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## A study to assess the effect of health teaching on knowledge and practices regarding colostomy care among care givers of patient in selected hospital

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### Abstract

**Introduction:** “Globally, colorectal cancer is the third commonest cause of cancer death in men since 1975. In the developed countries it is now the second most common cancer after lung in men and the 1990 age-standardized incidence rates range from 25.3 per 100,000 (Eastern Europe) to 45.8 per 100,000 (Australia). Approximately 1 million people are living with a colostomy, and 100,000 to 130,000 new colostomies are created each year. In India the annual incidence rates (AARs) for colon cancer and rectal cancer in men 4.4 and 4.1 per 100,000, respectively. AAR for colon cancer women 3.9 per 100,000. It is the eighth most common cancer in men, where for women, colon cancer ranks ninth.

### Methods research approach

**Research Approach:** Evaluative research approach. Research design used was one group pretest and post-test design. Conceptual framework based on theory of investigator adopted King's Goal Attainment model was used for the study which is designed by Imogene. M. King's (1958). The setting for this study was the selected areas Indrayani Hospital and Cancer Research Center, Pune. Caregivers of colostomy patients in Indrayani Hospital and Cancer Research Center, Pune. Non-Probability purposive sampling technique was used for 30 Colostomy Care Among Care Givers of Patient in Selected Hospital. The tool developed which includes, Section-I: demographic variables, Section-II: Deal with 20 items of Structured Knowledge Questionnaire Colostomy Care Among Care Givers of Patient in Selected Hospital. Section-III: Assessment Checklist was prepared to assess the practices regarding colostomy care among care givers of patients in selected hospital. Section IV: Analysis of data related to find the association between the knowledge & practices regarding colostomy care among caregivers of patients with the selected demographic variables. Fisher's exact test for association between the practices regarding colostomy care among caregivers of patient with the selected demographic variables. Tool validity was done and tool found reliable. Study found feasible after pilot study.

**Results:** In Pretest, 90% caregivers of patients had poor practices (score 0-13) 10% them had average practices (Score 14-26) regarding colostomy. In posttest, 90% of the caregivers had good practices (Score 27-40) 10% had average practices (Score 14-26) regarding colostomy. This indicates that the practices of the caregivers of patients improved remarkably after the health teaching. Researcher applied paired t-test for the effectiveness of health teaching on knowledge regarding colostomy care. Knowledge score in pretest which increased to 14.5 in posttest. Researcher applied paired t-test for the effectiveness of health teaching on practices regarding colostomy. Practice score in pretest was 11.2 which increased to 31.1 in posttest. Since p-value corresponding educational status is small (less than 0.05), education status of caregivers of patients was found to have significant association with the practices regarding colostomy care among caregivers of patients. P-values corresponding monthly family income residence were marginal (very close to 0.05), monthly family income and residence were found to have marginally significant association with the practices regarding colostomy care among caregivers of patients.

**Conclusion:** The study was conducted to assess the effect of health teaching on knowledge and practices regarding the colostomy care among patient's caregivers. Based on data collected, and after statistical analysis was done, found that there is significant difference in pre-test and post-test knowledge and practice on colostomy care among care givers. Corresponding p-value for knowledge and practices score in Pre-experimental group was found to be small (less than 0.05), hence null hypothesis is rejected and the hypothesis  $H_1$  is accepted, indicating that Health teaching is highly effective in improving in the knowledge and practices of caregivers regarding colostomy care.

**Keywords:** Health teaching, colostomy care, globally

### Introduction

In India, incidence rate of colorectal cancer is very low, rectal cancer remains more common, a significant increase in its incidence has been reported for both men and women over the last two decades. The age adjusted annual incidence rates (AAR) of colorectal cancers per 100,000 persons during the year 2008-012/2012-015 various population based cancer registries operating under Indian Council of Medical Research was found to range 1.5 to 6.9 and 2.5 to 7.4 amongst males and females in urban areas respectively. Similarly, rural areas

the rates were 1.6 and 2.4 and 1.1 to 1.3 amongst males and females respectively.

