RESEARCH ARTICLE

A STUDY TO ASSESS THE KNOWLEDGE OF SCHOOL TEACHERS ON PROSTATE CANCER AT SELECTED GOVERNMENT SCHOOLS OF TIRUPATI

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ARTICLE INFO	ABSTRACT
	Cancer is a broad group of various diseases, all involving unregulated cell growth. Cancer is the name given to a collection of related diseases. In all types of cancer, some of the body's cells begin to divide without stopping and spread into surrounding tissues. Cancer can start almost anywhere in the human body, which is made up of trillions of cells. **Objectives:** To assess the knowledge on Prostate cancer among school teachers, to find out the association between level of knowledge on Prostate cancer with selected demographic variables. **Methodology:** The research approach used for the present study was Quantitative Approach and research design was Cross-Sectional Descriptive Design. The sample of the study chosen by Non-Probability Purposive Sampling Technique, which includes 100 school teachers. A self structured questionnaire was used to collect the data which consists of 30 dichotomous questions. **Results:** The major findings of the study was out of 100 school teachers 51 (51%) had adequate knowledge, 35 (35%) had moderate knowledge and only 14 (14%) had inadequate knowledge regarding Prostate cancer. The associations of demographic variables with the level of knowledge on prostate cancer were determined by using chi-square test which revealed that there was a significant association with education of the school teachers, type of job, residence, habit of alcoholism, type of diet. **Conclusion:** The study concluded that majority of school teachers had adequate knowledge on prostate cancer. Hence there is a need to improve the knowledge regarding preventive measures for prostate cancer. So informational booklet has been given for improving knowledge and practices.

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INTRODUCTION

The American cancer society defines cancer as a large group of diseases characterized by uncontrolled growth and spread of abnormal cells (www.American cancer society. In). Prostate cancer grows slowly and is initially confined to the prostate gland, where it may not cause serious harm. However, while some types of prostate cancer grow slowly and may need minimal or even no treatment, other types are aggressive and can spread quickly. The exact cause and natural history of prostate cancer is still relatively unknown. The cancer cells metastasize from the prostate to other parts of the body, particularly the bones, lymph node (Brunner and suddharths, ?).

Need for study: Prostate cancer is a very common diagnosis, 1 in 9 men will be diagnosed with prostate cancer during their lifetime. While it is a common diagnosis, most men that have prostate cancer will not die from it.[3] Prostate cancer is the second most commonly occurring cancer in men and the fourth most commonly occurring cancer overall.[4] Prostate cancer is one among the top ten leading cancer sites in India. It usually affects men in age group of 65+ years.[5] Prostate cancer is the second leading cause of cancer death in men in the United States. It is estimated that 31,620 deaths from this disease will occur this year. However, the death rate has dropped by more than half from 1993 to 2016.[6]

Statement of the problem

A Study to Assess the Knowledge of School Teachers on Prostate Cancer at Selected Government Schools of Tirupati.

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Objectives

- To assess the knowledge on Prostate cancer among school teachers.
- To find out the association between level of knowledge on Prostate cancer with selected demographic variables.

Operational Definitions

- **ASSESS:-** It refers to determine or judge the knowledge regarding Prostate cancer.
- **KNOWLEDGE:-** It refers to the general awareness as measured by the desired response to a structured questionnaire on Prostate cancer.
- **SCHOOL TEACHERS:-** It refers to a person who helps others to acquire knowledge, competences or values.
- **MEN:-** Men refers to a person aged between 30-65 years.
- **PROSTATE CANCER:-** Prostate cancer is an abnormal, uncontrolled cell growth present in prostate gland in men.
- **SELECTED AREA:-** The area selected for conducting the study is government schools at Tirupati.

HYPOTHESIS

- **Ho1:-** There is no significance difference with level of knowledge on Prostate cancer among school teachers.
- **Ho2:-** There is no significant association between level of knowledge on Prostate cancer with selected socio-demographic variables.

ASSUMPTIONS

- School teachers will not have knowledge on prostate cancer.
- Awareness improves the knowledge of school teachers, which will help them in future to protect from prostate cancer.

