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RESEARCH ARTICLE

A PRE EXPERIMENTAL STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME REGARDING KNOWLEDGE ON AYUSHMAN BHARAT HEALTH ACCOUNT (ABHA) AMONG PEOPLE RESIDING IN SELECTED AREAS OF DEHRADUN DISTRICT, UTTRAKHAND

Lonkar Sadhana Parshuram¹ and Deeksha Rawat²

1. M.Sc. Nursing, Community Health Nursing CIMS College of Nursing, Kuanwala, Dehradun.
2. Assistant Professor, Community Health Nursing CIMS College of Nursing, Kuanwala, Dehradun.

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Abstract

Ayushman Bharat Health Account (ABHA): Empowering Individuals for Better Healthcare "Ayushman Bharat Health Account is a government initiative launched in 2018 with the aim of providing financial protection to families for secondary and tertiary care hospitalization. The present research project is, "A pre experimental study to assess the effectiveness of structured teaching programme regarding Ayushman Bharat Health Account (ABHA) among people residing in selected areas of Dehradun District, Uttarakhand." The objective of the study was to assess the knowledge regarding ABHA among people, To evaluate the effectiveness of structured teaching programme on knowledge regarding ABHA among people and also to associate the pre-test knowledge regarding ABHA among people with their selected demographic variables.

Methodology: A quantitative evaluative research approach with a pre-experimental (one group pretest- posttest) design was adopted, the setting of the study was people nearby Nehru gram PHC, Dehradun. The sample size was 60, who were selected by random sampling technique. A Structured Self- administered questionnaire which consist of 30 objective type questions was used to assess the knowledge of the people. The investigator involved the people on Structured Teaching Programme regarding ABHA by using a Power-point slide presentation followed with pre-test. On same day, the post test was conducted. The collected data were analyzed by using both descriptive and inferential statistical methods, and interpretations were made based on the objectives of the study.

Findings: The study findings revealed that during Pre-test, most of the people 52 (86.66 %) had inadequate knowledge, whereas 06 (10 %) people have moderately adequate knowledge and very few 02 (3.34 %) of them had adequate knowledge regarding ABHA. During posttest, most of the people numbering 57 (95.00 %) were having adequate knowledge, whereas 03 (05.00 %) people have Moderately adequate knowledge and none of them had inadequate knowledge regarding ABHA. The mean score during pre-test was 6.383 ± 2.88 and the mean score during posttest was 25.97 ± 3.05 . The paired 't' value was 39.09

Corresponding Author:- Lonkar Sadhana Parshuram

Address:- M.Sc. Nursing, Community Health Nursing CIMS College of Nursing, Kuanwala, Dehradun.

which was significant at $p \leq 0.05$ level. Thus it shows that the structured teaching programme was effective in improving knowledge regarding ABHA among people. The study concluded that the structured teaching programme was effective.

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Introduction:-

Healthcare is a fundamental pillar of human well-being, transcending geographical boundaries and societal divides. In the pursuit of optimal health outcomes, nations across the globe have embarked on transformative journeys, seeking to expand access, improve affordability, and enhance the quality of healthcare services for their citizens. Within this landscape of innovation and reform, India has emerged as a beacon of hope, spearheading initiatives aimed at realizing the vision of universal health coverage and equitable healthcare access for all. In recent years, one such initiative has captured the attention of policymakers, healthcare practitioners, and citizens alike – the AYUSHMAN BHARAT HEALTH ACCOUNT (ABHA). Envisioned as cornerstone of India's healthcare ecosystem, ABHA represents a paradigm shift in healthcare financing, offering financial assistance to individuals and families for a wide range of medical expenses. Rooted in the principle of inclusivity and equity, ABHA seeks to alleviate financial burden of healthcare costs, particularly for vulnerable and marginalized populations. The Dehradun district of Uttarakhand nested amidst the tranquil Himalayas, embodies both the serenity and the challenges of healthcare accessibility. Within this picturesque landscape lies the focal point of our enquiry- the efficacy of structured educational interventions in enhancing awareness about ABHA among the residents of selected areas.

Material and Methods:-

Research Approach:

The Quantitative evaluative research approach was adopted in this study. It was used to find out the understanding of the people about ABHA. The main goal was to find out the awareness about ABHA on various scheme parameters.

