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Assess the effectiveness of planned health teaching programme on the basis of knowledge regarding preventive measures of pressure sore among caretakers of bedridden patients in Netaji Subhas Chandra Bose Medical college of Jabalpur (MP)

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Abstract
The current study has been undertaken to assess knowledge score regarding preventive measures of pressure sore among caretakers of bedridden patients by planned health programme in NSCB medical college of Jabalpur. The research design used for study was evaluative research approach with one group pre-test and post-test design with 60 caretakers of bedridden patients in Netaji Subhash Chandra Bose (NSCB) Medical College Jabalpur MP. The sampling technique was purposive sampling. The tool for study was "The pressure sore knowledge inventory" which consists of 2 parts. Part 1 consisted of socio-demographic data, Part 2 consisted of The "pressure sore knowledge inventory" to assess the knowledge score regarding preventive measures of bed sore among caretakers of bedridden patients. The data was analyzed by using descriptive and inferential statistical methods. The findings of the study were mean post-test knowledge score (23.65) of caretakers was found significantly higher than their mean pre-test knowledge score (15.05) as evident from "t" value 7.6336, P, <0.05 level. Hence the study showed 8% participants had poor knowledge in the pre-test whereas none of them had poor knowledge in the post test. Therefore planned health teaching programme was to be effective in increasing in knowledge regarding preventive measures of pressure sore.

Introduction
In our society the healthy moveable individual has greater value. But when individual mobility has lost then they has to face tremendous changes in their life style, planned life events. The loss of mobility can be perceived as a loss of part of the self. It can cause profound physical and emotional effects. The knowledge about bed sore prevention is must, especially to the health professional and caretaker's of patients. After all "Prevention is better than cure". Thus the knowledge and skill in prevention of Pressure sore, it gives the patient and family the potential to do or to teach others the care that is required and managing risk factors and preventing pressure sore. Immobility causes psychosocial problems. The loss of ability to move towards a goal, commonly results in feeling of loss of control and of frustration. Individuals with alternations in mobility experience several interpersonal and social problems like influence on relationship and isolation problem. Prevention of pressure ulcer requires a team effort among health caregivers patients and their family members. Thus the knowledge and skill in prevention of pressure sore, it gives the patient and family the potential to do so or to teach others the care that is required and managing risk factors and preventing pressure sore.

Hypothesis
H_1: There is a gain in the knowledge score after the administration of planned health teaching program.
H_2: There is a relation between the age of the caretakers and knowledge regarding preventive measures of pressure sore.
H_3: There is a relation between the sex of the caretakers and knowledge regarding preventive measures of pressure sore.

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H4: There is a relation between the education of the caretakers and knowledge regarding preventive measures of pressure sore.

Need of the Study
Pressure sore are the expensive common painful and needless complication of critically ill patients with a great financial burden to patients caretakers. This contributes to a significant decrease in quality of life and lost productivity of work. (Winsock 1966).

In Netaji Subhash Chandra Bose Medical college, Jabalpur, nurses are unable to adopt preventive measures of bed sore due to lack of time, low priority given to preventive aspects of bed sore in the wards, overloaded by work and only one staff nurse appointed in between 32-40 patients. These results in patients not being turned cleaned and fed as the ideal standard of nursing would dictate. The caretakers are psychologically and physically more near to the patient. Thus their knowledge will prove to be beneficial in implementing the treatment process followed by the physicians.

Methodology
An evaluation approach was used and pre-experimental one group pre-test, post-test research design was used for the study. The samples consisted of 60 caretakers of bedridden patient selected by Non probability purposive sampling technique. The setting of the study was in Medical College Jabalpur. Data was gathered with the help of demographic variables and administering self-structured "Pressure sore knowledge inventory.

Research Design
The design of the study was pre experimental with "one group pre and posttest" design where the knowledge among caretakers of bedridden patients in Netaji Subhash Chandra Bose Medical College Jabalpur was assessed before and after imparting the planned health teaching program regarding preventive measures of pressure sore.

Population
Target population of this study consists of the entire caretakers of bedridden patients in Netaji Subhash Chandra Bose medical college Jabalpur (M.P.)

Sample and Sampling Technique: The sample consisted of 60 caretakers of bedridden patients of Netaji Subhash Chandra Bose Medical College Jabalpur. Non probability

purposive sampling technique was used for data collection.