Conceptual Framework: Conceptual frame work adopted for the present study was 'General System Theory' by LeudWigvonBerrtalanffy (1968). General system theory explains that, systems of inter-related elements in the abstract system are the human being and their environment. According to general system theory, 'silence of wholeness and its purpose is scientific thinking across the discipline and which provide frame work for analyzing the whole of any system. This system specifics the purpose of goal and uses a process to achieve that goal.

A system can be resolved into an aggregation of feedback circuit such as:

- Input
- Throughput
- Output
- Feed back

METHODOLOGY

RESEARCH APPROACH

The research approach adopted was Descriptive research approach to achieve the objective of the study, which is felt to be most appropriate in the field of education for its practicability in real life situations.

Research Design: The research design selected for the present study was Cross-Sectional Descriptive Research Design.

Setting Of The Study: The study was conducted in selected Government schools of Tirupati.

Population: The population in this study includes Government school teachers.

Sample: The sample includes Men teachers who were falling under inclusion criteria.

Sample Size: Sample size consists of 100 men school teachers.

Sampling Technique: The selection of sample depends on availability of men teachers, Non Probability Purposive Sampling Technique was adopted based on inclusion criteria.

Criteria for sample selection

Inclusion criteria

Men who are

- In the age group of 30-65 years
- Willing to participate in the study and available at the time of data collection.

Exclusion criteria

Men who are

- In the age group below 30 years
- Already diagnosed with prostate cancer
- Diagnosed with benign prostate hyperplasia

Tool: The tool was developed with the help of related literature from various textbooks, journals, websites, discussions and guidance from experts.

The tool consists of II sections.

Section-I:- Consists of questions related to demographic data.
Section-II:- A structured questionnaire to assess the knowledge on prostate cancer among men. It consists of 30 dichotomous questions based on general information, anatomy and physiology, risk factors, signs and symptoms, diagnostic tests, treatment and preventive measures of prostate cancer by using Yes/No options.

Scoring key

Section-I:- By coding the demographic variables.

Section-II:- Dichotomous questions were given with two options YES or NO. In the questionnaire for the positive question YES carries "1"mark, NO carries "0" mark. For the negative questions NO carries "1" mark, YES carries "0" mark.
Scoring interpretation

0-50% - Inadequate knowledge.
51-75% - Moderate knowledge.
>75% - 100%- Adequate knowledge.

RESULTS

Majority of school teachers with respect to age 31 (31%) were in the age group of 31-40 years, 87 (87%) belongs to Hindu religion, 59 (59%) belongs to B.Ed qualification, 70 (70%) were permanent employees, 94 (94%) were married, 34 (34%) were having monthly income of 30,000-50,000/-, 67 (67%) were belongs to nuclear family, 66 (66%) were residing at urban area, only 7 (7%) were having the habit of smoking, among these 4 (57.10%) were having history of smoking since > 10 years, 2 (28.6%) were smoking 5-10 years and 1 (14.30%) were smoking <5 years. 3 (3%) were having habit of consuming alcohol, among these 2 (66.70%) were consuming alcohol two time per week and 1 (33.30%) were consuming alcohol once in a week.

