A STUDY TO ASSESS THE EFFECTIVENESS OF TRANSITIONAL CARE NURSING PACKAGE ON HEALTH RELATED QUALITY OF LIFE AMONG CLIENTS WITH CORONARY ARTERY DISEASE.

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Background: Coronary artery disease (CAD) is connected with poor patient health status and deterioration of health-related quality of life. The magnitude of the impact of coronary artery disease on an individual’s quality of life is due to the demanding long term changes in lifestyle coupled with the huge economic burden of treatment and rehabilitation. Health related quality of life (HRQOL) as a multidimensional construct demonstrates functional dimensions, patient’s subjective understanding of his bio psychosocial health status and productivity affairs.

Aim: To assess the effectiveness of transitional care nursing package on health related quality of life of clients with coronary artery disease.

Materials and Methods: A quasi experimental pre-test, post-test design was used. A Sample of 290 coronary artery disease clients (study group-146, control group -144) were selected by non probability convenience sampling technique. SF-36 Health Survey Tool was used to assess the HRQOL.

Results: In pre-test assessment of HRQOL, 4.1% of them having low level, 87.7% were having moderate level, 8.2% of them were having high level & none of them having very high level of HRQOL. After administration of transitional care nursing package to study group the HRQOL was improved to high level for majority 76.7% of respondents and 6.8% had achieved very high level of HRQOL and none of them had low level of HRQOL. The mean and standard deviation in the pre and post test level of HRQOL among CAD clients was 351.12, SD 38.45 and 506.84; SD 48.65 respectively with the mean difference level of 155.71. Hence the transitional care nursing package was effective in improving the level of HRQOL at p<0.001 level.

Conclusion: Comprehensive transitional care nursing programs helps to enhance care during transitions between settings that can reduce not only hospital readmissions but also helps to improve health related quality of life (HRQOL) by adapting positive health behaviors after discharge from acute care settings.
Introduction:

Coronary artery disease is the leading cause of death in developed and developing countries accounting for over 40% of CVD deaths and 15% of all deaths in the world (WHO, 2017). India is experiencing epidemiologic transition with sharp increase in coronary artery disease which is alarmingly high leading to the most common cause of premature mortality in 2016. There is a growing burden of coronary risk factors owing to rapid urbanization and changes in lifestyle, including diabetes mellitus (DM), hypertension, dyslipidemia, smoking, alcohol consumption, dietary patterns, central obesity, physical inactivity and psychological factors. These risk factors attribute 90% of CAD in population.

In addition to mortality, CAD is also responsible for morbidity and loss of quality of life (QOL). CAD has significant physical, emotional, and social impact for patients; so, evaluating their QOL is necessary for assessing the success of treatment and it may be used for modifying or improving the treatment given, or for providing treatment alternatives. Recovering from a cardiac event is a complex procedure that presents psychological and physical needs that continue after discharge from hospital. As the patient becomes anxious, scared, and depressed it has a significant impact on patient quality of life (QOL). These emotional complications can limit the patient’s activities of daily living, work performance, and relationships. The transition from hospital to home or other care settings can be a challenging and confusing journey for patients and their families that is fought with challenges. Preventing avoidable readmission has the potential to profoundly improve both QOL for patients and the financial wellbeing of health care system.

Thus, an improvement in health-related quality of life (HRQOL) is considered to be important as a primary outcome and in the determination of therapeutic benefits of CAD patients by adapting positive health behavior. The nurse-led transitional care programme is helpful for coronary artery disease patients by supporting their effective transfer from hospital to community after a cardiac event by enhancing patients’ knowledge of their illness and awareness of behavioral changes to prevent a new event or readmission to hospital thereby improve quality of life. Masoumeh Akbari, Sevilay Senol Celik (2020) study aimed to investigate the effects of discharge training and post discharge counseling on QOL after CABG sample of 100 patients who underwent CABG surgery. Six weeks after hospital discharge, the mean score of QOL in the intervention group was significantly greater than the control group (93.19 ± 4.45 vs. 47.00 ± 13.43; \( P < 0.001 \)). A study showed that discharge training was effective in alleviating post discharge problems and improving patient outcomes such as health related knowledge and self-care ability.