Validity
The instrument was validated by getting opinion from 13 experts and researcher in the field of Nursing, surgery, statistics, neurology and orthopaedic. Experts gave their opinion on the clarity and appropriateness of the items. The recommendations and suggestions were considered and the tool was reframed accordingly.

Reliability
The tool was tested on 10 respondents i:e the reliability was calculated by using Karl Correlation Coefficient formula. Where X- mean of X variable Y mean of Y variable. The reliability of the tool was 0.83 which is significant P(<0.05) which indicate that the tool was reliable.

Data Collection
Formal permission was obtained from the medical superintendent and head of the department of orthopaedic, surgery, ICU and neurological unit of the Netaji Subhash Chandra Bose medical college Jabalpur. The data was collected during the period of June and July after taking verbal permission permission and establishing rapport with the subjects. Confidentiality of the information given by them. Pretest on knowledge was observed on the day one and planned health teaching programme was conducted on the same day. Post test on the same tool was done for comparison.

Data Analysis and Interpretation

Section I: This section deals with finding of socio demographic variables tools
1. The Variables of Age

Table 1: Distribution of subjects according to age of caretakers

Age	Frequency (60)	Percentage
20-29 years	19	32%
30-39 years	27	45%
40 years and above	15	23%
Total	60	100%

In all the sixty subjects in the sample size the 27(45%) were in the age range of 30-39 years, 19(32%) caretakers were in the range of 20-29 years, 14(23%) caretakers were in the age range of 40 years and above. (Table No.1).
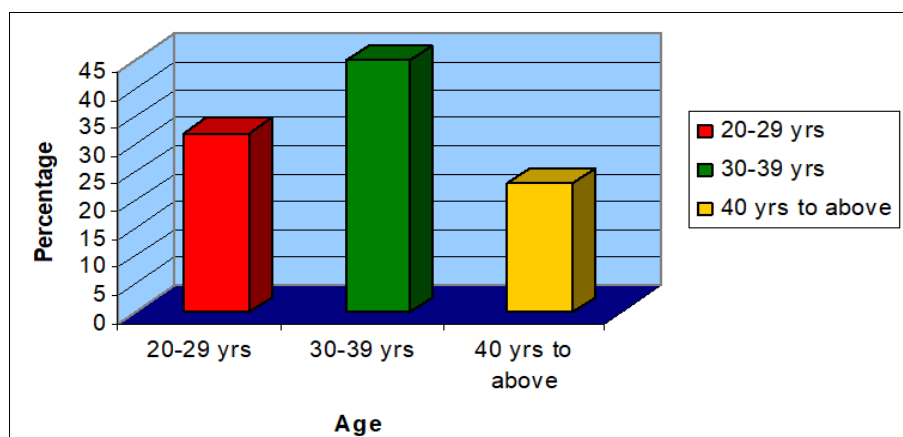

Fig 1: Age of the caretakers

The variables of sex of the caretakers

Table 2: Distribution of subjects according to sex of the caretakers

Sex	Frequency	Percentage
Male	26	44%
Female	34	56%
Total	60	100%

In all the 60 caretakers, the caretakers of the bedridden patients were male in 26(44%) and female in 34(56%) cases. (Table No. 2)
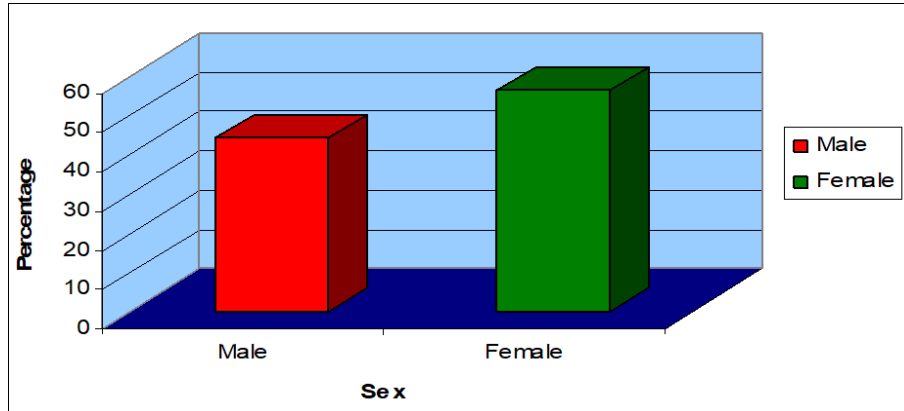

Fig 2: Sex of the caretakers

The variables of Education

Table 3: The distribution of subjects according to education of caretakers.