Research Design:

For the research on ABHA following design procedure was opted Pre experimental research design – design and development of Pretest questionnaire

Structured teaching and awareness program –

After pretest a structured teaching and awareness program was conducted for the community and ABHA scheme was discussed in detail.

Post experimental research design –

The same questionnaire (Pretest) which was circulated for collecting information was used to collect information after teaching and awareness program and was used as posttest to find out the increase in knowledge after the teaching and awareness program conducted for the said group of community.

Research Study Setting:

The study was conducted in village Nehrugram nearby PHC, Raipur Dehradun. This PHC covers about 40,000 populations. The said PHC is 7km away from CIMS college of Nursing.

Population:

Population is the set of people or entities to which the results of a research are to be generalized. The study population was the community residing nearby 1 km of PHC Nehrugram and patient visiting PHC OPD the total number of population sample for study was 60 numbers.

Sampling:

Sampling is the process of selecting a representative segment of the population under study. (Denise F. Polit and Beck, 2011). In the current study 60 people were selected using random sampling methodology so as to have random assessment about ABHA.

Sample:

The samples comprised of the People between 18-65 years and who fulfilled the inclusion criteria and who were attending the OPD at the PHC Nehru gram.

Sample Size:

The total sample size of present study comprised of 60 samples came after calculation. $Z=1.96$ $p = 97\%$ $d = 5\%$ assumed error $\alpha_1 = \alpha_2 = 1.92$

It was estimated by using formula, $n=(\sigma_1-\sigma_2)^2(Z_{1-\alpha/2}+Z_{1-\beta})^2(m_1-m_2)^2$

Sampling Technique:

A random sampling technique was adopted for selecting the samples for the study. The total number of people who visit the PHC every day is approximately 100. The sample size was 60. The samples were selected based on the availability and interest shown in the government programs.

Criteria For Sample Selection:**Inclusion Criteria –**

The following was the basic criteria for selection of the sample for the study

Those who were in the age group of 18 to 65 residing in the selected area.

Those who were available at the time of data collection.

Both male and female willing to participate in the study.

Person who can read and write Hindi or English.

Exclusion Criteria –

The people who had already been exposed to any teaching on ABHA were excluded,

Result:-**Section–A**

Distribution of people according to their demographic variables. Variables. $n=60$

Sr.no	Personal variables	Frequency(f)	Percentage(%)
1	Age		
	25–34 years	29	48.34 %
	35– 44 years	19	31.66 %
	45– 54 years	09	15.00 %
2	Sex		
	Male	24	40.00 %
	Female	36	60.00 %
3	Type of Family		
	Joint Family Nuclear Family	22 38	36.66 % 63.34 %
4	Marital Status		
	Unmarried	05	08.34 %
	Married Widow	54	90.00 %
	Divorced	01 00	01.66 % 00.00 %
5	Place		
	Rural Urban	54 06	90.00 % 10.00 %
6	Religion		
	Hindu		
	Christian	47	78.33 %
	Muslim	03	05.00 %
	Others		
		08 02	13.33 % 03.34 %

7	Education		
	No formal Education	Primary	00
	Education Higher	Education	05
	Graduate		35
	Masters Degree		12
			08
			00.00 %
			08.34 %
			58.33 %
			20.00 %
			13.33 %
8	Occupation		
	Unemployed		24
	Self Employed		09
	Private Employee		24
	Government Employee		03
			40.00 %
			15.00 %
			40.00 %
			05.00 %
9	Monthly Income (INR)		
	Less than 10,000		12
	10,000– 15,000		29
	15,000– 30,000		12
	30,000– 45,000		7
	45,000 or more		00
			20.00 %
			48.33 %
			20.00 %
			11.67 %
			00.00 %

Table 1:- Frequency and percentage distribution of people with respect to demographic variables.

