



A STUDY TO ASSESS THE EFFECTIVENESS OF VIDEO ASSISTED TEACHING ON KNOWLEDGE AND ATTITUDE REGARDING BENIGN PROSTATE HYPERPLASIA AMONG DRIVERS WORKING AT SELECTED EDUCATION INSTITUTION IN CHENNAI

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ABSTRACT

Benign prostatic hyperplasia, in simple terms refers to the increased in prostate gland size. It involves hyperplasia of prostatic stromal cells and epithelial cells, resulting in the formation of large, fairly discrete nodules in the per urethral region of the prostate. **Aim of the Study:** A study to assess the effectiveness of video assisted teaching on knowledge and attitude regarding Benign Prostate Hyperplasia among drivers at selected Educational Institution. **Methodology:** A quazi experimental study was adopted with 60 samples using convenient sampling technique at selected Educational Institution, self-structured questionnaires was used to assess the knowledge and likert scale was used to assess the attitude towards Benign Prostate Hyperplasia. **Major findings:** In the post test after the video assisted teaching 58(96.67%) had adequate knowledge and only 2(3.33) had fairly adequate knowledge regarding Benign Prostate Hyperplasia among drivers. Pre-test, 49(81.67) had fair attitude and 11(18.33%) had poor attitude whereas in the post test after the video assisted teaching 45(75%) had good attitude and 15(25%) had fair attitude regarding Benign Prostate Hyperplasia among Drivers. **Conclusion:** The study results revealed that driver's post-test level of knowledge and attitude had been improved after the video assisted teaching compared to the pre-test level of knowledge and attitude. And this also clearly states that increase in the drivers' knowledge about benign prostate hyperplasia increases the attitude levels.

KEYWORDS: Benign prostate Hyperplasia, drivers, knowledge, attitude and prostate cancer.

INTRODUCTION

Benign prostatic hyperplasia (BPH) also known as Benign prostatic hypertrophy or Benign enlargement of the prostate (BEP), general in simple terms it refers to the increased in prostate gland size, BPH involves hyperplasia of the cells rather than hypertrophy, It involves hyperplasia of prostatic stromal cells and epithelial cells, resulting in the formation of large, fairly discrete nodules in the per urethral region of the prostate. BPH, the actual hyperplasia of the prostate gland, develops as a strictly age-related phenomenon in nearly all men, starting at approximately in age of 40 years. Indeed, in several autopsy studies worldwide, the histological prevalence of BPH is approximately 10% for men in their 30s, 20% for men in their 40s, it reaches between 50% and 60% for men in their 60s, and it rates between 80% and 90% for men in their 70s and 80s. Undoubtedly, most men will develop histological features in accordance with BPH if they live long

enough. (Harvey B. Simon, Harvard Medical School. 2017 Sep).

Objectives

1. To assess the knowledge and attitude regarding benign prostate hyperplasia among drivers in pretest and posttest.
2. To assess the effectiveness of video assisted teaching on knowledge and attitude of drivers regarding benign prostate hyperplasia.
3. To correlate the knowledge and attitude regarding benign prostate hyperplasia among drivers in the pretest and posttest.
4. To find out the association between the level of knowledge and attitude regarding benign prostate hyperplasia with selected demographic variables in the posttest

Hypothesis

- H1-There will be a significant difference between pre and post- test level of knowledge and attitude of drivers regarding Benign Prostate Hyperplasia.
- H2 –There is a significant relationship between the existing knowledge and attitude regarding Benign Prostate Hyperplasia.
- H3- There will be a significant association between the knowledge and attitude of drivers regarding Benign Prostate Hyperplasia with selected demographic variable.

RESEARCH METHODOLOGY**Research Approach**

Research approach is the most significant part of any research. The appropriate choice of the research approach depends on the purpose of the research study which is undertaken. According to Polit and Beck (2004) evaluate research is an extremely applied form of research and involves findings out how well a programme, the practice or policy is working. Its goal is to evaluate the success of the programme.

The approach chosen for the study was quantitative approach.

Setting of the study

The study was conducted in Dr. MGR Educational and Research Institute, maduravoyil. The setting has been chosen on the basis of feasibility of adequate samples

Section B- Questionnaire to assess the knowledge regarding benign prostate hyperplasia

It consisted of 24 MCQ items to assess the knowledge of the drivers. And the scores intervals are as follows.

