

A Study To Assess The Knowledge Regarding Modifiable And Non Modifiable Risk Factors Of Lifestyle Diseases Among People Residing At Selected Rural Area, Puducherry

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ABSTRACT

Lifestyle diseases can be defined as diseases linked with one's lifestyle. These diseases are non communicable diseases. The risk factors of lifestyle diseases Can be divided into two broad categories such as modifiable risk factors and non modifiable risk factors. Modifiable risk factors are controlled or modified by the application of an intervention that includes excessive use of alcohol, bad food habits, smoking tobacco, Physical inactivity, wrong body posture and disturbed biological clock increase the likelihood of lifestyle diseases . In this paper, we discuss knowledge regarding modifiable and non modifiable risk factors of lifestyle diseases among silukari palayam village people and maximize the health outcomes of people. The main study was conducted at silukari palayam, Puducherry. The period of data collection was 1 week, and the data were collected from the 50 silukari palayam people by using knowledge questionnaires. Convenient sampling technique was used. Majority of the people 19(38%) had adequate level of knowledge, 18(36%) had moderate level of knowledge and 13(26%) had inadequate level of knowledge. The mean and standard deviation of level of knowledge regarding modifiable and non-modifiable risk factors of lifestyle diseases among people is (13.38+6.09) respectively. The study shows that, majority of the people having adequate level of knowledge regarding modifiable and non modifiable risk factors of lifestyle diseases.

KEYWORDS: Lifestyle diseases, Modifiable risk factors, non modifiable risk factors

I. INTRODUCTION

Lifestyle is the way of living of individuals, families, and societies which they manifest in coping with their physical, psychological, social and economic environments on a day to day basis. Lifestyle diseases can be defined as diseases linked with one's lifestyle. These diseases are non communicable diseases. Lifestyle diseases kill around 40 million people each year globally. Studies conducted by the world Health Organization (WHO) showed that about 60% of quality of life is associated with lifestyle and health behaviors. Also 53% of mortalities are related to these issues. Studies have identified specific types of behaviors that contribute to the development of lifestyle diseases.

The risk factors of lifestyle diseases Can be divided into two broad categories such as modifiable risk factors and non modifiable risk factors. Modifiable risk factors are controlled or modified by the application of an intervention that includes excessive use of alcohol, bad food habits, smoking tobacco, Physical inactivity, wrong body posture and disturbed biological clock increase the likelihood of lifestyle diseases .The modern occupational setting and stress related work is also being seen as potent risk factor for lifestyle disease.

Prevention of these lifestyle disease are remedies or activities that aim to reduce the likelihood of a disease or disorder affecting people. Lifestyle diseases are preventable for children if parents set them on the correct path, as early life decisions and influences can impact people later on in life. Lifestyle diseases can be prevented through reduction in smoking of tobacco. The Australian Government started by introducing plain packaging for all tobacco products and increasing the prices of tobacco production. Obesity can be prevented through a well balanced lifestyle through healthy eating and exercise. 30 minutes of moderate exercise daily or

by doing 150 minutes of moderate intensity exercise a week can be the start to a new lifestyle change. Examples of moderate exercise includes a brisk walk, swim, bike ride or it can also be everyday life activities like mowing the lawn or house cleaning.

Lifestyle medicine focuses on educating and motivating patients to improve the quality of their lives by changing personal habits and behaviors around the use of healthier diets which minimize ultra-processed foods such as a Mediterranean or whole food, plant-predominant dietary pattern, regular physical activity, restorative sleep, stress management, avoidance of risky substances, and positive social connection. In the clinic, major barriers to lifestyle counseling are that physicians feel ill-prepared and are skeptical about their patients' receptivity.

II. REVIEW OF LITERATURE:

Van Zyl S et al.,(2020) was conducted a study based on a risk factor profile for chronic lifestyle diseases in three rural free state towns: A prospective and longitudinal epidemiological study aimed at determining how living in a rural area can either protect or predispose one to develop chronic lifestyle diseases . The study population consisted of 499 households and 658 individuals participated in the study. Only results of adult participants between 25 and 64 years will be reported in this article. The study group consisted of 29.4% male and 70.6% female participants, with a mean age of 49 Years. Results: The reported rusk factor profile was ranked. Increased waist circumference was ranked highest, high blood pressure second, tobacco smoking third, Physical inactivity fourth, diabetes fifth. The cumulative risk factors tor profile revealed that 35.6 and 21% of this study population had two and three risk factors, respectively.

