



A STUDY TO EVALUATE THE EFFECTIVENESS OF INFORMATION EDUCATION AND COMMUNICATION (IEC) ON KNOWLEDGE AND ATTITUDE REGARDING MEMORY LOSS AMONG MIDDLE AGED ADULTS IN A SELECTED RURAL AREA AT INDORE.

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ABSTRACT

Memory plays a very important role in our learning and psychological growth. Through memory of our past experiences, we handle new situations, it helps us in our relearning problem solving and thinking. Memory loss is an unusual forgetfulness in which person may not be able to remember new events, recall one or more memories of the past. Memory loss affects the individual's day to day functioning, professional and social life. Middle and older adults have a high risk for developing memory loss. So the best way of reducing the risk of developing memory loss is to provide IEC regarding memory loss among middle age people and it is found to be more valuable in creating awareness. A pre-experimental one group pre-test post-test design was adopted and Non-probability convenient sampling technique was chosen for this study. The total number of samples for the present study was 60 middle aged adults. The study was conducted in a selected rural area at Indore. Data were collected by means of structured knowledge questionnaire was used to assess the knowledge and three point likert scale was used to assess the attitude regarding memory loss. The subjects received Information Education Communication (IEC) regarding memory loss. The collected data were analyzed by using both descriptive statistics and inferential statistics. Independent „t“ test was used to evaluate the effectiveness of Information Education Communication (IEC) on knowledge and attitude regarding memory loss. The obtained „t“ value for knowledge 42.90 and for

attitude 33.55 was significant at $p < 0.05$ level. Conclusion : The findings of the study revealed that Information Education Communication (IEC) was effective in improving knowledge and attitude regarding memory loss among middle aged adults.

Key words: Effectiveness, Information Education Communication (IEC), Memory Loss, MiddleAged Adults.

INTRODUCTION

The nervous system is the master controlling and communicating system of the body. Every thought, action and emotion reflects its activity. The nervous system is divided into central nervous system and peripheral nervous system. The central nervous system consists of brain and spinal cord. Brain is the intellectual centre that allows thought, learning, memory and creativity.

The brain constitutes about one fiftieth of the body weight and it consists of cerebrum, midbrain, pons, medulla oblongata and cerebellum. Cerebrum is the largest part of the brain, the superficial part of the cerebrum is composed of nerve cell bodies or grey matter forming the cerebral cortex. The main function of cerebral cortex is mental activities involved in memory, intelligence, sense of responsibility, thinking and learning.

Memory refers to a special ability of our mind to conserve or retain what has been previously experienced or acquired through hearing and then at some later stage enable us to make use of it by its reproduction or revival. It is a complex process, which involves learning, retention, recall and recognition. Memory plays a very important role in our learning and psychological growth. Through memory of our past experiences, we handle new situations, it helps us in our relearning problem solving and thinking.

Memory loss is an unusual forgetfulness in which person may not be able to remember new events, recall one or more memories of the past, or both. Memory loss is a common complaint in the primary care setting. It is particularly common among the elderly but also may be reported by younger people. Memory loss is caused by progressive, irreversible degeneration and atrophy of the cerebral cortex and results in mental deterioration, usually over several years and there is a gradual impairment in memory.

Need for the Study

Memory loss is the major mental health problem among aging individual which influence day to day life functioning. The elderly age group covers a significant percentage among total population, so the health of elderly is important to all. Awareness and preventive education on memory loss is quite important for middle aged adults to recognize the risk of memory loss and to practice healthy life styles such as regular exercise, healthy diet, adequate sleep, reduce stress, avoid alcohol and relaxation etc from the middle age to prevent memory loss in later stages.

Memory loss has a major effect on individuals life such as inability to perform day to day activities, loses interest in work which may lead to loss of job, unable to follow social norms in person's social life and emotional irritability in doing activities etc.