S.No	Rating	Raw score	Percentage intervals
1.	Inadequate	0-8	4%-33.3%
2.	Fairly adequate	9-16	37.5%-66.6%
3.	Adequate	17-24	70.83%-100

Section C- Likert scale to assess the attitude regarding Benign Prostate Hyperplasia

It consisted of 13 items 4 point likert scale (1-4) on attitude regarding (Agree, strongly agree, disagree, strongly disagree) scores intervals are as follow.

S.No	Scoring	Raw score	Percentage intervals
1.	Poor attitude	13-26	25%-50%
2.	Fair attitude	27-39	51.92%-75%
3.	Good attitude	40-52	76.92%-100%

Reliability of the study instruments

The reliability for the knowledge questionnaire:

Method: Test – retest method (kari Pearson's correlation Formula) $r = 0.97$.

The reliability for the attitude questionnaire:

Method: Inter – rate reliability $r = 0.88$.

Ethical consideration

- The proposed study was conducted after obtaining formal permission from Principal and Ethical committee of Dr. MGR Educational and Research Institute.

and the cooperation of the samples. This educational institute consists of adequate number of samples (drivers) who comes under the inclusive criteria.

Description of the tool

The tools used for data collection is Structured Questionnaire and Rating Scale.

The formation of the tool consists of 3 section

- Section A- Demographic proforma
- Section B -Questionnaire to Assess the knowledge on Benign Prostate Hyperplasia
- Section C- likert scale to assess the attitude towards Benign Prostate Hyperplasia.

Section A- Demographic data

It consisted of details regarding Age, Education, Income, Family history of Benign prostate hyperplasia, Body mass index, Bad habits (smoking and alcohol) and Health issues (hypertension, diabetes, liver disease and other diseases) which will be assessed by interview method.

- The informed consent was obtained from the participants and the response given by them were kept confidential.

Data collection for the main study

- Data collected started after the formal permission from Principal of Dr. MGR Educational and Research Institute. Permission from Honourable President. The data's were collected after obtaining written consent.
- Convenience sampling technique was used to choose the sample for the study. The data was collected with selected drivers and the structured tool were used to assess the knowledge and attitude of the drivers about

the BPH. Written consent was taken from all the participants and all were explained about the purpose and nature of the study.

- In this study pre-test post-test one group only technique followed, the drivers were given pre-test to assessed for knowledge and attitude and the same day they were given video assisted teaching program.
- After 2 week (14 days) the drivers were given post-test to assess the post-test level of knowledge and attitude.

DATA ANALYSIS AND INTERPRETATION

The analysis is a process of organizing and synthesizing the data in such a way that the research questions can be answered and the hypotheses are tested.

This chapter deals with the analysis and interpretation of the data collected from drivers to assess the effectiveness of Video Assisted Teaching on Knowledge and Attitude regarding Benign Prostate Hyperplasia among Drivers working in selected Hospitals in Chennai. The data was organized, tabulated and analyzed according to the objectives. Data analysis begins with description that applies to the study in which the data are numerical with some concepts. Descriptive statistics allows the researcher to organize the data and to examine the quantum of information and inferential statistics is used to determine the relationship.

ORGANIZATION OF DATA

The findings of the study were grouped and analyzed under the following sessions.

SECTION B: ASSESSMENT OF LEVEL OF KNOWLEDGE AND ATTITUDE REGARDING BENIGN PROSTATE HYPERPLASIA AMONG DRIVERS

Table I: Frequency and percentage distribution of pretest and post-test level of knowledge regarding Benign Prostate Hyperplasia among Drivers.

n = 60

Knowledge	pretest		Post test	
	f	%	f	%
Inadequate (0 - 8)	40	66.67%	0	0
Fairly Adequate (9 - 16)	20	33.33%	2	3.33%
Adequate (17 - 24)	0	0	58	96.67

The table 1 shows that in the pretest, 40(66.67%) had inadequate knowledge and 20(33.33%) had fairly adequate whereas in the post test after the video assisted

Section A: Description of the demographic variables.