Age:

Table 1 shows that 29 people (48.34 %) belongs to the age group between 25-34 years, 19 people (31.66 %) belongs to the age group between 35-44 years, 09 people (15.00 %) belongs to the age group between 45-54 years and 03 people (05.00 %) belongs to the age group between 55-64 years

Gender:

Total 24 people (40%) were male and 36 people (60%) were female

Type Of Family:

Total 22 people (36.66 %) people belonged to Joint Family and 38 people (63.34 %) representation was from the nuclear family

Marital Status:

Total 05 people (08.34 %) were unmarried, 54 people (90.00 %) were married where as 01 person (01.66 %) was widow and no person was having divorce in the overall sample

Place:

Total 54 people (90.00 %) were from the rural area whereas 06 people (10.00 %) were from the urban area

Religion:

Total 47 people (78.33 %) were Hindu, 03 people (05.00 %) were Cristian, 08 people (13.33 %) were Muslim and 02 people (03.34 %) belonged to other category

Education:

No one was illiterate in the overall sample, 05 people (08.34 %) were having primary education, 35 people (58.33 %) were having higher education, 12 people (20.00 %) were graduate and 08 people (13.33 %) were post graduate and above.

Occupation:

Total 24 people (40.00 %) were unemployed, 09 people (15.00 %) were self employed, 24 people (40.00 %) were private employee and 03 people (05.00 %) were Government employee

Monthly Income:

12 people (20.00 %) were having monthly income less than 10,000 where as 29 people (48.33%) were having monthly income between 10,000- 15,000, 12 people (20.00 %) were having monthly income between 15,000 –

30,000 Where as 07 people (11.67 %) were having income in the range of 30,000 – 45,000 per month where as no people in the sample were having income more than 45000 per month

Section-B:

Distribution Of People According To Their Pre-Test Score On Knowledge Regarding ABHA

The assessment of the knowledge was done on the basis of the evaluation of pretest questionnaire. The sample population of the study was initially briefed about the objective of the study and the pretest questionnaire was circulated to take their view points about ABHA. There were 30 questions in the pretest. Each correct answer was given the score of 1 and each wrong answer was given the score of 0. Below is the table showing the assessment of knowledge during pretest.

Based on Pretest (without teaching/education)

Category	Score	No of people	Percentage
Adequate knowledge	23-30	2	3.34 %
Moderately adequate knowledge	10-22	6	10 %
Inadequate knowledge	0-9	52	86.66 %

Table 2:- Scoring key for knowledge assessment-Pretest before teaching/education.

From table no. 2 it is clear that during pre-test, most of the people numbering 52 (86.66 %) have inadequate knowledge, whereas 06 (10 %) people have moderately adequate knowledge and very few 02 (3.34 %) of them have adequate knowledge regarding ABHA. Further, during the analysis of the pretest questionnaire it was revealed that very few of the people were only able to answer the generalized questions like have you heard about ABHA, How you know about it, about understanding of ABHA, eligibility, registration etc. But by and large the people were not adequately aware about ABHA.

Section-C:

Distribution Of People According To Their Post Test Score On Knowledge On ABHA

The assessment of the knowledge was done on the basis of the evaluation of posttest questionnaire. The sample population of the study was initially briefed about the objective of the study and the pretest which was carried out. They were provided a teaching cum education session of around 45 minutes followed by an open session of question and answer so as to have clarity on ABHA. After this activity posttest questionnaire was circulated to take their view points about ABHA. The post test was same as that of pretest and also consisted the same were 30 questions. Each correct answer was given the score of 1 and each wrong answer was given the score of 0. Below is the table showing the assessment of knowledge after posttest.

Based on Posttest (after teaching/education)