### Research Design

The research design selected for the study was pretest and post-test design was used.

### Research Setting

The present study was conducted in the Indrayani Hospital and Cancer Research Center, Pune. caregivers of colostomy patients in Indrayani Hospital And Cancer Research Center, Pune.

### Population

The population of the present study is the target populations of this research were the caregivers of colostomy patient.

### Sample

In the present study the samples are selected for the present study comprised caregivers of colostomy patients in Indrayani Hospital and Cancer Research Center, Pune.

### Sample size

The sample size selected for this study was 30.

### Sample technique

A non-probability purposive sampling technique was used for selecting 30 patients who met the designated set of criteria during the period of data collection.

### Criteria for selection of sample

#### Inclusion Criteria

1. The care givers of patient having colostomy for a period of less than 1 month.
2. The care givers those who can read and understand Marathi and English are included in the study.

#### Exclusion Criteria

1. Care givers who are having health related profession.
2. Care givers of critically ill patients

### Development of tool

The tools of data collection translate the research objectives in to specific questions items, The responses to which provide the data requires to achieve this purpose, Each question must convey to the respondent an idea or group required by the research objectives. Also each item must obtain a response which can be analyzed for fulfilling the research objectives. An instrument in research refers to the tool or equipment used for data collection.

### Description of the tool

In this study the tool consisted of:-

**Section A:** Demographic Performa

**Section B:** Structured knowledge questionnaire

**Section C:** Checklist-An Assessment Checklist was prepared to assess the practices regarding colostomy care among care givers of patients in selected hospital

**Section D:** Health Teaching, Factors taken into consideration while preparing the planned teaching was independent learning, easy to explain, the tools and content were given to experts.

### Reliability of the Tools

Reliability was assessed using an test-retest for Structured Questionnaire to assess knowledge and Inter-rater for Observational Checklist. Person's correlation coefficient was found to be 0.96 for knowledge and 0.86 for checklist.

### Ethical consideration

The researcher followed the ethical and legal issues related to nursing research. Permission was taken from nursing superintendent. The authority was informed and consent was taken from the staff nurses. This study was done only for study purpose, and researcher maintained confidentiality of this research.

### Plan for data collection

The actual data was collected from 16/01/2020 to 23/01/2020. At the beginning, the session was introduced/by investigator. They were explained about the purpose of the study and assured about the confidentiality of the information between the investigator and the respondent only. Their willingness for sought for. Data was collected from 16/01/2020 till 24/01/2020 demographic data questionnaire on knowledge and practices and assessment checklist. Assessment was done on 30 patients in which 3 patients were observed for pilot study.

### Pilot study

Pilot study was conducted between 03/01/2020 to 09/01/2020 on 3selected patient from the Oncology ward, to assess the feasibility of the study, decide the plan for data analysis. Prior permission was taken to collect sample from trustee of Indrayani Hospital and Research Center, Aalandi, Pune. Investigator approached the subjects, informed them regarding objectives of the study, obtained consent after assuring the subjects about confidentiality data. Pre-test was given on the first day by using the Knowledge Questionnaire on knowledge regarding colostomy care practice being observed by using the Observation Checklist.

### Data analysis and interpretation

The investigator decided to analyze the data using descriptive and inferential statistics and present them in tables, graphs and figures. For the analysis of demographic data, frequencies and percentage was calculated. significance was calculated by using mean, median, mode, standard deviation, and calculated 't' value. The association was done by fisher's test with demographic variable.