STATEMENT OF THE PROBLEM:

A STUDY TO ASSESS THE KNOWLEDGE REGARDING MODIFIABLE AND NON MODIFIABLE RISK FACTORS OF LIFESTYLE DISEASES AMONG PEOPLE RESIDING AT SELECTED RURAL AREA, PUDUCHERRY.

OBJECTIVES:

- To assess the level of knowledge regarding modifiable and non modifiable risk factors of lifestyle diseases among people residing at silukari palayam, puducherry.
- To associate the level of knowledge regarding modifiable and non modifiable risk factors of lifestyle diseases among rural population with their selected demographic variables.

ASSUMPTION:

- ❖ The tool prepared for the study will be sufficient for collecting information on modifiable and non modifiable risk factors of lifestyle diseases among rural population.
- ❖ There may be decreased knowledge of rural population regarding the modifiable and non modifiable risk factors of lifestyle diseases.

III. METHODOLOGY

The research approach used for this study was quantitative research approach. A descriptive research design was used to assess the level of knowledge regarding modifiable and non modifiable risk factors of lifestyle diseases among people residing at selected rural area, puducherry. By using purposive sampling technique 50 sample was selected for the present study. The tool consists of demographic data and questionnaire.

RESEARCH DESIGN:

A descriptive Research Design was adapted for this study.

RESEARCH SETTING :

The study will be conducted at silukari palayam, Puducherry. The population of the study silukari palayam village people. sample size is the number of subjects involved in the study. sample size consist of 50 silukari palayam people. Sampling refers to the process of selecting a portion of the population to represent the entire population. Sampling technique chosen was convenient sampling.

DESCRIPTION OF TOOL:

Tool consists of 2 sections namely,

Section A: Socio demographic Variables: Age, gender, Religion, educational Status, occupational Status, marital Status, dietary habits, bad habits.

Section B: Multiple choice questionnaire regarding modifiable and non modifiable risk factors of lifestyle diseases among people residing at silukari palayam , puducherry.

It consists of 25 items, each correct answer carries one mark.

SCORING INTERPRETATION:

LEVEL OF KNOWLEDGE	SCORING
Fair knowledge	0-8
Good knowledge	9-16
Very Good knowledge	17-25

RESEARCH APPROACH:

A quantitative research approach was adapted for this study.

POPULATION:

The target population for this study comprises of silukari palayam village people, puducherry.

SAMPLE:

The study samples consist of people residing at silukari palayam, puducherry who fulfill the inclusion criteria.

SAMPLE SIZE :

Sample size consists of 50 silukari palayam village people.

SAMPLING TECHNIQUE:

A convenient sampling technique is used for the present study.

SAMPLE SELECTION CRITERIA:

Inclusion criteria:

- People residing at silukari palayam, puducherry.
- Silukari palayam village people who willing to participate in the study.

Exclusion criteria:

- People who not willing to participate in the study.

DATA COLLECTION PROCEDURE

After the validation of the tool and content from consent authority, the date and time will be fixed for collecting data. The sample of 50 silukari palayam village people with lifestyle diseases, who was selected by convenience sampling technique, after introducing and maintained interpersonal relationship with the silukari palayam village people who are interested to be. The tool consists of demographic variables and knowledge questions were administered to respondents and data was collected.

IV. RESULTS

- Out of the 50 people who were interviewed, Majority of the people 14(28%) of study population were in the age group are 20-30 years. Majority of the people were female 26(52%). Most of the people were Hindu 37(74%). Majority of the people were Primary school education 15(30%). Majority of the people were had Government job 19(38%). Majority of the people were married 36(72%). Majority of the people were Both veg and non veg 42(84%). Most of the people were not had Bad habits 37(74%).
- The findings shows that Majority of the people 19(38%) had adequate level of knowledge, 18(36%) had moderate level of knowledge and 13(26%) had inadequate level of knowledge. The mean and standard deviation of level of knowledge regarding modifiable and non-modifiable risk factors of lifestyle diseases among people is (13.38+6.09) respectively

Frequency and percentage wise distribution of demographic variables among people.