2 (66.70%) were having history of consuming alcohol since 5-10 years, 1 (33.30%) were having history of consuming alcohol <5 years. 20 (20%) were having co-morbidities, 10 (50%) were having the co-morbidity of Hypertension, 12 (60%) were suffering with co-morbidities from 5-10 years, 86 (86%) were non vegetarians, 56 (65.10%) were taking non vegetarian food weekly once, 7 (7%) were having the family history of cancer, 2 (28.60%) were suffered with lung cancer, 4 (71.40%) were fathers was suffered, 2 (2%) were underwent for health checkups related to prostate cancer, 2 (100%) were underwent for blood test, 51 (51%) were the source of information by mass media. The study findings revealed that majority 51 (51%) of school teachers had adequate knowledge, 35 (35%) had moderate knowledge and only 14 (14%) had inadequate knowledge on prostate cancer.
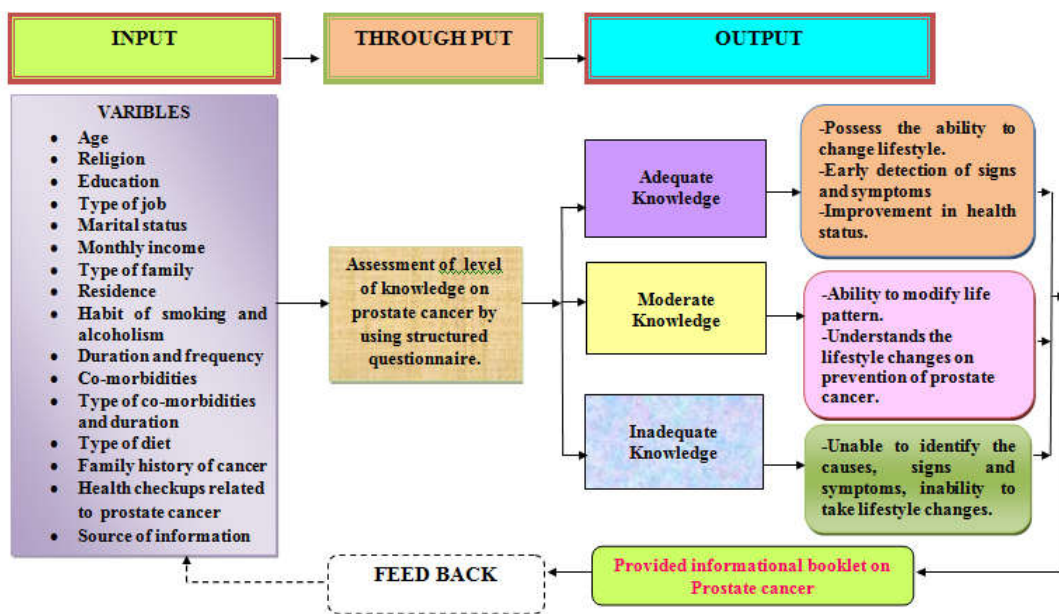

FIG:1 CONCEPTUAL FRAME WORK BASED ON MODIFIED LEUDWINGVON BERTALANFFY'S GENERAL SYSTEM THEORY (2019)
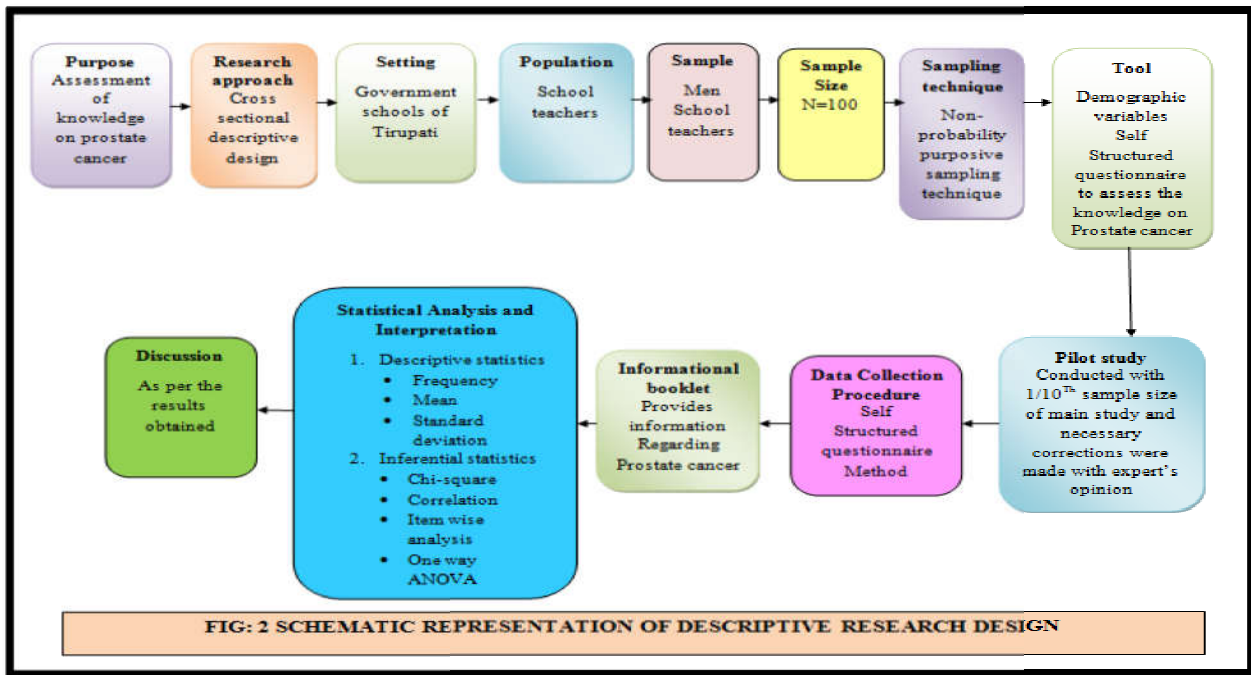