Section B: Assessment of level of knowledge and attitude regarding Benign Prostate Hyperplasia among Drivers.

Section C: Effectiveness of Video assisted teaching on knowledge and attitude regarding Benign Prostate Hyperplasia among Drivers.

Section D: Relationship between knowledge and attitude regarding Benign Prostate Hyperplasia among Drivers.

Section E: Association of post test level of knowledge and attitude regarding Benign Prostate Hyperplasia among Drivers with selected demographic variables.

SECTION A: DESCRIPTION OF THE DEMOGRAPHIC VARIABLES

Frequency and percentage distribution of demographic variables of drivers

The frequency and the percentage distribution of demographic variables shows that maximum 40(66.67%) were in the age group of 50 and above, 30(50%) had high school education, 25(41.7%) had an income of 10000 – 20000, 54(90%) had no family history of benign prostate hyperplasia, 44(73.33%) were healthy weight, 46(76.67%) had no personal habits, 37(61.67%) had kidney problem, 39(65%) were residing in urban area, 50(83.33%) never got any unusual urinary symptoms, 56(93.33%) had not undergone any surgery for urinary problems and 48(80%) had not checked prostate specific antigen.

teaching 58(96.67%) had adequate knowledge and only 2(3.33) had fairly adequate knowledge regarding Benign Prostate Hyperplasia among drivers.

Table II: Frequency and percentage distribution of pretest and post test level of attitude regarding Benign Prostate Hyperplasia among Drivers.

n= 60

Attitude	pretest		Post test	
	f	%	f	%
(Poor Attitude) (13 - 26)	11	18.33	0	0
Fair Attitude (27 - 39)	49	81.67	15	25.0
Good Attitude (40 - 52)	0	0	45	75.0

The table 2 shows that in the pretest, 49(81.67) had fair attitude and 11(18.33%) had poor attitude whereas in the post test after the video assisted teaching 45(75%) had

good attitude and 15(25%) had fair attitude regarding Benign Prostate Hyperplasia among Drivers.

SECTION C: EFFECTIVENESS OF VIDEO ASSISTED TEACHING ON KNOWLEDGE AND ATTITUDE REGARDING BENIGN PROSTATE HYPERPLASIA AMONG DRIVERS

Table III: Comparison of pretest and post test level of knowledge regarding Benign Prostate Hyperplasia among Drivers.

n = 60

Knowledge	Mean	S.D	Mean Improvement & %	Paired 't' value
Pretest	7.23	2.71	13.77	t = 32.876 p = 0.0001, S***
Post Test	21.0	2.50	(57.4%)	

*** $p < 0.001$, S – Significant.

The table 3 depicts that the pretest mean score of knowledge was 7.23 ± 2.71 and the post test mean score of knowledge was 21.0 ± 2.50 . The mean improvement score was 13.77 i.e., 57.4%. The calculated paired 't' value of $t = 32.876$ was found to be statistically highly

significant at $p < 0.001$ level. This clearly indicates that the video assisted teaching administered to the drivers was found to be effective in improving the level of knowledge regarding Benign Prostate Hyperplasia.

Table IV: Comparison of pretest and post test level of attitude regarding Benign Prostate Hyperplasia among Drivers.

n = 60

Attitude	Mean	S.D	Mean Improvement & %	Paired 't' value
Pretest	34.0	5.06	13.03	t = 14.410 p = 0.0001, S***
Post Test	47.03	4.54	(25.06%)	

*** $p < 0.001$, S – Significant.

The table 4 depicts that the pretest mean score of attitude was 34.0 ± 5.06 and the post test mean score of attitude was 47.03 ± 4.54 . The mean improvement score was 13.03 i.e., 25.06%. The calculated paired 't' value of $t = 14.410$ was found to be statistically highly significant at

$p < 0.001$ level. This clearly indicates that the video assisted teaching administered to the drivers was found to be effective in improving the level of attitude regarding Benign Prostate Hyperplasia among Drivers.