Clinicians and patients are often concerned that the memory loss indicates impending dementia. Such concern is based on the common knowledge that the first sign of dementia typically is memory loss. One of the key concerns of older adults is the experience of memory loss, especially as it is one of the hallmark symptoms of Alzheimer's disease.

Several studies suggest that there is less awareness regarding memory loss among general population. So the nurse researcher felt the need of imparting awareness through Information Education and Communication (IEC) to promote knowledge and attitude among the high risk population of middle aged adults. So the researcher planned to design IEC regarding memory loss to assess the effectiveness of IEC on knowledge and attitude regarding memory loss among middle aged adults.

Statement of the Problem

A study to evaluate the effectiveness of Information Education and Communication (IEC) on knowledge and attitude regarding Memory Loss among Middle Aged Adults in a selected rural area at Indore.

Objectives

- To assess the level of knowledge and attitude regarding memory loss among middle aged adults.
- To evaluate the effectiveness of Information Education Communication (IEC) on knowledge and attitude regarding memory loss among middle aged adults.
- To find out the relationship between the level of knowledge and attitude regarding memory loss among middle aged adults.
- To determine the association between the level of knowledge regarding memory loss among middle aged adults with their selected demographic variables.
- To determine the association between the level of attitude regarding memory loss among middle aged adults with their selected demographic variables.

Hypotheses

- H1 : There will be a significant difference between the mean pre-test and post-test score of knowledge regarding memory loss among middle aged adults.
- H2 : There will be a significant difference between the mean pre-test and post-test score of attitude regarding memory loss among middle aged adults.
- H3 : There will be a significant relationship between the knowledge and attitude regarding memory loss among middle aged adults.
- H4 : There will be a significant association between the post-test level of knowledge regarding memory loss among middle aged adults with their selected demographic variables.
- H5 : There will be a significant association between the post-test level of attitude regarding memory loss among middle aged adults with their selected demographic variables.

Assumptions

- Middle aged adults have inadequate knowledge regarding memory loss.
- Middle aged adults have unfavorable attitude regarding memory loss.
- Middle aged adults need adequate knowledge and favorable attitude about prevention and management of memory loss.
- Providing Information Education Communication (IEC) will have positive effect on the middle aged adults knowledge and promote favorable attitude regarding memory loss.
- Knowledge and attitude regarding memory loss among middle aged adults influenced by selected demographic variables.
- Providing Information Education Communication (IEC) to the middle aged adults regarding memory loss will be effective in preventing memory loss in the community.

Delimitations

The study is delimited to

- Middle adults who are in the age group of 40 – 60 years.
- Middle aged adults in selected rural area at Coimbatore.
- Data collection period was delimited to 6 weeks.

METHODOLOGY

Research Approach

In this present study, a quantitative approach was used for analyzing the effectiveness of Information Education Communication on level of knowledge and attitude regarding memory loss among middle aged adults.

Research Design

A pre-experimental one group pre-test post-test design was adopted for this study.

Variables

- Dependent variable** : Level of knowledge and attitude regarding memory loss.
- Independent variable** : Information Education & Communication (IEC) regarding memory loss.
- Extraneous variables** : Age, Sex, Religion, Occupation, Education, Family

monthly income, Type of family, Marital status, Previous exposure to awareness regarding memory loss, If yes means source of information.

Setting of the Study

The study was conducted in rural area under PHC at Indore,

Population

Target population selected for this study was all the middle aged adults between the age group of 40-60 years. Accessible population selected for this study includes middle aged adults in rural area at Indore.

Sample

A total number of 60 middle aged adults between the age group of 40-60 years were selected based on inclusion and exclusion criteria for the study

Criteria for Sample Selection

Inclusion Criteria:

- Middle aged adults who can able to read and write Hindi
- Middle aged adults who are willing to participate in this study.
- Middle aged adults who are present during the data collection period.

Exclusion Criteria:

- Middle aged adults who are suffering from serious physical illness and mental illness
- Middle aged adults who are deaf and blind.
- Middle aged adults who are working in medical or paramedical areas.