Education level	Frequency	Percentage
Primary education	10	17%
Secondary education	36	60%
Graduate	14	23%
Post-graduate	0	0%
Total	60	100%

Out of 60 subject studies, most of them i.e. 36(60%) caretakers had secondary education, 14(23%) had undergraduate, 10(17%) had primary education.(Table No. 3)
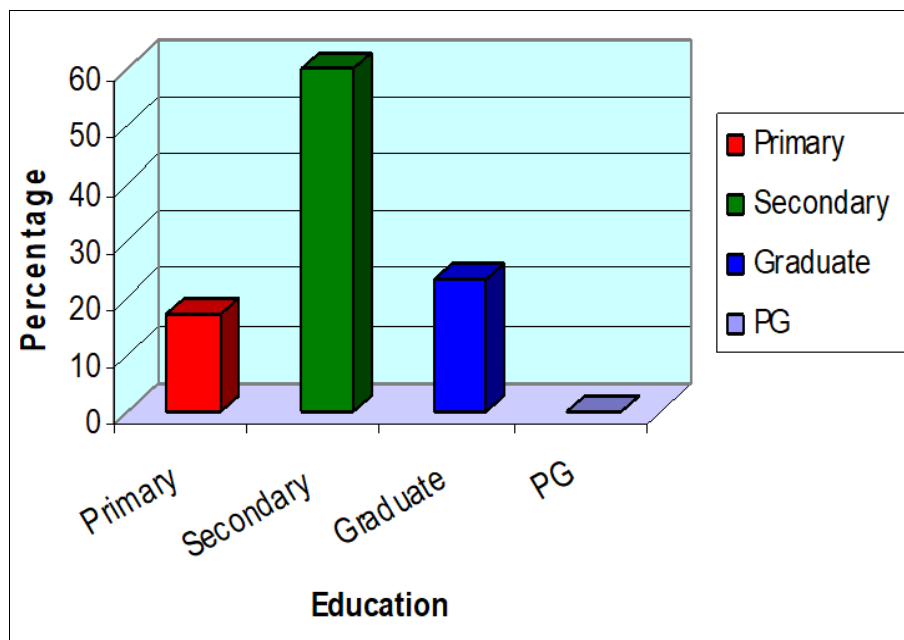

Fig 3: Education of the caretakers

The Variables of Residence

Table 4: The distribution of subjects according to residence of caretakers.

Residence	Frequency	Percentage
Rural	35	58%
Urban	25	42%
Total	60	100%

In all the subjects in the sample most of the caretakers i.e. 35(58%) belongs to rural area, 25(42%) were belongs to urban area. (Table No. 4)
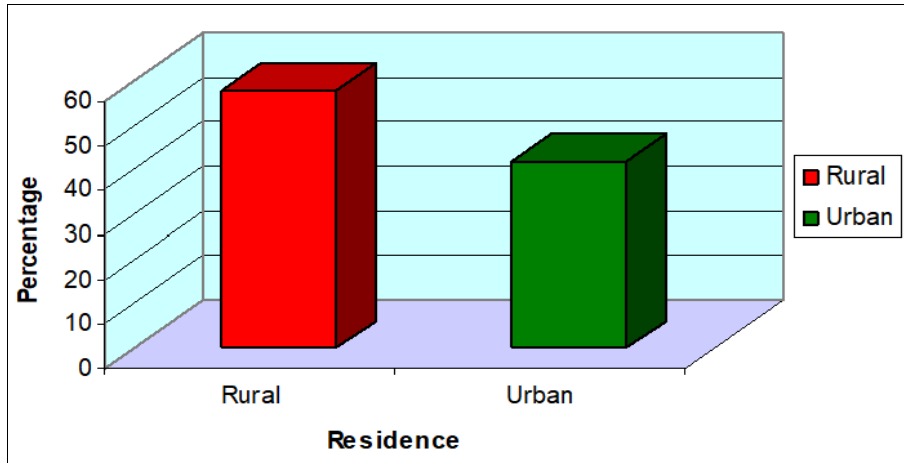

Fig 4: Residence of caretakers

The variables of employed status

Table 5: Distribution of subjects according to employed status:

