age 60 years (or) above. <sup>1</sup>

Normal aging brings about certain changes that are both inevitable and irreversible. These changes due to ageing are partially responsible for the increased risk of developing health related problems within the elderly population. The prevalent problems experienced by the older adult includes sleep disorders, problems with eating or feeding, incontinence, confusion, depression, evidence of fall and skin break down. Falls and sleep disorders are the major problems among the older adults. These are the important causes of morbidity and mortality among older adults and predictor of poor physical and cognitive status. <sup>2</sup>

The majority of health problems that are been faced by older persons are the result of risk factors such as smoking, lack of physical activity and unhealthy diets. Maintaining an active lifestyle is one of the most cost effective ways to stay healthy. An active lifestyle means older persons continue to participate in social, economic, cultural, spiritual and civic affairs. Longer life is a benefit to individual and community only if the quality of life is maintained. <sup>3</sup>

## **OBJECTIVES OF THE STUDY:**

1. To assess and compare the pre and post test level of functional health problems among older adults.
2. To assess and compare the pre and post test level of knowledge on functional health problems among caregivers in experimental group.
3. To administer and assess the effectiveness of family focused nursing interventions on functional health problems among older adults.
4. To assess the effectiveness of family focused nursing interventions on level of knowledge on functional health problems among caregivers.
5. To determine the association between pre-test level of functional health problems with the selected socio-demographic variables among older adults.
6. To determine the association between the pre-test level of knowledge regarding functional health problems with the socio-demographic variables among caregivers.

## **MATERIALS AND METHODS:**

A Pre- Experimental one group pre test post test research design was used for the study. The non-probability simple random sampling technique was used and 135 older adults and their caregivers were taken as sample from village Madara and Kapoor Pind, Distt. Jalandhar Punjab in the month of August 2023. The data were collected using the performa for selected socio-demographic variables and Modified Fulmer SPICES (Sleep disturbances, Problems with eating, Incontinence, Confusion, Evidence of fall and Skin

breakdown) Screening tool among the older adults and Structured Interview Schedule (Checklist) regarding knowledge on Functional Health Problems among caregivers. The tools were validated by experts. Reliability of tool was established through split half method by computing Karl Pearson's coefficient of correlation which was found reliable ( $r=0.86$ ). The pretest level of functional health problems was assessed by using Modified Fulmer SPICES (Sleep disturbances, Problems with eating, Incontinence, Confusion, Evidence of fall and Skin breakdown) Screening tool among the older adults and Structured Interview Schedule (Checklist) regarding knowledge on Functional Health Problems among caregivers. Then post test was conducted by using the same tool after the administration of family focused nursing intervention. The data analysis was done by using both descriptive and inferential statistics.

### PROBLEM STATEMENT

A study to assess the effectiveness of family focused nursing interventions on knowledge and functional health problems among older adults and their caregivers at selected rural community setting

### RESULTS AND DISCUSSION:

**Table 1a: Distribution of older adults according to their socio-demographic variables.**

N=165

| Variables           | Opts                 | Frequency  | Percentage   |
|---------------------|----------------------|------------|--------------|
| Age                 | 60-65 years          | 47         | 28.5%        |
|                     | 66-70 years          | <b>53</b>  | <b>32.1%</b> |
|                     | 71-75 years          | 30         | 18.2%        |
|                     | ≥76 years            | 35         | 21.2%        |
| Gender              | Male                 | <b>88</b>  | <b>53.3%</b> |
|                     | Female               | 77         | 46.7%        |
|                     | Other                | 0          | 0.0%         |
| Religion            | Hindu                | 34         | 20.6%        |
|                     | Muslim               | <b>62</b>  | <b>37.6%</b> |
|                     | Sikh                 | 47         | 28.5%        |
|                     | Christian            | 22         | 13.3%        |
| Dietary pattern     | Vegetarian           | 78         | 47.3%        |
|                     | Non- Vegetarian      | <b>87</b>  | <b>52.7%</b> |
| Marital status      | Married              | <b>123</b> | <b>74.5%</b> |
|                     | Unmarried            | 12         | 7.3%         |
|                     | Widow                | 23         | 13.9%        |
|                     | Divorced             | 7          | 4.2%         |
| Educational Status  | No formal education  | <b>60</b>  | <b>36.4%</b> |
|                     | Primary education    | 53         | 32.1%        |
|                     | Secondary education  | 20         | 12.1%        |
|                     | Graduation and above | 32         | 19.4%        |
| Occupational status | Unemployed           | <b>111</b> | <b>67.3%</b> |
|                     | Private employee     | 25         | 15.2%        |