Objectives:

1. To assess the level of HRQOL among coronary artery disease clients.
2. To evaluate the effectiveness of Transitional Care Nursing Package on HRQOL among coronary artery disease clients.
3. To associate the effectiveness of Transitional Care Nursing Package on HRQOL of coronary artery disease clients with their selected demographic variables.

Materials and Methods:

Quantitative evaluative approach was used. A quasi-experimental design was chosen for this study. Sample of 290 coronary artery disease clients (study group-146, control group -144) were selected by using non probability convenience sampling technique.

Data collection procedure:

After obtaining the formal permission from the head of the institution the investigator introduced self to the samples and explained the purpose of the study. Written informed consent was obtained and demographic variables was assessed followed by pre-test level of HRQOL was assessed by SF- 36 Health survey questionnaire. Transitional care nursing package was administered to study group and the samples were encouraged to follow the recommended instructions on regular basis and to maintain the dairy of events. Post test was conducted at the end of 4 weeks, 12 weeks & 24 weeks. Reinforcement of transitional care nursing package and individual need based guidance was given as required after each post test. Similarly the pre test and post test data was collected from the samples in the control group except the administration of transitional care nursing package. The researcher maintained confidentiality throughout the study. The data collection was completed from all samples & data was prepared and analyzed.
Results And Discussion:
Description of sample characteristics:
Table 1 shows that the description of demographic variables in study and control group. In both the group majority of the clients 71.9% in study group & 65.3% in control group were in the age group 51 to 60 years. In the study group 74% were male, 32.9% had elementary school education and 80.8% were married whereas in control group 65.3% were male 38.9% had elementary school education and 79.2% were married. In both the groups majority of them belongs to Hindu religion and living in nuclear family.

In the aspect of family history of hypertension 29.5% in study group and 28.5% in control group had family history of hypertension with the degree of relationship as paternal. For diabetes mellitus 20.5% in study group and 16.7% had family history of diabetes mellitus with the degree of relationship as maternal. Only 13.7% in study group and 11.8% in control group had family history of coronary artery disease with the degree of relationship as paternal.

With regard to history of diabetes mellitus 43.2% in study group and 45.8% in control group had history of diabetes mellitus with chronicity as more than 10 years in both groups. In view of hypertension majority of them 88.4% in study group and 91% in control group had significant history of hypertension with 7 to 10 years as chronicity of disease.

Assessment of Pre-test post & test level of HRQOL among study and control group
Table 2 shows the percentage difference in the level of HRQOL in pretest, post test 1, post test 2 and post test 3 among study and control groups. In pre-test, majority of respondents 128 (87.7%) in both groups were having moderate level of HRQOL followed by 6 (4.1%) in study group and 7 (4.9%) in control group had low level of HRQOL and none of them had very high level of HRQOL in both groups. But after administration of transitional care nursing package to study group the HRQOL has improved to high level (24%), moderate level (73.9%) in post test 1 followed by 60.3% had high level and 2.7% had very high level of HRQOL and none of them had low level of HRQOL in post test 2. But in post test 3 majority of them 76.7% had high level followed by 6.8% had very high level of HRQOL and none of them had low level of HRQOL.

In control group majority 87.5% had moderate level, 3.5% had low level and 9% had high level of HRQOL in post test 1 whereas in post test 2, 88.9% had moderate and 11.1% had high level of HRQOL. In post test 3 majority 86.8% were remained as same as in pre test having moderate level and 13.2% had high level but none of them had low and very high level of HRQOL.

Comparison of overall Mean and Standard Deviation in all domains of HRQOL within study group and control group.
The above figure shows the comparison of mean and standard deviation of pre test and post test scores related to level of HRQOL among study and control groups. Results proved that there was a significant difference found between the pre test and post test level of HRQOL among study group at p<0.001. There was no significant difference found within control group.

**Effectiveness of Transitional care nursing package on HRQOL gain score within the study group and control group.**

Table 3 revealed the findings of the study that the pretest mean score of the study group was 351.12 and that of control group was 348.51 and it showed that before implementing transitional care package both of the group were having equal level of HRQOL. The post test mean score of experimental group was 506.84 and that of control group was 359.12 with the mean difference among the study group was 155.71 but in control group it was about 10.61. Hence the transitional care nursing package was effective in promoting the level of HRQOL.