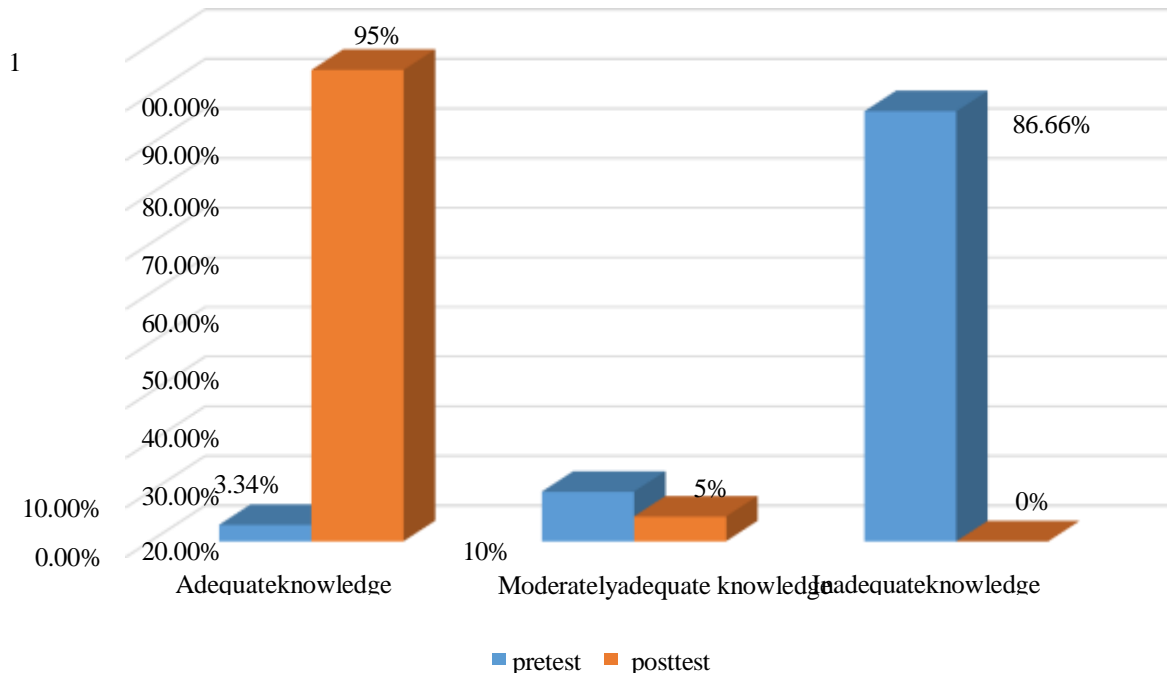
Category	Score	No of people	Percentage
Adequate knowledge	23-30	57	95 %
Moderately adequate knowledge	10-22	03	5 %
Inadequate knowledge	0-9	0	0 %

Table 3:- Scoring key for knowledge assessment after posttest-on teaching/education.

From table no. 3 it is clear that after posttest, most of the people numbering 57 (95.00 %) were having adequate knowledge, whereas 03 (05.00 %) people have moderately adequate knowledge and none of them had inadequate knowledge regarding ABHA. The above trend shows that a small teaching cum orientation program about ABHA had created awareness among subject people. Further, during the analysis of the posttest questionnaire it was revealed that most of the people were able to answer most of the questions related to ABHA.

Comparison Between The Pretest And Post Test Scores On Knowledge Of ABHA Among People.

PreandPosttest Comparison



FigureNo.1:- Comparisonbetweenpretestandposttest.

The above figure shows a comparison between pretest and posttest. From the figure it is clear that during the pre test 86.66 % of people were having inadequate knowledge and only 3.34 % were having adequate knowledge. But just after teaching and educating and making them aware about ABHA it was found that the level of adequate knowledge has drastically increased from 3.34 % during pre test to 95.00 % after post test. Thus there has been a remarkable boost in the level of knowledge after post test.

Table4:- Descriptive Statistics of Pretest Knowledge Score Regarding ABHA among people. N = 60

Mean	SD	Md	Range
6.38	2.889	3.8	22

NB:SD=Standard deviation Md=Median

Table 4 provide descriptive statistics for the pretest knowledge scores among people regarding ABHA. The mean knowledge score was 6.38, with a standard deviation (SD) of 2.889, indicating a moderate level of variation in knowledge levels within the sample. The median (Md) knowledge score was 3.8. These statistics provide a comprehensive overview of the distribution and central tendencies of pretest knowledge scores among the people, which can help researchers and policy makers, understand the initial knowledge levels and plan targeted interventions accordingly.