Sampling Technique

The samples were selected for this study by adopting non-probability convenient sampling techniques which means, selection of the most readily available persons as participants in a study.

The collected data regarding effectiveness of Information Education Communication (IEC) regarding memory loss on level of knowledge and attitude among middle aged adults were organized, analyzed and interpreted as follows:

Section I : Data on Demographic Variables of Middle Aged Adults.

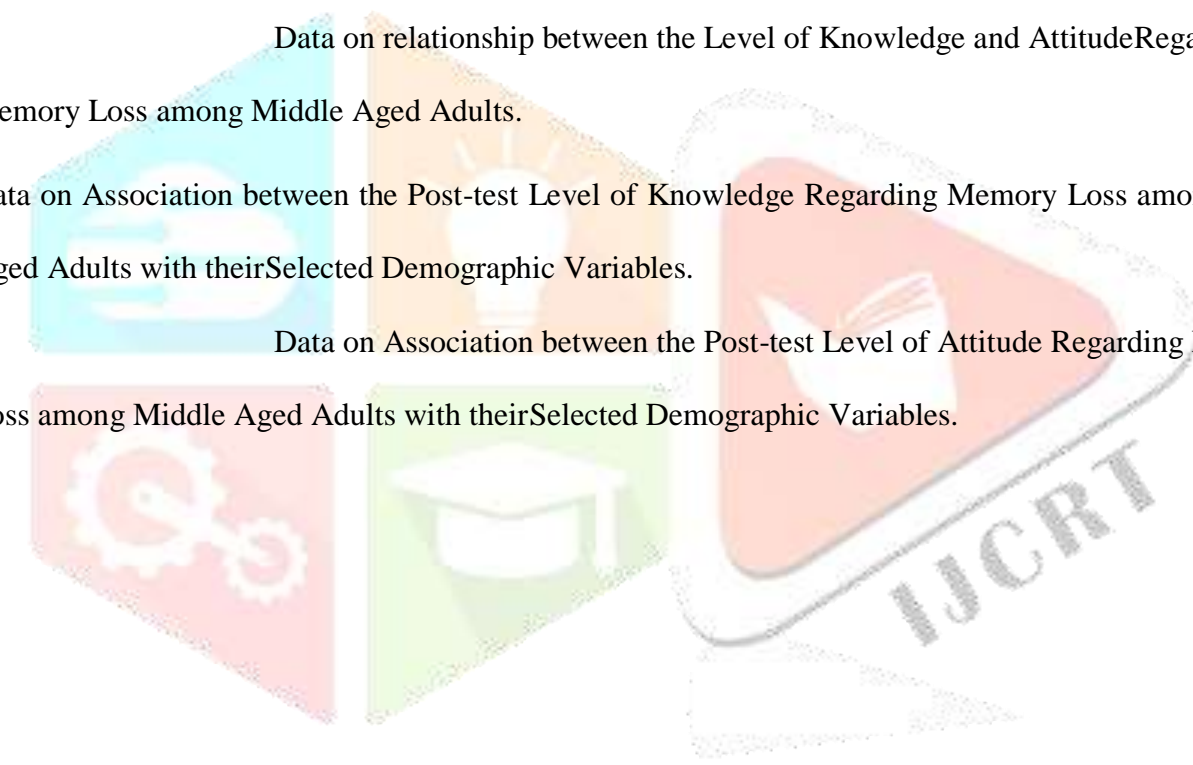
: Data on Level of Knowledge and Attitude regarding Memory Loss among Middle Aged Adults.

: Data on Effectiveness of Information Education Communication (IEC) on Level of Knowledge and Attitude Regarding Memory Loss among Middle Aged Adults.

: Data on relationship between the Level of Knowledge and Attitude Regarding Memory Loss among Middle Aged Adults.

: Data on Association between the Post-test Level of Knowledge Regarding Memory Loss among Middle Aged Adults with their Selected Demographic Variables.