(N=50)

SL. NO	DEMOGRAPHIC VARIABLES	FREQUENCY (N)	PERCENTAGE (%)
1	Age		
	A) 20-30 years	14	28
	B) 30-40 years	12	24
	C) 40-50 years	11	22
	D) >50 years	13	26
2	Gender		
	A) Male	24	48
	B) Female	26	52

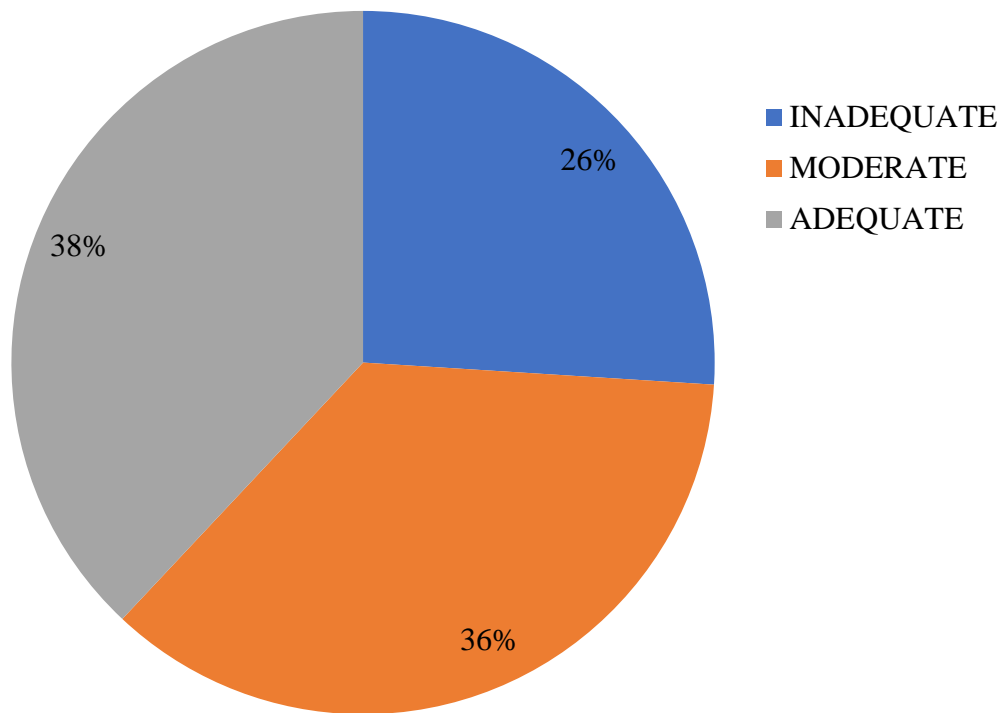
	C) Transgender	0	0
3	Religion		
	A) Hindu	37	74
	B) Muslim	6	12
	C) Christian	6	12
	D) Others	1	2
4	Education		
	A) Illiterate	8	16
	B) Primary school	15	30
	C) Secondary school	13	26
	D) Graduate	14	28
5	Occupation		
	A) Private sector	5	10
	B) Government job	19	38
	C) business	11	22
	D) others	15	30
6	Marital status		
	A) Unmarried	8	16
	B) Married	36	72
	C) Single	4	8
	D) widowed	2	4
7	Dietary habits		
	A) vegetarian	2	4
	B) Non- vegetarian	6	12
	C) Both veg and non veg	42	84
8	Bad habits		
	A) Alcohol	7	14
	B) Smoke/tobacco	6	12
	C) Drug abuse	0	0
	D) None	37	74

Frequency and percentage wise distribution of level of knowledge regarding modifiable and non-modifiable risk factors of lifestyle diseases among people.

(N = 50)

LEVEL OF KNOWLEDGE	FREQUENCY (n)	PERCENTAGE (%)
INADEQUATE	13	26
MODERATE	18	36
ADEQUATE	19	38
Total	50	100
Mean±Standard deviation	13.38±6.09	

Frequency and percentage wise distribution of level of knowledge regarding modifiable and non-modifiable risk factors of lifestyle diseases among people



Association between the level of knowledge regarding modifiable and non-modifiable risk factors of lifestyle diseases among people with their selected demographic variables.