Table5:- Descriptive Statistics of Posttest Knowledge Score Regarding ABHA among people. N=60

Mean	SD	Md	Range
25.97	3.0567	19.3	22

NB:SD=Standard deviation Md=Median,

Table 5 depict descriptive statistics for the knowledge scores among people regarding ABHA after educational and awareness program intervention (post test). The mean knowledge score increased to 25.97 from the pretest score, indicating drastic improvement in knowledge levels. The standard deviation (SD) increased to 2.307, suggesting a increase in the variation of knowledge scores within the sample compared to the pretest. The median (Md) knowledge

score increased remarkably to 19.3. These statistics highlight the positive impact of awareness and education interventions about ABHA, with an increased mean score and increased variability, underscoring the effectiveness of the implemented strategies in improving awareness about ABHA.

Table.6:- Effectiveness of educational intervention regarding knowledge about ABHA. N=60

S.No.	Knowledge score	Mean	SD	MD	t value	Df	Table value
1.	Pretest	6.383	2.889	19.592	39.09	58	3.460
2.	Posttest	25.975	3.057				

NB:SD=Standard deviation, MD=Mean difference, df=degree of freedom, S=significant at 0.05 level

Table 6 shows the effectiveness of the educational intervention in improving knowledge about ABHA among sample people at PHC, Nehrugram. The pretest knowledge score had a mean of 6.383 ± 2.88 and a standard deviation (SD) of 2.889, while the posttest knowledge score had a mean of 25.97 ± 3.05 and an increased SD of 3.057. The paired 't' test value is 39.09 which is significantly higher than the table value of 3.460 at $p \leq 0.05$ level. Hence hypothesis H_1 is retained. Thus it becomes evident that the structured-teaching programme is effective in improving the knowledge regarding ABHA among people indicating that the educational intervention had a significant positive impact on enhancing understanding about ABHA among the sample people. This finding underscores the effectiveness of the implemented educational and awareness strategies in improving knowledge levels among the study participants and highlights the importance of such interventions for promoting maximum benefits about ABHA.

Table7:- Association Between the Level of Knowledge Regarding Ayushman Bharat Health account (ABHA) among people with their selected demographic variables.

S.No.	Socio-Demographic Data	Inadequate knowledge	Moderately Adequate knowledge	Adequate Knowledge	χ^2 value	p value	Degree of freedom	Remark
1.	Age							
	25–34 years	00	02	27				
	35–44 years	01	02	16				
	45–54 years	00	01	08	21.546	0.0014	6	S
	55–64 years	01	01	01				
2.	Gender							
	Male	01	04	19	2.120	0.3463	2	NS
	Female	01	02	33				
3.	Type of Family							
	Joint family							
	Nuclear family	01	03	18	0.7066	0.7023	2	NS
		01	03	34				
4.	Marital status							
	Unmarried							
	Married	01	02	02				
	Widow	00	03	50	31.618	0.0000	4	S
	Divorced	01	01	00				
5.	Place							
	Rural	01	04	49	4.4654	0.1072	2	NS
	Urban		02	03				

6.	Religion							
	Yes	00	02	45				
	No	01	01	01	34.474	0.0000	6	S
	Muslim	01	01	06				
	Other	00	02	00				
7.	Education							
	No Formal education			03				
	Primary education	01	01					
	Higher education	01	03					
	Graduate			11	4.042	0.670	6	NS
	MasterDegree	00	01					
				00				
		00	00					
8.	Occupation							
	Unemployed	00	01	23				
	Self employed	01	02	06	27.425	0.0001	6	S
	Private employee	00	01	23	2			
	Government employee	01	02	00				
9.	Monthly Income							
	<10,000	01	01	10				
	10,000-15,000	01	02	26	2.5704	0.8605	6	NS
	15,000-30,000	00	02	10				
	30,000-45,000	00	01	06				
	45,000 or more	00	00	00				

Variables considered include age,gender,place,educational status ,occupation,type of family ,marital status,monthly income,

The Chi-square (χ^2) test was used to determine the association between these variables and the pretest knowledge levels.

Regarding age, the analysis revealed no statistically significant association between age groups (<20, 25- 34, 34-44, 45-54,55-64 years) and pretest knowledge levels ($\chi^2 = 21.456$, df = 6, p = 0.0014), indicating that age very little significantly influence initial knowledge about the ABHA .

Also about the Gender(male,female) analysis shows no significance association ($\chi^2 = 2.120$, df = 2, p = 0.3463).