|                       |                      |            |              |
|-----------------------|----------------------|------------|--------------|
|                       | Government employee  | 29         | 17.6%        |
|                       | Self employed        | 0          | 0.0%         |
| Type of family        | Joint Family         | 46         | 27.9%        |
|                       | Nuclear Family       | <b>119</b> | <b>72.1%</b> |
| Family size           | ≤3 members           | 5          | 3.0%         |
|                       | 4-5 members          | <b>139</b> | <b>84.2%</b> |
|                       | 6-7 members          | 11         | 6.7%         |
|                       | ≥8 members           | 10         | 6.1%         |
| Family monthly income | ≤10,000/-            | 11         | 6.7%         |
|                       | 10,001/- to 20,000/- | 29         | 17.6%        |
|                       | 20,001/- to 30,000/- | <b>90</b>  | <b>54.5%</b> |
|                       | ≥30,001/-            | 35         | 21.2%        |

**Table 1** denotes that shows the distribution of older adults according to their socio- demographic variables such as age, gender, religion, dietary pattern, marital status, educational status, occupational status, type of family, family size and family income per month.

- According to age, maximum 53 (32.1%) of older adults were between age group of 66-70 years, 47 (28.5%) were in 60-65 years, 35 (21.2%) belonged to ≥76 years of age group and 30 (18.2%) were in 71-75 years of age group.
- According to gender, majority 88 (53.3%) of older adults were males and only 77 (46.7%) were females.
- According to religion, maximum 62 (37.6%) of older adults belong to Muslim religion, 47 (28.5%) were Sikhs, 34 (20.6%) were Hindus and only 22 (13.3%) belonged to Christian religion.
- According to dietary pattern, majority 87 (52.7%) of older adults were non vegetarian whereas only 78 (47.3%) were vegetarian.
- According to marital status, maximum 123 (74.5%) of older adults were married, 23 (13.9%) were widows, 12 (7.3%) were unmarried and only 7 (4.2%) were divorced.
- According to educational status, majority 60 (36.4%) of older adults had no formal education whereas 53 (32.1%) had primary level of education, 32(19.4%) were graduated and above and only 20 (12.1%) had secondary level of education.
- According to occupational status, majority 111 (67.3%) of older adults were unemployed, 29 (17.6%) were government employees, 25 (15.2%) older adults were private employees and none of them were self employed.
- According to type of family, maximum 119 (72.1%) of older adults belonged to nuclear family whereas only 46 (27.9 %) belonged to joint family.
- According to family size, majority 139 (84.2%) of older adults had 4-5 members in their family, 11 (6.7%) had 6-7 family members, whereas 10 (6.1%) had ≥ 8 members in their family and only 5 (3%) had ≤3 members in their family.
- According to family income per month, maximum 90 (54.5%) had monthly income between Rs. 20,001/- to 30,000/-, 35 (21.2%) had their monthly income ≥Rs.30,001/-, 29 (17.6%) had their monthly

income between Rs. 10,001/- to 20,000/- and only 11(6.7%) had their monthly income below Rs. 10,000/-.