: Data on Association between the Post-test Level of Attitude Regarding Memory Loss among Middle Aged Adults with their Selected Demographic Variables.



**SECTION I : DATA ON DEMOGRAPHIC VARIABLES OF
MIDDLE AGED ADULTS.**

Table: 1

Frequency and Percentage Distribution of
Middle Aged Adults with their selected Demographic Variables

N=60

S. No.	Demographic Variables	Frequency (f)	Percentage (%)
1.	Age in years		
	40- 46 years	22	36.7
	47-53 years	22	36.7
	c) 54-60 years	16	26.6
2.	Gender		
	a) Male	42	70
	b) Female	18	30
3.	Religion		
	Hindu	53	88.3
	Christian	7	11.7
	Muslim	0	0
	c) Others	0	0
	Education		
	Primary Education	0	0
	Secondary Education	0	0
	Higher Secondary Education	35	58.4
	Graduate / equivalent	20	33.3
	e) No formal education	2	3.3
	Occupation		
	Government Employee	3	5.00
	Private Employee	0	0
	Self Employed	2	3.3
	Unemployed	11	18.3
		34	56.7
		13	21.7
. No.	Demographic Variables	Frequency (f)	Percentage (%)
6.	Family Monthly Income		
	a) Below Rs.5000	11	18.3
	b) Rs.5001-Rs.10000	45	75
	c) Rs.10001-Rs.20000	3	5
		1	1.7

7.	d) Rs.20001 and above		
	Type of Family		
	Nuclear Family	37	61.7
	Joint Family	23	38.3
	c) Extended Family	0	0
8.	Marital Status		
	Married		
	Unmarried	53	88.3
	Widow (or) Widower	0	0
	Divorced (or) Separated	7	11.7
	Previous exposure to awareness regarding Memory Loss	0	0
9.	Loss		
	Yes		
	No	3	5
	If yes specify the source of information	57	95
10.	Mass Media		
	Health Personnel	2	66.7
	Relatives and Friends	1	33.3
		0	0

SECTION II : DATA ON LEVEL OF KNOWLEDGE AND ATTITUDE REGARDING MEMORY LOSS AMONG MIDDLE AGED ADULTS.

Frequency and Percentage Distribution of Pre and Post-test Level of Knowledge Regarding Memory Loss among Middle Aged Adults

N=60

S. No.	Level of Knowledge	Pre-test		Post-test	
		f	%	f	%
1	Inadequate knowledge	12	20	0	0
2	Moderately adequate knowledge	45	75	7	11.7
3	Adequate knowledge	3	5	53	88.3

Frequency and Percentage Distribution of Pre and Post-test Level of Attitude Regarding Memory Loss among Middle Aged Adults.

N=60

S. No.	Level of Attitude	Pre-test		Post-test	
		f	%	f	%
1	Unfavorable Attitude	21	35	0	0
2	Moderately Favorable Attitude	36	60	8	13.3
3	Favorable Attitude	3	5	52	86.7

III : DATA ON EFFECTIVENESS OF INFORMATION EDUCATION COMMUNICATION ON LEVEL OF KNOWLEDGE AND ATTITUDE REGARDING MEMORY LOSS AMONG MIDDLE AGED ADULTS.

Mean, Standard Deviation, Mean Difference and "t" Value of Pre-test and Post-test Knowledge Score regarding Memory Loss among Middle Aged Adults.

N=60

S. No.	Level of Knowledge	Mean	SD	MD	"t" Value
1	Pre-test	14.23	3.65	10.18	42.90***
2	Post-test	24.41	2.89		

*** - Significant at $p < 0.05$ level

Mean, Standard Deviation, Mean Difference and "t" Value of Pre-test and Post-test Attitude Score regarding Memory Loss among Middle Aged Adults.