(N=50)

SL. NO	DEMOGRAPHIC VARIABLES	LEVEL OF KNOWLEDGE						Chi-square X ² and P-Value
		INADEQUATE		MODERATE		ADEQUATE		
		N	%	N	%	N	%	
1	Age							X ² =3.97 Df=6 p =0.679 NS
	A) 20-30 years	5	38.5	4	22.2	5	26.3	
	B) 30-40 years	3	23.1	3	16.7	6	31.6	
	C) 40-50 years	2	15.4	4	22.2	5	26.3	
	D) >50 years	3	23.1	7	38.9	3	15.8	
2	Gender							X ² =0.272 Df=2 p =0.873 NS
	A) Male	7	53.8	8	44.4	9	47.4	
	B) Female	6	46.2	10	55.6	10	52.6	
	C) Transgender	0	0	0	0	0	0	
3	Religion							X ² =3.57 Df=6 p =0.734 NS
	A) Hindu	10	76.9	15	83.3	12	63.2	
	B) Muslim	2	15.4	1	5.6	3	15.8	
	C) Christian	1	7.7	2	11.1	3	15.8	
	D) Others	0	0	0	0	1	5.3	

4	Education							$X^2=5.27$ Df=6 p =0.01 *S
	A) Illiterate	2	15.4	2	11.1	4	21.1	
	B) Primary school	3	23.1	6	33.3	6	31.6	
	C) Secondary school	4	30.8	7	38.9	2	10.5	
	D) Graduate	4	30.8	3	16.7	7	36.8	
5	Occupation							$X^2=7.36$ Df=6 p =0.289 NS
	A) Private sector	1	7.7	1	5.6	3	15.8	
	B) Government job	7	53.8	4	22.2	8	42.1	
	C) business	1	7.7	5	27.8	5	26.3	
	D) others	4	30.8	8	44.4	3	15.8	
6	Marital status							$X^2=5.68$ Df=6 p =0.460 NS
	A) Unmarried	3	23.1	2	11.1	3	15.8	
	B) Married	10	76.9	14	77.8	12	63.2	
	C) Single	0	0	2	11.1	2	10.5	
	D) widowed	0	0	0	0	2	10.5	
7	Dietary habits							$X^2=4.507$ Df=4 p =0.342 NS
	A) vegetarian	1	7.7	0	0	1	5.3	
	B) Non- vegetarian	0	0	2	11.1	4	21.1	
	C) Both veg and non veg	12	92.3	16	88.9	14	73.7	
8	Bad habits							$X^2=2.67$ Df=4 p =0.614 NS
	A) Alcohol	1	7.7	3	16.7	3	15.8	
	B) Smoke/tobacco	3	23.1	2	11.1	1	5.3	
	C) Drug abuse	0	0	0	0	0	0	
	D) None	9	69.2	13	72.2	15	78.9	

*-p < 0.05 significant, *-p < 0.001highly significant, NS-Non significant

V. RECOMMENDATIONS AND CONCLUSION:

CONCLUSION:

The present study was conducted to a study to assess the knowledge regarding modifiable and non modifiable risk factors of lifestyle diseases among rural people residing at selected rural area at Puducherry . A descriptive Research Design was adopted this study.

The findings of the study revealed that **Majority of the people 19(38%) had adequate level of knowledge, 18(36%) had moderate level of knowledge and 13(26%) had inadequate level of knowledge.** The mean and standard deviatioⁿ of level of knowledge regarding modifiable and non-modifiable risk factors of lifestyle diseases among people is **(13.38+6.09)** respectively.

NURSING IMPLICATIONS:

➤ The study had implications for nursing practice, nursing education, nursing administration and nursing research.

NURSING PRACTICE:

➤ The community area nurses must have some knowledge about lifestyle diseases and take a care about high risk populations.

NURSING EDUCATION:

➤ The nurse educated the general people about the lifestyle diseases in the community settings and handling of high risk clients. Provide a necessary health education, provide a activity therapy or routine works etc.,

NURSING RESEARCH:

➤ Numbers of studies are being conducted to assess the knowledge regarding modifiable and non modifiable risk factors of lifestyle diseases among people residing at selected rural area at Puducherry. .Nursing studies are comparatively less in this community field. Different studies have to be conducted further prevalence of lifestyle diseases.

NURSING ADMINISTRATION:

- Nurse's administrators can make necessary steps to spread awareness about lifestyle diseases. Nurse's administration can organize awareness program or some participation events about lifestyle diseases.