**TABLE 1b: Distribution of caregivers according to their socio-demographic variables.**

**N=165**

| Variables                                    | Opts                 | Frequency | Percentage |
|--|----------------------|-----------|------------|
| Age  | 21-25 years          | 50        | 30.3%      |
|  | 26-30 years          | 53        | 32.1%      |
|  | 31-35 years          | 29        | 17.6%      |
|  | ≥36 years            | 33        | 20.0%      |
| Gender                                       | Male                 | 90        | 54.5%      |
|  | Female               | 75        | 45.5%      |
|  | Other                | 0         | 0.0%       |
| Educational Status                           | No formal education  | 7         | 4.2%       |
|  | Primary education    | 0         | 0.0%       |
|  | Secondary education  | 51        | 30.9%      |
|  | Graduation and above | 107       | 64.8%      |
| Occupational status                          | Unemployed           | 4         | 2.4%       |
|  | Private employee     | 48        | 29.1%      |
|  | Government employee  | 113       | 68.5%      |
|  | Self employed        | 0         | 0.0%       |
| Family monthly income                        | ≤10,000/-            | 11        | 6.7%       |
|  | 10,001/- to 20,000/- | 29        | 17.6%      |
|  | 20,001/- to 30,000/- | 90        | 54.5%      |
|  | ≥30,001/-            | 35        | 21.2%      |
| Duration of time spending with older adults. | ≤ 2 hours            | 45        | 27.3%      |
|  | 3-4 hours            | 21        | 12.7%      |
|  | 5-6 hours            | 90        | 54.5%      |
|  | ≥7 hours             | 9         | 5.5%       |
| Marital Status                               | Married              | 28        | 17.0%      |
|  | Unmarried            | 128       | 77.6%      |
|  | Widow                | 4         | 2.4%       |
|  | Divorced             | 5         | 3.0%       |

**Table 1b** denotes that shows the distribution of caregivers of the older adults according to their socio-demographic variables such as age, gender, educational status, occupational status, family income per month, duration of time spending with older adults and marital status.

- According to age, maximum 53 (32.1%) of caregivers of older adults were between age group of 26-30 years, 50 (30.3%) were in 21-25 years, whereas 33 (20%) belonged ≥36 years of age group and 29 (17.6%) to 31-35 years.

- According to gender, majority 90 (54.5%) of caregivers of older adults were males and only 75 (45.5%) were females.
- According to educational status, majority 107 (64.8%) of caregivers were graduated and above whereas 51 (30.9%) had secondary level of education, 7 (4.2%) no formal education and none of them had primary level of education.
- According to occupational status, majority 113 (68.5%) of caregivers of older adults were government employees whereas 48 (29.1%) were private employees, only 4 (2.4%) were unemployed and none of them were self employed.
- According to family income per month, maximum 90 (54.5%) of caregivers had monthly income between Rs. 20,001/- to 30,000/-, 35 (21.2%) had their monthly income  $\geq$ Rs.30,001/- 29 (17.6%) between Rs. 10,001/- to 20,000/- and only 11 (6.7%) had their monthly income below Rs. 10,000/-.
- According to duration of time spending with older adults, maximum 90 (54.5%) of caregivers spend 5-6 hours with older adults whereas 45 (27.3%) spend  $\leq$  2 hours, only 21 (12.7%) spend 3-4 hours with older adults and only 9 (5.5%) spend  $\geq$  7 hours with older adults.
- According to marital status, maximum 128 (77.6%) of caregivers were unmarried, 28 (17%) were married, 5 (3%) were divorced and only 4 (2.4%) were widow.