Similarly, educational status (Informal, Up to 10th, Up to 12th, Graduation and above) showed no statistically significant association with pretest knowledge ($\chi^2 = 4.042$, df = 6, p = 0.090), suggesting that education level was not a significant determinant of initial knowledge.

Occupation did not exhibit a statistically significant association with pretest knowledge levels ($\chi^2 = 2.745$ df = 6, p = 0.001), implying that whether a employed or unemployed did not significantly affect them initial knowledge about the ABHA.

Likewise, the type of family (Nuclear, Joint) showed no statistically significant association with pretest knowledge ($\chi^2 = 0.7066$, $df = 2$, $p = 0.7023$), suggesting that family structure did not play a significant role in influencing initial knowledge.

The place (Rural, Urban) exhibited no statistically significant association with pretest knowledge ($\chi^2 = 4.4654$, $df = 8$, $p = 0.1072$), indicating that the place did not impact the initial knowledge levels.

Marital status (married, unmarried, widow) also did not show a statistically significant association with pretest knowledge ($\chi^2 = 31.618$, $df = 2$, $p = 0.280$), suggesting that the marital status did not significantly affect initial knowledge.

Religion (Hindu, Christian, Muslim) did not demonstrate a statistically significant association with pretest knowledge ($\chi^2 = 34.474$, $df = 6$, $p = 0.000$), indicating that the number of religion did not significantly influence initial knowledge levels.

Finally the monthly income showed no statistically significant association with pretest knowledge ($\chi^2 = 2.5704$, $df = 6$, $p = 0.8605$) suggesting that the monthly income did not significantly impact initial knowledge.

In summary, Table 5.8 provides valuable insights into the association between various socio demographic factors and the pretest knowledge levels of people regarding the ABHA. The lack of significant associations in most cases suggests that these demographic variables did not play a significant role in determining the initial knowledge levels of the study participants. This information is essential for tailoring future interventions and targeting specific groups to improve ABHA awareness and utilization.

Conclusion:-

The study was conducted to assess the Effectiveness of Structured Teaching Programme on knowledge ABHA among People in a selected area Raipur, Dehradun. The study findings showed that the structured teaching programme was effective in improving their knowledge. There was no significant association found between the knowledge of ABHA and their selected demographic variables. This study intervention would help the People to get following Benefits of ABHA.

Financial Protection:

ABHA offers financial protection by providing health insurance coverage for economically vulnerable individuals and families. It aims to reduce out-of-pocket expenses on healthcare and protect them from catastrophic health expenses.

Cashless Treatment:

Under ABHA, beneficiaries can avail cashless treatment at empaneled hospitals and healthcare providers. They can receive necessary medical care without paying upfront and can focus on their treatment without worrying about financial burdens.

Comprehensive Coverage:

ABHA covers a wide range of medical treatments, including hospitalization expenses, surgeries, diagnostics, medications, and pre- and post-hospitalization expenses. It provides coverage for both outpatient and inpatient care, ensuring beneficiaries have access to essential healthcare services.

Empaneled Healthcare Providers:

ABHA has a network of empaneled hospitals and healthcare providers across India. Beneficiaries can choose from these empaneled facilities for their medical treatment, ensuring quality care and access to a wide range of healthcare services.

Portability:

ABHA is portable, meaning beneficiaries can avail of the scheme's benefits across India. This is particularly beneficial for individuals and families who may need to travel or relocate for medical treatment.

Technology-driven:

ABHA leverages technology for efficient implementation and management. It utilizes electronic health records (EHRs) and online platforms for seamless communication between beneficiaries, healthcare providers, and insurance agencies.

Preventive Healthcare:

ABHA also emphasizes preventive healthcare by providing coverage for annual health check-ups and screening tests. This encourages beneficiaries to prioritize preventive measures and early detection of health conditions.

It is important to note that the specific benefits and coverage details may vary depending on the state and the specific implementation of the ABHA scheme.

Recommendations:-

1. Similar study can be conducted as a comparative study between urban and rural population in different settings.
2. Similar study can be conducted for various socioeconomic backgrounds.
3. Similar study can be done by using various teaching methods.
4. The study can be carried out to assess the usage of ABHA at different age levels and large size of group.

Conflict of Interest:

Author declares no any conflict of interest.

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