**Association between HRQOL of clients with coronary artery disease and demographic variables among study group.**

Table 4 describes the association between the level of HRQOL and demographic variables among study group. There was a significant association found with the selected demographic variables such as age, gender, education, family history of diabetes mellitus, history of diabetes mellitus at p<0.05 level and income at p<0.01 level.

**Table 1: Frequency and Percentage distribution of demographic variables of clients with coronary artery disease among study and control group.**

| Demographic variables | Study (n=146) | Control (n=144) | Chi square test |
|-----------------------|--------------|----------------|----------------|
| Age                   |              |                |                |
| 31 -40 years          | 3            | 2.1            | 2              | 1.4 |
| 41 -50 years          | 18           | 12.3           | 20             | 13.9 |
| 51 -60 years          | 105          | 71.9           | 94             | 65.3 |
| > 60 years            | 20           | 13.7           | 28             | 19.4 |
| Gender                |              |                |                |
| Male                  | 108          | 74.0           | 105            | 72.9 |
| Female                | 38           | 26.0           | 39             | 27.1 |
| Education             |              |                |                |
| Illiterate            | 13           | 8.9            | 19             | 13.2 |
| Elementary            | 48           | 32.9           | 56             | 38.9 |
| High school           | 48           | 32.9           | 41             | 28.5 |
| Higher Secondary      | 31           | 21.2           | 21             | 14.6 |
| Graduate              | 6            | 4.1            | 7              | 4.9  |
| Occupation            |              |                |                |
| Semi Professional     | 3            | 2.1            | 2              | 1.4  |
| Clerical, shop owner | 20           | 13.7           | 13             | 9.0  |
| Skilled worker        | 30           | 20.5           | 36             | 25.0 |
| Semi skilled worker   | 47           | 32.2           | 36             | 25.0 |
| Unskilled worker      | 14           | 9.6            | 15             | 10.4 |
| Unemployment/         | 32           | 21.9           | 42             | 29.2 |
| House wife            |              |                |                |
| Income                |              |                |                |
| Rs.11362 – 15187      | 55           | 37.7           | 42             | 29.2 |
| Rs.7594 – 11361       | 50           | 34.2           | 49             | 34.0 |
| Rs.4556 – 7593        | 9            | 6.2            | 5              | 3.4  |
| Rs.1521 – 4555        | 6            | 4.1            | 8              | 5.6  |
| < Rs.1520             | 26           | 17.8           | 40             | 27.8 |
| Marital status        |              |                |                |
| Married               | 118          | 80.8           | 114            | 79.2 |
| Widow/Widower         | 28           | 19.2           | 30             | 20.8 |
| Religion              |              |                |                |
| Hindu                 | 81           | 55.5           | 80             | 55.6 |
| Muslims               | 18           | 12.3           | 12             | 8.3  |
| Christian             | 47           | 32.2           | 52             | 36.1 |

\[ \chi^2=2.33 \quad \text{P}=0.52 \quad \text{DF}=3 \quad \text{NS} \]

\[ \chi^2=2.00 \quad \text{P}=0.83 \quad \text{DF}=1 \quad \text{NS} \]

\[ \chi^2=4.27 \quad \text{P}=0.37 \quad \text{DF}=4 \quad \text{NS} \]

\[ \chi^2=5.06 \quad \text{P}=0.41 \quad \text{DF}=5 \quad \text{NS} \]

\[ \chi^2=6.13 \quad \text{P}=0.18 \quad \text{DF}=4 \quad \text{NS} \]

\[ \chi^2=0.12 \quad \text{P}=0.72 \quad \text{DF}=1 \quad \text{NS} \]

\[ \chi^2=1.44 \quad \text{P}=0.49 \quad \text{DF}=2 \quad \text{NS} \]
## Table 1: Percentage of occurrence of demographic variables among study group and control group.