**Table 2a: Comparison of pre-test and post-test level of functional health problems in older adults**

**N=165**

| SCORE LEVEL              | PRE TEST |         | POST TEST |         |
|--------------------------|----------|---------|-----------|---------|
|                          | f        | (%)     | f         | (%)     |
| <b>MILD. (28-56)</b>     | 0        | (0%)    | 0         | (0%)    |
| <b>MODERATE. (57-84)</b> | 3        | (1.8%)  | 83        | (50.3%) |
| <b>SEVERE. (85-112)</b>  | 162      | (98.2%) | 82        | (49.7%) |

**Maximum Score=112 Minimum Score=28**

**Table 2a** denotes the comparison of pre-test and post- test level of functional health problems among older adults.

In pre-test, 162 (98.2%) older adults suffered from severe level of functional health problems whereas only 3 (1.8%) older adults had moderate level of functional health problems and none of them had mild level of functional health problems. By conducting post-test in same group, it was seen that 83 (50.3%) older adults had moderate level of functional health problems whereas 82 (49.7%) older adults had severe level of functional health problems. While none of them had mild level of functional health problems.

It was found that in the pre-test level of functional health problems, majority of older adults suffered from severe level of functional health problems whereas in posttest, the majority had moderate level of functional health problems. Hence, it reveals that the family focused nursing intervention was effective to reduce the level of functional health problems from severe to moderate among the older adults.

**Table 2b: Comparison of the pre and post test level of Knowledge on functional health problems among caregivers. N=165**

| SCORE LEVEL | PRE TEST | POST TEST |
|-------------|----------|-----------|
|-------------|----------|-----------|

|                         | f   | (%)     | f   | (%)     |
|-------------------------|-----|---------|-----|---------|
| <b>INADEQUATE (0-7)</b> | 108 | (65.5%) | 7   | (4.2%)  |
| <b>MODERATE (8-13)</b>  | 57  | (34.5%) | 43  | (26.1%) |
| <b>ADEQUATE (14-20)</b> | 0   | 0%      | 115 | (69.7%) |

Maximum Score=20 Minimum Score=0

**Table 2b** denotes the comparison of pre-test and post- test level of knowledge on functional health problems among caregivers.

In pre-test, 108 (65.5%) caregivers had inadequate level of knowledge on functional health problems whereas only 57 (34.5%) caregivers had moderate level of knowledge and none of them had adequate level of knowledge on functional health problems. By conducting post-test in the same group, it was seen that 115 (69.7%) caregivers had adequate level of knowledge on functional health problems whereas remaining 43 (26.1%) caregivers had moderate level of knowledge on functional health problems. While none of them had inadequate level of knowledge on functional health problems.

It was found that in the pre-test level of knowledge on functional health problems, majority of caregivers had inadequate level of knowledge on functional health problems whereas in posttest, the majority had adequate level of knowledge on functional health problems and none of them had inadequate level of knowledge. Hence, it reveals that the family focused nursing intervention was effective to enhance the level of knowledge regarding functional health problems to great extent among the caregivers of the older adults.

**Table 3a:** Effectiveness of family focused nursing interventions on functional health problems among older adults.

N=165

| Paired T Test            | Mean±S.D.   | Mean% | Mean Diff. | Paired T Test  | P value | Table Value at 0.05 |
|--------------------------|-------------|-------|------------|----------------|---------|---------------------|
| PRETEST HEALTH PROBLEMS  | 98.81±4.528 | 88.20 | -14.630    | 36.803<br>*Sig | <0.001  | 1.98                |
| POSTTEST HEALTH PROBLEMS | 84.18±2.823 | 75.20 |            |                |         |                     |

\*\* Significance Level 0.05 Maximum=112 Minimum=28

**Table 3a** summarizes the paired 't' test analysis of pre-test and post-test level of functional health problems after the administration of family focused nursing intervention among the older adults. The mean pre-test pain score of the experimental group was high (98.81±4.528) whereas mean post-test pain score for the same group was less (84.18±2.823). Calculated paired 't' value ( $t_{(0.05)} = 36.803, <0.001$ ) of experimental group shows highly significant at 0.05 level. Hence, the research hypothesis was accepted. Thus, it can be concluded that family focused nursing intervention was an effective intervention in decreasing the functional health problems among older adults to some extent.

**Table 3b:** Effectiveness of family focused nursing interventions on knowledge regarding functional health problems among caregivers.