N=60

S. No.	Level of Attitude	Mean	SD	MD	"t" Value
1	Pre-test	17.08	2.82	8.57	33.55***
2	Post-test	25.65	1.93		

*** - Significant at $p < 0.05$ level

SECTION IV : DATA ON RELATIONSHIP BETWEEN THE LEVEL OF KNOWLEDGE AND ATTITUDE REGARDING MEMORY LOSS AMONG MIDDLE AGED ADULTS.

Mean, Standard Deviation, and "t" Value of Knowledge and Attitude regarding Memory Loss among Middle Aged Adults.

N=60

S. No.	Aspects	Knowledge		Attitude		"t" Value
		Mean	SD	Mean	SD	
1	Pre-test	14.23	3.65	17.08	2.82	0.86
2	Post-test	24.41	2.89	25.65	1.93	0.75

DATA ON ASSOCIATION BETWEEN THE LEVEL OF KNOWLEDGE REGARDING MEMORY LOSS AMONG MIDDLE AGED ADULTS WITH THEIR SELECTED DEMOGRAPHIC VARIABLES.

Frequency, Percentage and Chi Square Distribution of Post-test Level of Knowledge Regarding Memory Loss among Middle Aged Adults with their selected Demographic Variables.

N=60

S. No.	Demographic Variable	Level of Knowledge				χ^2 Value
		Moderately Adequate		Adequate		
		f	%	f	%	
1	Age in years					5.52 ^{NS}
	a. 40-46	0	0	22	36.7	
	b. 47-53	5	8.3	17	28.4	
	c. 54-60	2	3.3	14	23.3	
2	Gender					0.007 ^{NS}
	Male	5	8.3	37	61.7	
	Female	2	3.3	16	26.7	
3	Religion					1.034 ^{NS}
	Hindu	7	11.6	46	76.7	
	Christian	0	0	7	11.7	
	Muslim	0	0	0	0	
	Others	0	0	0	0	
4	Educational Status					5.662 ^{NS}
	Primary education	7	11.7	28	46.7	
	Secondary education	0	0	20	33.3	
	Higher secondary education	0	0	2	3.3	
	Graduate / Equivalent	0	0	3	5	
	No formal education	0	0	0	0	
S. No.	Demographic Variable	Level of Knowledge				χ^2 Value
		Moderately Adequate		Adequate		
		f	%	f	%	
5	Occupation					3.373 ^{NS}
	government employee	0	0	2	3.3	
	private employee	0	0	11	18.3	
	self employee	4	6.7	30	50	
	unemployed	3	5	10	16.7	

6	Family Monthly income a. <Rs.5000					0.98 ^{NS}
	b. Rs 5001- 10000	2	3.3	9	15	
	c. Rs 10001- Rs 20000	5	8.3	40	66.7	
	d. > Rs 20000	0	0	3	5	
7	Type of family					1.185 ^{NS}
	Nuclear Family	3	5	34	56.7	
	Joint Family	4	6.6	19	31.7	
	Extended Family	0	0	0	0	
8	Marital Status					7.559 ^{NS}
	Married	4	6.7	49	81.7	
	Unmarried	0	0	0	0	
	Widow / Widower	3	5	4	6.6	
9	Divorced or Separated	0	0	0	0	0.416 ^{NS}
	Previous exposure to awareness regarding memory loss					
	Yes	0	0	3	5	
	No	7	11.7	50	83.3	

Conclusion

The main conclusion drawn from this present study was Information Education Communication (IEC) on memory loss is effective in improving knowledge and attitude that denoted by significant difference between pre-test and post-test level of knowledge and attitude score. Samples became aware about memory loss and developed favorable attitude towards memory loss and found themselves comfortable and also expressed satisfaction, and also the investigator understood the needs and purpose of Information Education Communication (IEC) regarding memory loss and developed adequate knowledge and skills regarding approaches and methods in doing research. The findings of the study encourage the nurses to adopt this Information Education Communication (IEC) as a part of their awareness nursing education programme in primary care setting.

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