Employed status	Frequency	Percentage
Unemployed	09	15%
Self employed	16	27
Service	15	25
Retired	1	2
House wife	19	31
Total	60	100

In all the 60 caretakers, of the bedridden patients 19(31%) were housewives, 16(27%) were self-employed, 15(25%) were in service, 9(15%) were unemployed and only 1(2%) were retired.
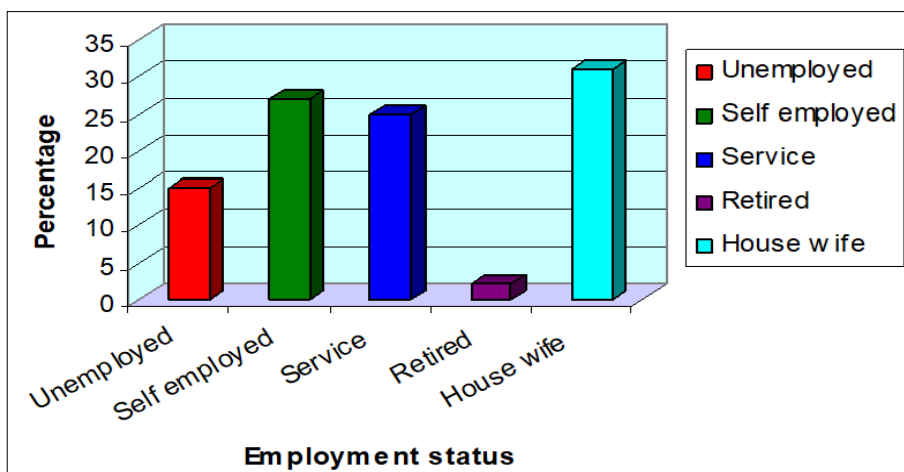

Fig 5: Employment status of the caretakers

The variables of income

Table 6: Distribution of subjects according to monthly income

Monthly income	Frequency	Percentage
Less than 1000 /-	15	25
1001-5000/-	29	48
5001-10,000/-	13	22
More than 10,000	3	5
Total	60	100

There were 15(25%) subjects in the income range of less than 1000 Rs., 29(48%) in Rs. 1001-5000, 13(22%) subjects in Rs. 5001-10000 and only 3(5%) subjects in Rs. More than 10,000 (Table 6).
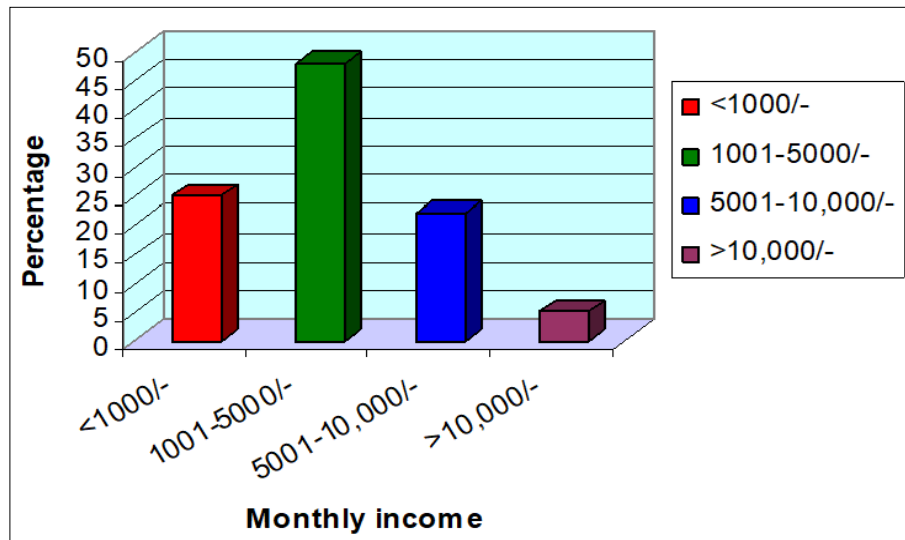

Fig 6: Monthly income of the caretakers

The variables of attended any health teaching programme

Table 7: Distribution of subject according to attended any health programme

Did you attend any health education programme	Frequency	Percentage
Yes	37	62
No	23	38
Total	60	100

There were 37(62%) caretakers attended health education about prevention of pressure sore, 23(38%) were not attended any education program.