| Family history of hypertension | Study (n=146) | Control (n=144) | Chi square test |
|-------------------------------|---------------|-----------------|----------------|
| Yes                           | 43            | 41              | \(\chi^2=0.03\) \(p=0.85\) |
| No                            | 103           | 103             | \(\chi^2=1\) \(p=NS\) |

| If yes, Degree of relationship | Study (n=146) | Control (n=144) | Chi square test |
|-------------------------------|---------------|-----------------|----------------|
| Paternal                      | 25            | 18              | \(\chi^2=3.01\) \(p=0.22\) |
| Maternal                      | 4             | 9               | NS             |
| Siblings                      | 14            | 14              | NS             |

| History of diabetes mellitus  | Study (n=146) | Control (n=144) | Chi square test |
|-------------------------------|---------------|-----------------|----------------|
| Yes                           | 30            | 24              | \(\chi^2=0.72\) \(p=0.39\) |
| No                            | 116           | 120             | \(\chi^2=1\) \(p=NS\) |

| If yes, Degree of relationship | Study (n=146) | Control (n=144) | Chi square test |
|-------------------------------|---------------|-----------------|----------------|
| Paternal                      | 9             | 9               | \(\chi^2=3.59\) \(p=0.16\) |
| Maternal                      | 16            | 7               | NS             |
| Siblings                      | 5             | 8               | NS             |

| Family history of Coronary Artery Disease | Study (n=146) | Control (n=144) | Chi square test |
|-------------------------------------------|---------------|-----------------|----------------|
| Yes                                       | 20            | 17              | \(\chi^2=0.23\) \(p=0.63\) |
| No                                        | 126           | 127             | \(\chi^2=1\) \(p=NS\) |

| If yes | Study (n=146) | Control (n=144) | Chi square test |
|--------|---------------|-----------------|----------------|
| Paternal | 10            | 10              | \(\chi^2=0.45\) \(p=0.80\) |
| Maternal | 2             | 2               | \(\chi^2=2\) \(p=NS\) |
| Siblings | 8             | 5               | NS             |

| History of diabetes mellitus | Study (n=146) | Control (n=144) | Chi square test |
|------------------------------|---------------|-----------------|----------------|
| Yes                          | 63            | 66              | \(\chi^2=0.21\) \(p=0.64\) |
| No                           | 83            | 78              | \(\chi^2=1\) \(p=NS\) |

| If yes, chronicity of disease | Study (n=146) | Control (n=144) | Chi square test |
|------------------------------|---------------|-----------------|----------------|
| <3 years                     | 3             | 4               | \(\chi^2=1.00\) \(p=0.84\) |
| 3-6 years                    | 18            | 14              | \(\chi^2=3\) \(p=NS\) |
| >10 years                    | 15            | 18              | \(\chi^2=27.3\) \(p=0.001\) |

| History of hypertension     | Study (n=146) | Control (n=144) | Chi square test |
|------------------------------|---------------|-----------------|----------------|
| Yes                          | 129           | 131             | \(\chi^2=0.53\) \(p=0.46\) |
| No                           | 17            | 13              | \(\chi^2=1\) \(p=NS\) |

| If yes, chronicity of disease | Study (n=146) | Control (n=144) | Chi square test |
|------------------------------|---------------|-----------------|----------------|
| <3 years                     | 18            | 23              | \(\chi^2=3.25\) \(p=0.52\) |
| 3-6 years                    | 39            | 36              | \(\chi^2=4\) \(p=NS\) |
| >10 years                    | 48            | 52              | \(\chi^2=39.7\) \(p=0.001\) |

## Table 2: Percentage significant difference between pretest, post test 1, post test 2 and post test 3 HRQOL gain score among study group and control group.