### Result

#### Section I:-Frequency and percentage distribution of selective Demographic Variables

10% of the caregivers of patients were aged between age 18-30 years, 20% of them were age 31-40 years old 40% of them were 41-50 years and 30% of them were aged above 50 years.20% of them were males and 80% of them were females.10% of them were illiterate, 20% of them had primary education, 40% of them had secondary and higher secondary education and 30% off them had graduation and above.10% of them were homemakers, 50% of them had service, 20% of them had business and 20% of them had some other occupation.20% of them had monthly family income below Rs.10000, 30% of them had monthly family income Rs.10001-20000, 30% of them had monthly income

20001-30000 and 20% of them had monthly family income above Rs. 30000.60% of them were from urban residence and 40% of them were from rural residence.30% of them were children of the patients and 70% of them were spouse (wife/husband). 10% of them were single and 90% of them were married.

**Section II:-Analysis of data related to the knowledge and practices regarding colostomy care among caregivers of patients:-** 96.7% of the caregivers of patients had poor knowledge (score 0-6) and 3.3% of them had average knowledge (Score 7-13) regarding colostomy care.90% of the caregivers of patients had poor practices (Score 0-13) and 10% of them had average practices (Score 14-26) regarding colostomy.

**Section III:- Analysis of data related to the effect of health teaching on knowledge and practices of regarding colostomy care among caregivers of patients:-** Researcher applied paired t-test for the effectiveness of health teaching on knowledge regarding colostomy care. Knowledge score in pretest was 3 which increased to 14.5 in posttest. T-value for this test was 27.7 with 29 degrees of freedom. Corresponding p-value was of the order of 0.000 which is small (less than 0.05), so the null hypothesis is rejected. The health teaching regarding colostomy care was significantly effective in improving the knowledge of the caregivers regarding colostomy care. Applied paired t-test for the effectiveness of health teaching on practices regarding colostomy. Average practice score in pretest was 11.2 which increased to 31.1 in posttest. T-value test was 42.1 with 29 degrees of freedom. Corresponding p-value was of the order 0.000 which small (less than 0.05), null hypothesis is rejected. The health teaching regarding colostomy care was significantly effective in improving the practices of the caregivers regarding colostomy care.

**Section IV:-Analysis of data related to the association between the knowledge & practices regarding colostomy care among caregivers of patient with the selected demographic variables:-** Since p-value corresponding to educational status is small (less than 0.05), education status of caregivers of patients was found to have significant association with the practices regarding colostomy care among caregivers of patients. Also, p-values corresponding to monthly family income and residence were marginal (very close to 0.05), monthly family income and residence were found to have marginally significant association with the practices regarding colostomy care among caregivers of patients.

### Conclusion

The study was conducted to assess the effect of health Teaching on knowledge and practices regarding the colostomy care among patients caregivers. Based on data collected, and after statistical analysis was done, it was found that there is significant difference in pre-test and post-test knowledge and practice on colostomy care among caregivers. Corresponding p-value for knowledge and practices score in Pre-experimental group was found to be small (less than 0.05), hence null hypothesis is rejected and the hypothesis  $H_1$  is accepted, indicating that the Health teaching is highly effective in improving in the knowledge and practices of caregivers regarding colostomy care.

### Discussion

A similar study was conducted on Caregivers who were concerned with the client care in hospital & home. Most of the caregivers were not able to provide care to clients of colostomy. The findings of Majority of caregivers belonged to the age group of 31-40 years was 36.66%, and 66.67% were females and 33.33% men. In this study 86.67% participated were married. Experimental approach with one group pretest post-test design was used for 30 caregivers and convenient sampling technique was used. The knowledge score gained by the caregivers in the results shows that the mean value of knowledge and practices in pre-test was 7.43 and at post assessment was 13.77. The “p” value for the test is less than 0.05

### Limitations

1. The study was conducted only in one hospital and hence generalization was limited.
2. A structured knowledge questionnaire was prepared for data collection, which restricts the amount of information that can be obtained from the respondents.

### Recommendations

1. A similar study can be conducted on a larger sample for broader generalization.
2. Studies can be conducted using other methods of teaching.
3. More studies need to be conducted to know the association between knowledge, practice and attitude regarding the colostomy care.
4. Studies can also be conducted on factors influencing non-compliance with regards to assessment of colostomy care.

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