N=165

| Paired T Test | Mean±S.D. | Mean% | Mean Diff. | Paired T Test | P value | Table Value at 0.05 |
|---------------|-----------|-------|------------|---------------|---------|---------------------|
|               |           |       |            |               |         |                     |

|                    |            |       |       |                |        |      |
|--------------------|------------|-------|-------|----------------|--------|------|
| PRETEST KNOWLEDGE  | 5.65±3.005 | 28.30 | 9.450 | 26.723<br>*Sig | <0.001 | 1.98 |
| POSTTEST KNOWLEDGE | 15.1±3.47  | 75.50 |       |                |        |      |

\*\* Significance Level 0.05    Maximum=20 Minimum=0

**Table 3b** summarizes the paired 't' test analysis of pre-test and post-test level of knowledge regarding functional health problems after the administration of family focused nursing intervention among the caregivers. The mean pre-test pain score of the experimental group was less (5.65±3.005) whereas mean post-test pain score for the same group was high (15.1±3.47). Calculated paired 't' value ( $t_{(0.05)} = 26.723$ , <0.001) of experimental group shows highly significant at 0.05 level. Hence, the research hypothesis was accepted. Thus, it can be concluded that family focused nursing intervention was an effective intervention in increasing the level of knowledge regarding functional health problems among caregivers to a great extent.

**Table 4a: Association between the pre-test functional health problems with the socio-demographic variables among older adults**  
N=165

| Variables          | Opts                | SEVERE | MODERATE | MILD | Chi Test | P Value | df | Table Value | Result          |
|--------------------|---------------------|--------|----------|------|----------|---------|----|-------------|-----------------|
| Age                | 60-65 years         | 46     | 1        | 0    | 0.794    | 0.851   | 3  | 7.815       | Not Significant |
|                    | 66-70 years         | 52     | 1        | 0    |          |         |    |             |                 |
|                    | 71-75 years         | 30     | 0        | 0    |          |         |    |             |                 |
|                    | ≥76 years           | 34     | 1        | 0    |          |         |    |             |                 |
| Gender             | Male                | 88     | 0        | 0    | 3.492    | 0.062   | 1  | 3.841       | Not Significant |
|                    | Female              | 74     | 3        | 0    |          |         |    |             |                 |
|                    | Other               | 0      | 0        | 0    |          |         |    |             |                 |
| Religion           | Hindu               | 33     | 1        | 0    | 2.042    | 0.564   | 3  | 7.815       | Not Significant |
|                    | Muslim              | 61     | 1        | 0    |          |         |    |             |                 |
|                    | Sikh                | 47     | 0        | 0    |          |         |    |             |                 |
|                    | Christian           | 21     | 1        | 0    |          |         |    |             |                 |
| Dietary pattern    | Vegetarian          | 77     | 1        | 0    | 0.238    | 0.626   | 1  | 3.841       | Not Significant |
|                    | Non- Vegetarian     | 85     | 2        | 0    |          |         |    |             |                 |
| Marital status     | Married             | 121    | 2        | 0    | 6.769    | 0.080   | 3  | 7.815       | Not Significant |
|                    | Unmarried           | 12     | 0        | 0    |          |         |    |             |                 |
|                    | Widow               | 23     | 0        | 0    |          |         |    |             |                 |
|                    | Divorced            | 6      | 1        | 0    |          |         |    |             |                 |
| Educational Status | No formal education | 59     | 1        | 0    | 2.106    | 0.551   | 3  | 7.815       | Not Significant |
|                    | Primary education   | 51     | 2        | 0    |          |         |    |             |                 |
|                    | Secondary education | 20     | 0        | 0    |          |         |    |             |                 |