| Assessment | Level of HRQOL | Group | Study (n=146) | Control (n=144) | Chi square test |
|------------|----------------|-------|---------------|-----------------|----------------|
| Pre test   | Low            | 6     | 4.1%          | 7               | \(\chi^2=0.49\) \(p=0.78\) |
|            | Moderate       | 128   | 87.7%         | 128             | \(\chi^2=11.95\) \(p=0.05\) |
|            | High           | 12    | 8.2%          | 9               | \(\chi^2=2\) \(p=NS\) |
|            | Very High      | 0     | 0.0%          | 0               | \(\chi^2=92.74\) \(p=0.001\) |
| Post test 1| Low            | 3     | 2.1%          | 5               | \(\chi^2=2\) \(p=NS\) |
|            | Moderate       | 108   | 73.9%         | 126             | \(\chi^2=11.95\) \(p=0.05\) |
|            | High           | 35    | 24.0%         | 13              | \(\chi^2=2\) \(p=NS\) |
|            | Very High      | 0     | 0.0%          | 0               | \(\chi^2=92.74\) \(p=0.001\) |
| Post test 2| Low            | 54    | 37.0%         | 128             | \(\chi^2=2\) \(p=NS\) |
|            | Moderate       | 88    | 60.3%         | 16              | \(\chi^2=92.74\) \(p=0.001\) |
|            | High           | 4     | 2.7%          | 0               | \(\chi^2=92.74\) \(p=0.001\) |
|            | Very High      | 0     | 0.0%          | 0               | \(\chi^2=92.74\) \(p=0.001\) |
### Table 3: Effectiveness of Transitional care nursing package on HRQOL gain score within the study group and control group. N=290.

| Group       | Maximum score | Mean± SD | % of mean score | mean difference with 95%CI | % of difference with 95%CI |
|-------------|---------------|----------|-----------------|-----------------------------|----------------------------|
| Study       | Pre test      | 800      | 351.12± 38.45   | 43.89%                      | 155.71 (147.31 -164.12)   | 19.46% (18.41% -20.51%)  |
|             | Post test 3   | 800      | 506.84±48.65    | 63.35%                      |                            |                            |
| Control     | Pre test      | 800      | 348.51±33.93    | 43.56%                      | 10.61 (7.25 -13.96)       | 1.32% (0.91% -1.75%)     |
|             | Post test 3   | 800      | 359.12±30.00    | 44.89%                      |                            |                            |

### Table 4: Association between HRQOL of clients with coronary artery disease and demographic variables among study group. n=146.