FIG: 2 SCHEMATIC REPRESENTATION OF DESCRIPTIVE RESEARCH DESIGN

Table: 1 Frequency and percentage distribution of level of knowledge on prostate cancer among school teachers

(N = 100)

S.NO	LEVEL OF KNOWLEDGE	FREQUENCY (f)	PERCENTAGE (%)
1	Inadequate knowledge	14	14
2	Moderate knowledge	35	35
3	Adequate knowledge	51	51

Table 2. Frequency and percentage distribution of knowledge level on domains of Prostate cancer among school teachers

S.NO	DOMAINS	LEVEL OF KNOWLEDGE					
		Inadequate (0 – 50%)		Moderate (51 – 75%)		Adequate (76 – 100%)	
		(f)	(%)	(f)	(%)	(f)	(%)
1	General information	18	18	33	33	49	49
2	Anatomy and physiology	14	14	24	24	62	62
3	Risk factors	32	32	37	37	31	31
4	Signs and symptoms	12	12	40	40	48	48
5	Diagnosis and Treatment	19	19	15	15	66	66
6	Prevention	16	16	22	22	62	62

Table: 3 Mean and standard deviation of domain wise knowledge on prostate cancer among school teachers

(N=100)

S.NO	DOMAINS	MEAN	STANDARD DEVIATION
1	General information	3.42	0.98
2	Anatomy and physiology	2.43	0.86
3	Risk factors	3.78	1.29
4	Signs and symptoms	3.40	0.87
5	Diagnostic tests and Treatment	4.66	1.34
6	Prevention	3.68	1.18
	Overall scores	21.37	4.35

Table: 2 Shows that regarding general information 18 % of teachers had inadequate knowledge, 33% had moderate knowledge and 49 % had adequate knowledge. With regard to anatomy and physiology 14% had inadequate knowledge, 24 % had moderate knowledge and 62 % had adequate knowledge. With regard risk factors 32% had inadequate knowledge, 37% had moderate knowledge, and 31% had adequate knowledge. With regard to signs and symptoms 12% had inadequate have knowledge, 40% had moderate knowledge, and 48% had adequate knowledge. Related to diagnosis and treatment 19% had inadequate knowledge, 15% had moderate knowledge, and 66% had adequate knowledge. With regard to prevention 16% had inadequate knowledge, 22% had moderate knowledge and 62 % had adequate knowledge. Table: 3 Shows that total mean knowledge scores was 21.37± 4.35. Considering to the general information the mean knowledge score was 3.42 ± 0.98. With regard to anatomy and physiology the mean knowledge score was 2.43 ± 0.86. Related to risk factors the mean knowledge score was 3.78±1.29. With regard to signs and symptoms the mean knowledge score was 3.40 ± 0.87. Related to diagnostic tests and treatment the mean knowledge score was 4.66 ± 1.34. With regard to prevention the mean knowledge score was 3.68 ± 1.18. The association of demographic variables with level of knowledge on prostate cancer revealed that, age with a Chi-square value of 37.6, education with a Chi-square value of 30.0, the type of job with a Chi-square value of 24.7, residence of school teachers with a Chi-square value of 19.6, habit of alcoholism with a Chi-square value of 7.3, underwent of health checkups related to prostate cancer with a Chi-square value of 12.5 which was statistically significant at $p<0.01$ level. Type of diet with a Chi-square value of 8.5 which was statistically significance at $p<0.05$ level. The other variables were not found to have any significant association with the level of knowledge among school teachers. Based on these findings the Null Hypothesis H_01 and H_02 were rejected.