|                       |                      |     |   |   |       |       |   |       |                 |
|-----------------------|----------------------|-----|---|---|-------|-------|---|-------|-----------------|
|                       | Graduation and above | 32  | 0 | 0 |       |       |   |       |                 |
| Occupational status   | Unemployed           | 109 | 2 | 0 | 0.895 | 0.639 | 2 | 5.991 | Not Significant |
|                       | Private employee     | 25  | 0 | 0 |       |       |   |       |                 |
|                       | Government employee  | 28  | 1 | 0 |       |       |   |       |                 |
|                       | Self employed        | 0   | 0 | 0 |       |       |   |       |                 |
| Type of family        | Joint Family         | 44  | 2 | 0 | 2.286 | 0.131 | 1 | 3.841 | Not Significant |
|                       | Nuclear Family       | 118 | 1 | 0 |       |       |   |       |                 |
| Family size           | ≤3 members           | 4   | 1 | 0 | 9.760 | 0.021 | 3 | 7.815 | Significant     |
|                       | 4-5 members          | 137 | 2 | 0 |       |       |   |       |                 |
|                       | 6-7 members          | 11  | 0 | 0 |       |       |   |       |                 |
|                       | ≥8 members           | 10  | 0 | 0 |       |       |   |       |                 |
| Family monthly income | ≤10,000/-            | 11  | 0 | 0 | 1.099 | 0.777 | 3 | 7.815 | Not Significant |
|                       | 10,001/- to 20,000/- | 28  | 1 | 0 |       |       |   |       |                 |
|                       | 20,001/- to 30,000/- | 89  | 1 | 0 |       |       |   |       |                 |
|                       | ≥30,001/-            | 34  | 1 | 0 |       |       |   |       |                 |

- According to age, the obtained chi square value ( $\chi^2_{(3, 0.05)} = 0.794, 0.851$ ) was higher at 0.05 level of significance. Hence, the research hypothesis was rejected. So, it was concluded that there was no association between pre-test level of functional health problems with age among older adults.
- According to gender, the obtained chi square value ( $\chi^2_{(1, 0.05)} = 3.492, 0.062$ ) was higher at 0.05 level of significance. Hence, the research hypothesis was rejected. So, it was concluded that there was no association between pre-test level of functional health problems with gender among older adults.
- According to religion, the obtained chi square value ( $\chi^2_{(3, 0.05)} = 2.042, 0.564$ ) was higher at 0.05 level of significance. Hence, the research hypothesis was rejected. So, it was concluded that there was no association between pre-test level of functional health problems with religion among older adults.
- According to dietary pattern, the obtained chi square value ( $\chi^2_{(1, 0.05)} = 0.238, 0.626$ ) was higher at 0.05 level of significance. Hence, the research hypothesis was rejected. So, it was concluded that there was no association between pre-test level of functional health problems with dietary pattern among older adults.
- According to marital status, the obtained chi square value ( $\chi^2_{(3, 0.05)} = 6.769, 0.080$ ) was higher at 0.05 level of significance. Hence, the research hypothesis was rejected. So, it was concluded that there was no association between pre-test level of functional health problems with marital status among older adults.
- According to educational status, the obtained chi square value ( $\chi^2_{(3, 0.05)} = 2.106, 0.551$ ) was higher at 0.05 level of significance. Hence, the research hypothesis was rejected. So, it was concluded that there was no association between pre-test level of functional health problems with educational status among older adults.
- According to occupational status, the obtained chi square value ( $\chi^2_{(2, 0.05)} = 0.895, 0.769$ ) was higher at 0.05 level of significance. Hence, the research hypothesis was rejected. So, it was concluded that there

was no association between pre-test level of functional health problems with occupational status among older adults.

- According to type of family, the obtained chi square value ( $\chi^2_{(1, 0.05)} = 2.286, 0.131$ ) was higher at 0.05 level of significance. Hence, the research hypothesis was rejected. So, it was concluded that there was no association between pre-test level of functional health problems with type of family among older adults.
- According to family size, the obtained chi square value ( $\chi^2_{(3, 0.05)} = 9.760, 0.021$ ) was at 0.05 level of significance. Hence, the research hypothesis was accepted. So, it was concluded that there was an association between pre-test level of functional health problems with family size among older adults.
- According to family income per month, the obtained chi square value ( $\chi^2_{(3, 0.05)} = 1.099, 0.777$ ) was higher at 0.05 level of significance. Hence, the research hypothesis was rejected. So, it was concluded that there was no association between pre-test level of functional health problems with family income per month among older adults.