RECOMMENDATIONS:

- A similar study can be conducted by large number of sample in future.
- The study was conducted to particular group of people at particular age.
- A prospective study can also be conducted
- Study based on daily life of clients to do their daily task.

REFERENCES

BOOK REFERENCE:

- [1]. Abdellah,G.Faye, Eugene Levene, Better Patient Care Through Nursing Research London: The Mac Million Publishing Company.
- [2]. Basavanthappa BT .Nursing Research, New Delhi; Jaypee Brothers Medical Publishers(p)Ltd.
- [3]. Brunner and Suddarth , "Textbook of Medical Surgical ",12th edition wolters kluwers pvt ltd , New Delhi.
- [4]. Burns Nancy, Grove k Susane The Practice of Nursing Research-Conduct, Critique and Utilization,2nded.Philadelphia (us);WB Saunders Company.
- [5]. Black JM, Hawks JH. Medical-Surgical Nursing : Clinical Management for Positive Outcomes, vol 2 : 8th ed. Philadelphia: Elsevier Publications; 2009
- [6]. Joyce M Black Esther Mataserin Jacob. Medical Surgical Nursing .Clinical Management for Continuity of care. 5thed. New Delhi: Harcourt Brace and company.
- [7]. Kothari CR ,Research methodology-methods and techniques.2nd edition New.
- [8]. K.Park; A textbook of preventive and social medicine; published by banarsidas bhanot ; 25th edition.
- [9]. Lewis, Colier, Hettkemper, Dirksen. Medical Surgical Nursing .6th ed. Mosby Publication.
- [10]. Lippon Cott (1998) Manual of Nursing Practices 8th edition, Ed.Lippincott, Williams & Wilkins, publications, US.
- [11]. Luckmann and Sorensens. Medical Surgical Nursing.4thed. Philadelphia: W.B Saunders Company; 1997.
- [12]. Simrat kaur N.J . Singh ; A textbook of community health nursing -1 , lotus Publishers.
- [13]. S Kamalam ; Essentials in community health nursing practice ; jaypee publications; 3rd edition.
- [14]. Suresh K Sharma ,Nursing Research and Statistics, Published by Elsevier, A Division Of Reed Elsevier India Private Limited.
- [15]. Shyamala D Manivannan ; A textbook of community health nursing ; CBS Publishers & Distributors.
- [16]. 16 .Polit FD, Beck CT. Nursing Research: Generating and Assessing Evidence for Nursing Practice. 8th ed. Philadelphia: Lippincott, Williams and Wilkins Publications; 2004.

JOURNAL REFERENCE:

- [17]. Anjana RM, Pradeepa R, Das AK, Deepa M, Bhansali A, Joshi SR, Joshi PP, Dhandhanika VK, Rao PV, Sudha V, Subashini R. Physical activity and inactivity patterns in India—results from the ICMR-INDIAB study (Phase-1)(ICMR-INDIAB Int J Behav Nutr Phys Act. 2014;11(1):26. [PMC free article] [PubMed] [Google Scholar]
- [18]. Meng L, Maskarinec G, Lee J. Lifestyle factors and chronic diseases: Application of a composite risk index. Prev Med. 1999;29:296–304. [PubMed] [Google Scholar]
- [19]. Steyn K, Fourie J, Bradshaw D. The impact of chronic diseases of lifestyle and their major risk factors on mortality in South Africa. S Afr Med J. 1992;82:227–31
- [20]. Steyn K, Kazenellenbogen JM, Lombard CJ. Urbanization and the risk for chronic diseases of lifestyle in the black population of the Cape Peninsula, South Africa. J Cardiovasc Risk. 1997;4:135–42
- [21]. Musaiger, A.O., Lloyd, O.L., Al-Neyadi, S.M. and Bener, A.B. (2003) Lifestyle Factors Associated with Obesity among Male University Students in the United Arab Emirates. Nutrition & Food Science, 33, 145-147.
- [22]. Nojomi, M. and Najamabadi, S. (2006) Health Promoting Lifestyle and its Determinants Among University Students in Sabzevar, Iran. Asia Pacific Journal of Clinical Nutrition, 15, 516-520

NET REFERENCE:

- [23]. www. Wikipedia. com
- [24]. www. medscape.com
- [25]. www. ncbi.nlm.gov/pubmed.com
- [26]. www. surgicalcriticalcare.net
- [27]. www.emro.who.com