SECTION D: RELATIONSHIP BETWEEN KNOWLEDGE AND ATTITUDE REGARDING BENIGN PROSTATE HYPERPLASIA AMONG DRIVERS

Table V: Correlation between pretest and post test level of knowledge and attitude regarding Benign Prostate Hyperplasia among Drivers.

n = 60

Test	Variables	Mean	S.D	'r' value
Pretest	Knowledge	7.23	2.71	$r = 0.195$ $p = 0.136, N.S$
	Attitude	34.0	5.06	
Post Test	Knowledge	21.0	2.50	$r = 0.506$ $p = 0.0001, S***$
	Attitude	47.03	4.54	

*** $p < 0.001$, S – Significant.

The table 5 depicts that the post test mean score of knowledge was 21.0 ± 2.50 and the post test mean score of attitude was 47.03 ± 4.54 . The calculated Karl Pearson's Correlation value of $r = 0.506$ shows a moderate positive correlation between knowledge and attitude which was found to be statistically highly significant at $p < 0.001$ level. This clearly indicates that knowledge regarding Benign Prostate Hyperplasia among Drivers increases their attitude level also increases.

SECTION E: ASSOCIATION OF POST TEST LEVEL OF KNOWLEDGE AND ATTITUDE REGARDING BENIGN PROSTATE HYPERPLASIA AMONG DRIVERS WITH SELECTED DEMOGRAPHIC VARIABLES

1. Association of posttest level of knowledge regarding Benign Prostate Hyperplasia among Drivers with selected demographic variables

The association of the post test level of knowledge regarding Benign Prostate Hyperplasia among Drivers at $p < 0.05$ level ($\chi^2 = 8.276$, $d.f = 2$, $p = 0.041$) and ($\chi^2 = 8.276$, $d.f = 2$, $p = 0.041$) and the other demographic variables had

not shown statistically significant association with post test level of knowledge regarding Benign Prostate Hyperplasia among Drivers.

2. Association of post-test level of attitude regarding Benign Prostate Hyperplasia among Drivers with selected demographic variables

The association of the post-test level of attitude regarding Benign Prostate Hyperplasia among the drivers shows that the demographic variables education and income (had shown statistically significant association with post test level of attitude regarding Benign Prostate Hyperplasia among Drivers at $p < 0.001$ and $p < 0.05$ level ($\chi^2 = 13.704$, $d.f = 3$, $p = 0.003$) and ($\chi^2 = 12.765$, $d.f = 3$, $p = 0.005$) and the other demographic variables had not shown statistically significant association with post test level of attitude regarding Benign Prostate Hyperplasia among Drivers.

DISCUSSION

The first objective of the study is to assess the existing knowledge and attitude regarding benign prostate hyperplasia among drivers

The pre-test, 40(66.67%) had inadequate knowledge and 20(33.33%) had fairly adequate whereas in the post test after the video assisted teaching 58(96.67%) had adequate knowledge and only 2(3.33) had fairly adequate knowledge regarding Benign Prostate Hyperplasia among drivers.

This study was supported with a quazi experimental study done by **Nithin jose (2016)** in Karnataka –Hassan in a medical college, to assess the knowledge and attitude about the benign prostate hyperplasia with 60 sample and the sampling technic used for data collection was simple random sampling. The major findings of the study was, most of patients (40.00%) were in the age group of 61-65 years. 73.33% were not aware of BPH. As for the effectiveness of planned teaching programme on BPH management, the total mean post-test knowledge score (31.73) was higher than that of the mean pre-test knowledge score (19.90). The study revealed that knowledge level on BPH management among BPH patients is inadequate. The study enables the clients to gain knowledge on selected areas of BPH and its management which could in turn help them to seek appropriate medical care early before occurrence of complications.

The second objective of the study is to assess the effectiveness of video assisted teaching on knowledge and attitude of drivers regarding benign prostate hyperplasia

The pre-test mean score of knowledge was 7.23 ± 2.71 and the post-test mean score of knowledge was 21.0 ± 2.50 . The mean improvement score was 13.77 i.e., 57.4%. The calculated paired 't' value of $t = 32.876$ was found to be statistically highly significant at $p < 0.001$ level. This clearly indicates that the video assisted teaching administered to the drivers was found to be

effective in improving the level of knowledge regarding Benign Prostate Hyperplasia.