**Table 5: Association of pre-test knowledge scores with selected socio-demographic variables among caregivers.** N=165

| Variables           | Opts                 | EXCELLENT KNOWLEDGE | GOOD KNOWLEDGE | POOR KNOWLEDGE | Chi Test | P Value | df | Table Value | Result          |
|---------------------|----------------------|---------------------|----------------|----------------|----------|---------|----|-------------|-----------------|
| Age                 | 21-25 years          | 0                   | 18             | 32             | 1.608    | 0.658   | 3  | 7.815       | Not Significant |
|                     | 26-30 years          | 0                   | 15             | 38             |          |         |    |             |                 |
|                     | 31-35 years          | 0                   | 12             | 17             |          |         |    |             |                 |
|                     | ≥36 years            | 0                   | 12             | 21             |          |         |    |             |                 |
| Gender              | Male                 | 0                   | 30             | 60             | 0.129    | 0.720   | 1  | 3.841       | Not Significant |
|                     | Female               | 0                   | 27             | 48             |          |         |    |             |                 |
|                     | Other                | 0                   | 0              | 0              |          |         |    |             |                 |
| Educational Status  | No formal education  | 0                   | 1              | 6              | 1.436    | 0.488   | 2  | 5.991       | Not Significant |
|                     | Primary education    | 0                   | 0              | 0              |          |         |    |             |                 |
|                     | Secondary education  | 0                   | 19             | 32             |          |         |    |             |                 |
|                     | Graduation and above | 0                   | 37             | 70             |          |         |    |             |                 |
| Occupational status | Unemployed           | 0                   | 2              | 2              | 1.322    | 0.516   | 2  | 5.991       | Not Significant |
|                     | Private employee     | 0                   | 19             | 29             |          |         |    |             |                 |
|                     | Government employee  | 0                   | 36             | 77             |          |         |    |             |                 |
|                     | Self employed        | 0                   | 0              | 0              |          |         |    |             |                 |
|                     | ≤10,000/-            | 0                   | 4              | 7              | 0.314    | 0.957   | 3  | 7.815       |                 |

|  |                      |   |    |    |       |       |   |       |                 |
|--|----------------------|---|----|----|-------|-------|---|-------|-----------------|
| Family monthly income                        | 10,001/- to 20,000/- | 0 | 11 | 18 | 2.118 | 0.548 | 3 | 7.815 | Not Significant |
|  | 20,001/- to 30,000/- | 0 | 31 | 59 |       |       |   |       |                 |
|  | ≥30,001/-            | 0 | 11 | 24 |       |       |   |       |                 |
| Duration of time spending with older adults. | ≤ 2 hours            | 0 | 19 | 26 | 2.457 | 0.483 | 3 | 7.815 | Not Significant |
|  | 3-4 hours            | 0 | 8  | 13 |       |       |   |       |                 |
|  | 5-6 hours            | 0 | 27 | 63 |       |       |   |       |                 |
|  | ≥7 hours             | 0 | 3  | 6  |       |       |   |       |                 |
| Marital Status                               | Married              | 0 | 11 | 17 | 2.457 | 0.483 | 3 | 7.815 | Not Significant |
|  | Unmarried            | 0 | 44 | 84 |       |       |   |       |                 |
|  | Widow                | 0 | 0  | 4  |       |       |   |       |                 |
|  | Divorced             | 0 | 2  | 3  |       |       |   |       |                 |