| Demographic variables | n | Baseline | 6th month | Gain score= 6th month-Baseline | One way ANOVA F-test/ t-test |
|-----------------------|---|----------|-----------|-------------------------------|-----------------------------|
|                       |   | Mean     | SD        | Mean                          | Mean                        | Mean                          |                                |
|                       |   |          |           |                               |                             |                             |                                |
| Age                   | 3 | 294.33   | 27.50     | 425.00                        | 31.10                       | 130.67                        | 34.00                          | F=2.68 NS                      |
| 31 -40 years          | 18| 362.39   | 41.11     | 497.00                        | 41.65                       | 134.61                        | 50.87                          |                                 |
| 41 -50 years          | 105| 350.26   | 37.99     | 492.90                        | 48.43                       | 142.64                        | 42.25                          |                                 |
| 51 -60 years          | 20| 334.05   | 33.92     | 523.85                        | 48.09                       | 169.80                        | 46.09                          |                                 |
| > 60 years            | 108| 345.38   | 34.99     | 508.13                        | 49.31                       | 162.75                        | 52.38                          |                                 |
| Gender                | 38| 367.45   | 43.39     | 510.55                        | 46.49                       | 143.11                        | 48.13                          | t=2.03 NS                      |
| Male                  | 13| 355.23   | 38.07     | 487.67                        | 54.83                       | 132.44                        | 46.67                          | F=2.39 NS                      |
| Female                | 48| 354.31   | 39.39     | 491.92                        | 48.29                       | 137.62                        | 48.73                          |                                 |
| Education             | 48| 342.56   | 37.79     | 489.22                        | 48.86                       | 146.66                        | 52.61                          |                                 |
| Illiterate            | 31| 357.61   | 38.56     | 526.41                        | 51.19                       | 168.81                        | 55.78                          |                                 |
| Elementary            | 6 | 351.67   | 36.95     | 522.07                        | 27.22                       | 170.40                        | 35.66                          |                                 |
| High school           | 14| 332.21   | 46.27     | 481.21                        | 40.06                       | 149.00                        | 41.72                          |                                 |
| Higher Secondary      | 20| 360.50   | 32.82     | 515.50                        | 50.04                       | 155.00                        | 52.31                          |                                 |
| Graduation            | 30| 343.23   | 41.12     | 496.10                        | 52.72                       | 152.87                        | 59.55                          | t=0.52 NS                      |
| Occupation            | 47| 347.72   | 33.93     | 512.53                        | 49.67                       | 164.81                        | 50.43                          | F=0.52 NS                      |
| Semi Professional     | 3 | 359.33   | 65.32     | 494.00                        | 10.58                       | 134.67                        | 56.13                          |                                 |
| Clerical, shop owner  | 20| 360.50   | 32.82     | 515.50                        | 50.04                       | 155.00                        | 52.31                          |                                 |
| Skilled worker        | 30| 343.23   | 41.12     | 496.10                        | 52.72                       | 152.87                        | 59.55                          |                                 |
| Semi skilled worker   | 14| 332.21   | 46.27     | 481.21                        | 40.06                       | 149.00                        | 41.72                          |                                 |
| Unemployed/ Housewife | 32| 365.16   | 35.87     | 515.56                        | 44.67                       | 150.41                        | 49.28                          |                                 |
| Income                | 55| 342.68   | 39.98     | 503.38                        | 50.84                       | 160.70                        | 54.33                          | F=3.91 P=0.01 NS                |
| Rs.11362 - 15187      | 9 | 350.38   | 35.71     | 496.71                        | 47.19                       | 146.33                        | 48.14                          |                                 |
| < Rs.1520             | 26| 380.67   | 51.17     | 499.00                        | 35.57                       | 118.33                        | 20.61                          |                                 |
| Marital status        | 118| 349.24   | 37.86     | 502.83                        | 48.52                       | 153.59                        | 48.62                          | F=1.02 NS                      |
| Married               | 28| 359.07   | 40.62     | 523.75                        | 46.29                       | 164.68                        | 61.97                          |                                 |
| Widow/Widower         | 81| 349.46   | 41.14     | 511.56                        | 47.57                       | 162.10                        | 51.16                          | F=1.40 NS                      |
| Religion              | 18| 347.50   | 22.00     | 495.28                        | 48.76                       | 147.78                        | 48.05                          |                                 |
| Hindu                 | 47| 355.38   | 38.81     | 503.15                        | 50.41                       | 147.77                        | 52.54                          |                                 |
| Muslims               | 18| 347.50   | 22.00     | 495.28                        | 48.76                       | 147.78                        | 48.05                          |                                 |
| Christian             | 47| 355.38   | 38.81     | 503.15                        | 50.41                       | 147.77                        | 52.54                          |                                 |
| Type of family                             | Number | Mean 1 | Standard Deviation 1 | Mean 2 | Standard Deviation 2 | F-value | P-value | Significance |
|-------------------------------------------|--------|--------|----------------------|--------|----------------------|---------|---------|-------------|
| Nuclear family                            | 99     | 349.82 | 36.67                | 505.81 | 49.19                | 0.68    | 0.50    | NS          |
| Joint family                              | 39     | 351.90 | 42.38                | 511.03 | 49.20                | 0.50    | 0.53    | NS          |
| Extended family                           | 8      | 363.50 | 43.06                | 499.25 | 42.93                | 0.37    | 0.55    | NS          |

| Family history of hypertension            |        |        |                      |        |                      |         |         |             |
|-------------------------------------------|--------|--------|----------------------|--------|----------------------|---------|---------|-------------|
| Yes                                       | 43     | 351.58 | 45.18                | 510.07 | 52.48                | 0.41    | 0.50    | NS          |
| No                                        | 103    | 350.93 | 35.51                | 505.50 | 47.17                | 0.37    | 0.55    | NS          |

| If yes, Degree of relationship            |        |        |                      |        |                      |         |         |             |
|-------------------------------------------|--------|--------|----------------------|--------|----------------------|---------|---------|-------------|
| Paternal                                  | 25     | 339.40 | 36.76                | 511.94 | 58.61                | 2.09    | 0.14    | NS          |
| Maternal                                  | 4      | 404.00 | 37.82                | 511.75 | 34.37                | 0.37    | 0.55    | NS          |
| Siblings                                  | 14     | 358.36 | 50.89                | 507.86 | 47.69                | 0.37    | 0.55    | NS          |