The variables if 'yes' from where

Table 8: Distribution of subjects according to if 'yes' from where

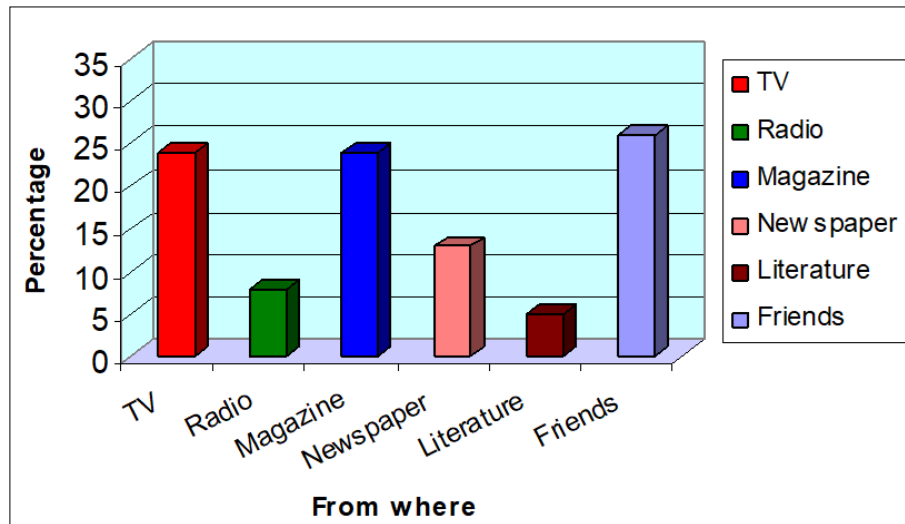| If 'Yes' from where	Frequency	Percentage
T.V.	09	24
Radio	03	08
Magazine	09	24
Newspaper	05	13
literature	02	05
Friends	10	26
Total	38	100

Fig 7: If yes from where

Section II

It deals with the analysis of the data related to knowledge score before administrating the planned health teaching.

Table 9: It deals with the analysis of the data related to knowledge score before administrating the planned health teaching. (N=60)

S. No.	Categories	Frequency	Percentage	Mean	S.D.
1	Poor (0-10)	05	8		
2	Average (11-20)	55	92	15.05	9.640
3	Good (21-30)	0	0		

The result (Table No. 09) clearly indicates that 92% caretakers were average knowledge before administration of planned health teaching whereas 8% caretakers have poor knowledge. It may be due to lack of awareness.

Section III

It deals with the analysis of the data related to knowledge score after administrating the planned health teaching

Table 10: It deals with the analysis of the data related to knowledge score after administrating the planned health teaching (N=60)

S. No.	Categories	Frequency	Percentage	Mean	S.D.
1	Poor (0-10)	0	0		
2	Average (11-20)	3	5	23.65	1.5317
3	Good (21-30)	57	95		

The results (Table 10) indicates that the 95% caretakers found good knowledge after administration of teaching whereas 5% caretakers have average knowledge. Here a point noted that no caretakers found poor knowledge.

Table 11: Overall scores of pretest and post test knowledge of caretakers (N=60)

S. No.	Description	Mean	Median	Mode	Min.	Max.	Range
1	Pre test Knowledge	15.05	15	20	09	20	0.37
2	Post test Knowledge	23.65	24	25	20	28	0.166

(Table No. 11) indicates that the knowledge of caretakers increased after administration of planned teaching regarding preventive measures of pressure sore of bedridden patients. Mean, median, mode also supports the results (Table No. 11). the score was maximum in the post test value as compared to the pretest value which also indicated by the range.
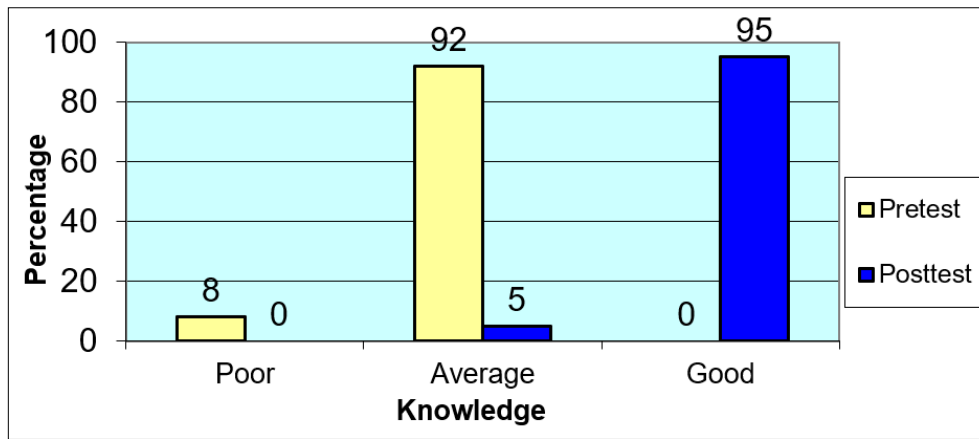
Fig 8: Comparison between pre & post-test knowledge of caretakers