The pre-test mean score of attitude was 34.0 ± 5.06 and the post -test mean score of attitude was 47.03 ± 4.54 . The mean improvement score was 13.03 i.e., 25.06%. The calculated paired 't' value of $t = 14.410$ was found to be statistically highly significant at $p < 0.001$ level. This clearly indicated that the video assisted teaching administered to the drivers was found to be effective in improving the level of attitude regarding Benign Prostate Hyperplasia among Drivers.

The findings of this study is supported with **Suntrup, S et al., (2014)** conducted a study to evaluate the preliminary, community-based prostate health education program carried out. In this study, the medical organisations, however, agree that men should be educated on prostate health with the problem of Benign Prostate Hyperplasia and Prostate Cancer. In this study, patients and practitioners participated in joint decision-making, yet several men need preparatory training before they meet. This study evaluated the effectiveness of a community health awareness program on men at risk of prostate cancer. Pre-tests and post-tests were performed to evaluate knowledge gains and impacts on their prostate health in the short term. It shows that the knowledge has increased statistically considerably.

The third objectives is to correlate the knowledge and attitude regarding benign prostate hyperplasia among drivers in the pretest and posttest

The post-test mean score of knowledge was 21.0 ± 2.50 and the post-test mean score of attitude was 47.03 ± 4.54 . The calculated Karl Pearson's Correlation value of $r = 0.506$ showed a moderate positive correlation between knowledge and attitude which was found to be statistically highly significant at $p < 0.001$ level. This clearly indicated that knowledge regarding Benign Prostate Hyperplasia among Drivers increased their attitude level.

This finding was supported a similar non-experimental descriptive study done by **Kashumbachola Molly et al (2012)** to determining the Knowledge, attitude and practice of men towards Benign Prostatic Hypertrophy (BPH) in Sinazongwe District, Southern Province. Assessing the men's knowledge and practice towards BPH was necessary because it would help these men understand and adopt good attitude and practices and to reduce the risk of cancer and death from such a condition. Self -administered questionnaires' were used to collect the data to assess the knowledge and attitude. The study revealed that the majority (80%) of the 50 respondents had lack of knowledge of BPH while (60%) of the respondents had good attitude and practice towards BPH given the knowledge. This indicated that the male's lack of knowledge affected them either positively or negatively to seek help and acquire the necessary care. The literature also revealed that age was

a major predisposing factor to BPH, while the majority of the respondents were agreeable and accepted the condition as inevitable. This indicated that their attitude and practice would be subjective to the knowledge they had over the disease.

The fourth objectives is to find out the association between the level of knowledge and attitude regarding benign prostate hyperplasia with selected demographic variables in the post-test

The demographic variables age and comorbid conditions (had shown statistically significant association with post-test level of knowledge regarding Benign Prostate Hyperplasia among Drivers at $p < 0.05$ level ($\chi^2 = 8.276$, $d.f = 2$, $p = 0.041$) and ($\chi^2 = 8.276$, $d.f = 2$, $p = 0.041$) and the other demographic variables had not shown statistically significant association with post-test level of knowledge regarding Benign Prostate Hyperplasia among Drivers.

The demographic variables education and income had shown statistically significant association with post-test level of attitude regarding Benign Prostate Hyperplasia among drivers at $p < 0.001$ and $p < 0.05$ level ($\chi^2 = 13.704$, $d.f = 3$, $p = 0.003$) and ($\chi^2 = 12.765$, $d.f = 3$, $p = 0.005$) and the other demographic variables had not shown statistically significant association with post-test level of attitude regarding Benign Prostate Hyperplasia among Drivers.

The findings of the present study is consistent with the cross-sectional survey done by **Haluk Kulaksizoglu et.al. (2014) turkey**. 1004 mens aged from 18-70 with 15 questions, the mean age of the participants (mean age 38.0 ± 12.9 years) were included in this study. Among these are 20.2% primary school graduates, 8.6% secondary graduates, 25.5% secondary graduates, 39.8% university graduates and 5.8% doctoral and/or higher education graduate students, among others.

Recommendations

- ✓ A study can be conducted on a large samples may help to draw conclusions that are more definite and generalize to a larger population.
- ✓ A study can be conducted among community Men's and can able to make awareness among the community.
- ✓ A study can be conducted in assessing the risk of BPH with IPSS (International prostate symptom score) and the prostate symptoms among Men's.

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