| Family History of diabetes mellitus       |        |        |                      |        |                      |         |         |             |
|-------------------------------------------|--------|--------|----------------------|--------|----------------------|---------|---------|-------------|
| Yes                                       | 30     | 356.00 | 42.10                | 494.70 | 40.40                | 2.05    | 0.04    | *           |
| No                                        | 116    | 349.86 | 37.54                | 509.98 | 50.25                | 0.37    | 0.55    | NS          |

| If yes, Degree of relationship            |        |        |                      |        |                      |         |         |             |
|-------------------------------------------|--------|--------|----------------------|--------|----------------------|---------|---------|-------------|
| Paternal                                  | 9      | 365.56 | 34.86                | 503.56 | 38.67                | 2.00    | 0.06    | NS          |
| Maternal                                  | 16     | 359.88 | 44.79                | 490.56 | 42.06                | 0.37    | 0.55    | NS          |
| Siblings                                  | 5      | 326.40 | 39.21                | 492.00 | 44.22                | 0.37    | 0.55    | NS          |

| Family history of Coronary Artery Disease |        |        |                      |        |                      |         |         |             |
|------------------------------------------|--------|--------|----------------------|--------|----------------------|---------|---------|-------------|
| Yes                                      | 20     | 344.90 | 42.68                | 506.30 | 54.68                | 0.53    | 0.59    | NS          |
| No                                       | 126    | 352.11 | 37.83                | 506.93 | 47.87                | 0.37    | 0.55    | NS          |

| History of diabetes mellitus             |        |        |                      |        |                      |         |         |             |
|------------------------------------------|--------|--------|----------------------|--------|----------------------|---------|---------|-------------|
| Yes                                      | 63     | 358.94 | 34.54                | 504.07 | 41.07                | 2.03    | 0.05    | *           |
| No                                       | 83     | 345.19 | 40.37                | 507.64 | 53.73                | 0.37    | 0.55    | NS          |

| if yes, chronicity of disease            |        |        |                      |        |                      |         |         |             |
|------------------------------------------|--------|--------|----------------------|--------|----------------------|---------|---------|-------------|
| Less than 3 years                        | 3      | 353.33 | 25.42                | 561.33 | 15.63                | 1.95    | 0.13    | NS          |
| 3-6 years                                 | 18     | 364.72 | 35.96                | 507.89 | 40.07                | 0.37    | 0.55    | NS          |
| 7-10 years                                | 27     | 356.44 | 33.81                | 510.30 | 37.28                | 0.37    | 0.55    | NS          |
| More than 10 years                       | 15     | 357.60 | 37.88                | 506.20 | 48.19                | 0.37    | 0.55    | NS          |

| History of hypertension                  |        |        |                      |        |                      |         |         |             |
|------------------------------------------|--------|--------|----------------------|--------|----------------------|---------|---------|-------------|
| Yes                                      | 129    | 352.49 | 37.46                | 508.17 | 48.27                | 0.02    | 0.98    | NS          |
| No                                       | 17     | 340.76 | 45.24                | 496.76 | 51.87                | 0.37    | 0.55    | NS          |

| if yes, chronicity of disease            |        |        |                      |        |                      |         |         |             |
|------------------------------------------|--------|--------|----------------------|--------|----------------------|---------|---------|-------------|
| Less than 3 years                        | 18     | 353.22 | 47.05                | 499.78 | 47.89                | 1.52    | 0.20    | NS          |
| 3-6 years                                 | 32     | 354.70 | 35.16                | 517.33 | 46.23                | 0.37    | 0.55    | NS          |
| 7-10 years                                | 37     | 356.46 | 36.56                | 508.49 | 46.98                | 0.37    | 0.55    | NS          |
| More than 10 years                       | 42     | 340.45 | 36.98                | 507.19 | 52.53                | 0.37    | 0.55    | NS          |
Conclusion:
The study findings demonstrate that the transition care nursing package was very effective in improving the HRQOL for CAD clients before getting discharge from the hospital. The pretest and post test level of HRQOL were compared by paired t test which showed highly significant at \( p<0.001 \) level and the gained score was 19.46% in study group whereas in control group there was no significant difference between pre test and post test level. Nurses play a vital role in treatment as they are close to the patients and their families during all the process of hospitalization.

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