Section IV

It deals with the correlation of knowledge scores before and after administering the planned health teaching programme. (N=60)

Table 12: It deals with the correlation of knowledge scores before and after administering the planned health teaching programme.

S. No.	Description	Mean	S.D.	Correlation
1	Pretest Knowledge	15.05	9.64056	0.422005
2	Post test Knowledge	23.65	1.53179	

The result showed positive correlation, it indicates the caretakers had good respond and properly understand the motto (objective) the researcher.

Table 13: Correlation between pre and post knowledge of caretakers through 't' test (N=60)

S. No.	Description	Mean	S.D.	't' test
1	Pretest Knowledge	15.05	9.64056	7.6336
2	Post test Knowledge	23.65	1.53179	

(Result significant at 0.05% level of significance)

(Table No.13) reveals that the relation between pre and post value score is statistically tested by applying 't' test. It is the method of comparison of pre and post value using probability at given level of significance.

Section V

Deals with the association of knowledge score of caretakers with selected demographic variables and testing h_1 to h_4

Table 14: Relationship of caretakers age with the level of knowledge

Age in Years	f and %	Level of knowledge Poor	Avg.	Good	Mean	S.D.	F Value	P Value
20-29	19 (32%)	2 (3.33)	17 (28.3)	0	15.36	0.7849		
30-39	27 (45%)	2 (3.33)	25 (41.6)	0	13.96	0.6196	0.6756	>0.05
40 and Above	15 (23%)	1 (1.66)	13 (21.6)	0	15.71	1.328		

Table 15: Relationship of caretakers sex with the level of knowledge (N=60)

Age in years	f and %	Level of knowledge Poor	Avg.	Good	Mean	S.D.	't' Value	P Value
Male	26 (44%)	1 (1.66)	25 (41.6)	0	15.36	0.6492	0.9407	>0.05
Female	34 (56%)	4 (6.66)	30 (5.0)	0	15.05	0.4936		

Note: 't' value 2.00 at 0.05 level

Table 16: Relationship of caretakers education with the level of knowledge (N=60)

Education	f and %	Level of knowledge Poor	Avg.	Good	Mean	S.D.	'F' Value	P Value
Primary. edu.	10 (17%)	1 (1.66)	09 (15)	0	14.3	0.8608		
Sec. edu.	36 (60%)	4 (6.66)	32 (53.3)	0	14.8	0.5916	0.481	>0.05
Graduate	14 (23%)	0	14 (23.3)	0	16.21	0.7083		
Post-Graduate	0 (0%)	0	0	0	-	-		

Note: 'F' value 2.76 at 0.05 level.

Conclusion

- The knowledge was analysed in terms of poor, average and good. The investigator found pretest knowledge score, 92% were average and 8% were poor and the post test knowledge score was 95% were good and 5% were average.
- Planned health teaching program was to be effective in increasing in knowledge regarding preventive measures of pressure sore.
- A positive significant correlation existed between the pre and post test knowledge score regarding preventive measures of pressure sore.

Summary
A study to assess the effectiveness of planned health teaching programme on the basis of knowledge regarding preventive measures of pressure sore in the caretakers of bedridden patients at Netaji Subhash Chandra Bose Medical College Jabalpur. The main objective of the study was to assess the knowledge of caretakers before and after administration of planned health teaching and compare the pre-test and post test knowledge scores regarding preventive measures of pressure sore. The pressure sore knowledge inventory was developed. The tool was tested for its validity, reliability and item analysis was carried out. Feasibility was obtained through pilot study. The collected data were analyzed by adopting different statistical method; Mean, SD,'t' test, correlation (Pearson coefficient), ANOVA.

Conflict of Interest
Not available

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