- According to age, the obtained chi square value ( $\chi^2_{(3, 0.05)} = 1.608, 0.658$ ) was higher at 0.05 level of significance. Hence, the research hypothesis was rejected. So, it was concluded that there was no association between pre-test level of knowledge regarding functional health problems with age among caregivers.
- According to gender, the obtained chi square value ( $\chi^2_{(1, 0.05)} = 0.129, 0.720$ ) was higher at 0.05 level of significance. Hence, the research hypothesis was rejected. So, it was concluded that there was no association between pre-test level of knowledge regarding functional health problems with gender among caregivers.
- According to educational status, the obtained chi square value ( $\chi^2_{(2, 0.05)} = 1.436, 0.488$ ) was higher at 0.05 level of significance. Hence, the research hypothesis was rejected. So, it was concluded that there was no association between pre-test level of knowledge regarding functional health problems with educational status among caregivers.
- According to occupational status, the obtained chi square value ( $\chi^2_{(2, 0.05)} = 1.322, 0.516$ ) was higher at 0.05 level of significance. Hence, the research hypothesis was rejected. So, it was concluded that there was no association between pre-test level of knowledge regarding functional health problems with occupational status among caregivers.
- According to family income per month, the obtained chi square value ( $\chi^2_{(3, 0.05)} = 0.314, 0.957$ ) was higher at 0.05 level of significance. Hence, the research hypothesis was rejected. So, it was concluded that there was no association between pre-test level of knowledge regarding functional health problems with family income per month among caregivers.
- According to duration of time spending with older adults, the obtained chi square value ( $\chi^2_{(3, 0.05)} = 2.118, 0.548$ ) was higher at 0.05 level of significance. Hence, the research hypothesis was rejected. So, it was concluded that there was no association between pre-test level of knowledge regarding functional health problems with duration of time spending with older adults among caregivers.
- According to marital status, the obtained chi square value ( $\chi^2_{(3, 0.05)} = 2.457, 0.483$ ) was higher at 0.05 level of significance. Hence, the research hypothesis was rejected. So, it was concluded that there was



no association between pre-test level of knowledge regarding functional health problems with marital status among caregivers.

### **RECOMMENDATIONS:**

Based on the results of study, the recommendations made were:

- The study can be replicated on a large sample to validate and generalize its findings.
- Similar studies can be conducted on older adults regarding functional health problems in selected hospital(s).
- A descriptive study can be conducted to assess the knowledge and attitude of caregivers regarding functional health problems in selected villages (s).
- A study can be conducted to assess the attitude and level of satisfaction of family focused nursing interventions regarding Functional health problems in selected hospital(s) or community setting.

### **CONCLUSION:**

Based on the findings the following conclusions were drawn. It was found that in the pre-test level of functional health problems, majority of older adults suffered from severe level of functional health problems whereas in posttest, the majority had moderate level of functional health problems. It was found that in the pre-test level of knowledge on functional health problems, majority of caregivers had inadequate level of knowledge on functional health problems whereas in posttest, the majority had adequate level of knowledge on functional health problems and none of them had inadequate level of knowledge. There was an association of pre-test functional health problems with the socio-demographic variables among older adults with their socio-demographic variables such as family size. There was no association of pre-test knowledge scores with age, gender, educational status, occupational status, family income per month, duration of time spending with older adults and marital status among the caregivers. Hence, it was concluded that family focused nursing intervention was an effective intervention to reduce the functional health problems among older adults to some extent and in increasing the level of knowledge regarding functional health problems among caregivers to a great extent.

### **REFERENCES:**

1. Ministry of Social Justice and Empowerment, Government of India. National Policy on Older person. Available at: <http://www.socialjustice.nic.in>.
2. Fulmer. Best Practices in Nursing care to Older adults from the Harvard Institute of Geriatric Nursing, New York University, College of Nursing, Revised in 2022. [www.consultGeRN.org](http://www.consultGeRN.org)
3. World Health Organization (WHO). WHO global report on falls prevention in Older age. Available at: [http://www.who.int/ageing/publication/Falls\\_ Prevention 7 Marchpdf](http://www.who.int/ageing/publication/Falls_Prevention_7_Marchpdf). Accessed at 5 March 2015.