The correlation of demographic variables with level of knowledge on prostate cancer revealed that, Age, education, type of job, marital status, residence, habit of alcohol consumption, type of diet, undergone for health checkups related to prostate cancer were positively correlated with the level of knowledge on prostate cancer and significant at $p<0.01$ and frequency of alcohol consumption, duration of alcohol consumption were negatively correlated with the level of knowledge on prostate cancer at $p<0.01$.

Conclusion

The study findings revealed that, a majority of school teachers were had adequate knowledge on prostate cancer and some of the demographic variables were statistically significant, and hence it can be concluded that, school teachers should improve the knowledge regarding prostate cancer. So informational booklet has been given for improving knowledge and practices.

Implication

The implications drawn from the present study are vital concern to health care team, including nursing practice, nursing education, nursing administration and nursing research.

Nursing Practice: The present health care delivery system gives emphasis on comprehensive health care, which includes preventive, curative and rehabilitative care.

- In the community, small teaching sessions can be conducted regarding Prostate cancer.
- Planned health teaching programmes are to be scheduled in the community on fixed days for patients

as well as their attendants regarding prevention of Prostate cancer.

- Nurses working in community have to realize their responsibility in giving health education regarding lifestyle changes on prevention of Prostate cancer.
- An informational booklet can be provided to the school teachers in the language, which they can understand with appropriate pictures to improve their knowledge on Prostate cancer.
- Nurses can take an active part in conducting mass health awareness programs regarding prostate cancer to adopt healthy practices to prevent Prostate cancer.

Nursing education: Nursing students and nursing personnel should be encouraged to teach the community people regarding the importance of the knowledge on risk factors, signs and symptoms, diagnostic findings, management and prevention of prostate cancer to decrease the chance of getting prostate cancer as well as to provide better treatment to the prostate cancer patients.

- Effective teaching material and audio-visual aids should be used to communicate and express the content clearly.
- Established planned teaching programmes, which could be used as illustrative informational models for student nurses, nursing personnel, patients and people in community.

Nursing administration:

The nursing administration should have a health education cell with group of adequate retained nurses for developing health education material for teaching school teachers as well as community peoples.

- The nursing administration can create awareness on prostate cancer, conduct teaching programmes among the general public regarding the prostate cancer.
- The nursing administration should take initiative to conduct effective In service education programmes and conducting nursing education programmes on newer trends in the development of health teaching on prostate cancer.

Nursing Research

- Nursing research should be done on practicing newer methods of teaching focusing on interest, quality and cost effectiveness.
- The new knowledge obtained through the study would enhance evidence based nursing practice. The emphasis on research and clinical studies is needed to improve the quality of nursing care.
- Nursing research should be focus on teaching programmes on dietary patterns and lifestyle modifications among school teachers, because those are high risk to getting prostate cancer due to habituated of high fat diet, alcohol, and smoking and low physical activity.
- Health education is a process which affects and changes the health practice of people in their knowledge and attitudes related to prostate cancer. The recipient is motivated to use the information for maintenance and restoration of his health.

Recommendation

- A quasi-experimental study can be conducted on effectiveness of planned teaching programme regarding prevention of prostate cancer and lifestyle modifications among general population.
- A comparative study can be conducted to assess knowledge regarding lifestyle changes and prevention of prostate cancer among selected degree college students.
- A descriptive study can be conducted to assess the prevalence of prostate cancer.
- A descriptive study can be conducted to assess the quality of life among prostate cancer patients.
- Randomized clinical trials could be carried out on preventive strategies of prostate cancer.

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