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ASSESSMENT OF NUTRITIONAL KNOWLEDGE OF WOMEN SUFFERING FROM CARDIOVASCULAR DISEASES

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Abstract

Cardiovascular diseases are becoming a prominent cause of morbidity and mortality across the globe. An increase has been seen in its cases due to the unhealthy eating habits and sedentary lifestyle human population is moving towards. Some other major causes of CVD can be hereditary, stress, other diseases that might lead to it. Nutrition plays a very important role in its prevention and cure because medicines alone can never work if you don't eat healthy along with it. So, to eat right is the main goal in preventing and curing CVD. This study aims at studying the pattern of eating and nutrition consumption in the women who suffer from cardiovascular diseases. Furthermore, it helps in any future research to find the better practices in terms of nutrition to fight against CVD by studying the already seen pattern of nutrition consumption in CVD patients.

Keywords **:** Cardiovascular, Diseases, Mortality, Nutrition, CVD Patients

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Introduction

Early adulthood, defined by the WHO as the years between 20 and 39, and middle adulthood, defined as the years between 40 and 59, are becoming the leading causes of death worldwide, with a greater prevalence among adult women. Early and middle adulthood women comprise of one third of total female population. A variety of inherited, environmental, and other variables contribute to CVD. It might also be the outcome of adult women's dietary issues. Adult women's heart health deteriorates due to poor eating habits.

Purpose of the Study

- To identify the socio-economic status of women suffering from CVD.
- To assess nutritional status of women.
- To identify physical activity pattern of women.
- To assess the nutritional knowledge of women suffering from CVD.

Definition:

- A variety of disorders affecting the cardiovascular system are included under CVD. The heart and blood arteries are the main organs affected by these disorders (vascular and cardiac).
- "Common examples include coronary artery disease, heart failure, stroke, and hypertension" (American Heart Association, 2020).
- Due to their complexity, CVDs are a key focus of medical research, preventative initiatives, and the distribution of healthcare resources.

Prevalence:

- "CVD have an immense impact on global public health, as they are the leading cause of mortality and morbidity worldwide" (World Health Organization, 2020).
- "In 2019, CVD were responsible for an estimated 17.9 million deaths, emphasizing their role as a major health concern" (World Health Organization, 2021).
- "Beyond the loss of life, CVD have substantial economic and social implications due to the cost of treatment, reduced productivity, and decreased quality of life for affected individuals" (Benjamin et. al., 2019)
- "The burden of CVD extends across nations, affecting both developed and developing countries" (World Health Organization, 2021).

Risk Factors:

- Risk factors are essential for classifying cardiovascular disease (CVD) and determining a person's chance of contracting particular cardiovascular diseases. Conventional CVD risk factors include -
  - Hypertension,
  - Hyperlipidemia,
  - Smoking,
  - Obesity, and
  - Diabetes

Heritability and genetic predisposition can also influence a person's risk profile for specific CVDs. As more genetic markers linked to a higher risk of CVD are

discovered, risk assessments can be improved and people can be categorized according to their genetic risk profiles.

In CVD research, novel risk variables have drawn attention in addition to conventional risk factors. Chronic stress, depression, and a lack of social support are examples of psychosocial factors that have been linked to an increased risk of CVD. It has also been established that environmental factors, like as air pollution, contribute to the development of CVD.

Prevention:

"The goal of *primary prevention* is to stop CVD before it starts, which lowers the condition's occurrence. The goal of *secondary prevention* is to keep people with CVD from experiencing new problems or recurrences of existing ones." (Lloyd-Jones *et al*., 2010)

Three of the main elements of therapies are diet, exercise, and quitting smoking. The risk of CVD can be decreased by following a heart-healthy diet, such as the Mediterranean diet, which is high in fruits, vegetables, whole grains, and lean proteins. Frequent exercise is linked to many cardiovascular advantages, such as better heart health, blood pressure control, and weight management. Since smoking is a significant risk factor for CVD, quitting is essential.

Method

The research design used for the present research has been further described in the following sections -

- Sampling Design
- Operational Design
- Statistical Design

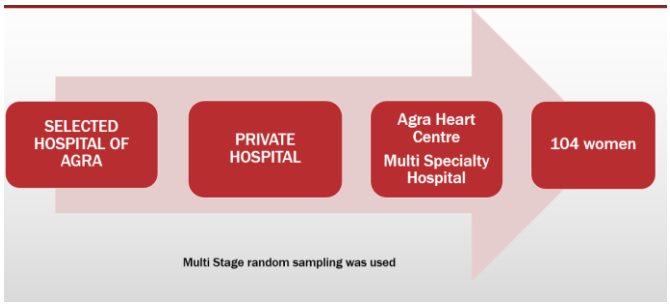

Fig. 1 : Selection process of sample

Locale of the Study

Agra District was selected conveniently as the locale of the present study.

Selection of hospital

There are approx. 70 private hospitals of Agra district that run cardiac care unit, out of which 1 hospital namely Agra Heart Center was selected conveniently.

Selection of Sample

- A list of women was prepared from a selected hospital (private) in Agra,
- Out of 260 CVD patients (women), 104 women were selected by lottery method for the present study.
- The selected women should be in the age group of 20-59
- The woman should be a patient of the selected hospital.

Table 1 : Description of Tools for Research

S. No	Name of tools	Types of tools	Components
1.	Socioeconomic status	"Modified Kuppuswamy scale" (Gunjan, 2022)	Age, literacy status, occupation, family income, type of family, family size, literacy status, religion.
2.	Assessment of Anthropometric, measurement	"Jelliffe" (Jelliffe, 1966)	Height, weight and body mass index.
3.	Assessment of dietary pattern	"Food and agricultural organizations" (FAO, 2018)	24-hour dietary recall, FFQ [Food Frequency Questionnaire]
4.	Assessment of nutritional knowledge	Self-structured interview schedule	CVD symptoms, causes, preventive measures, balanced diet, food practices.
5.	Assessment of Physical activity pattern	Self-structured interview schedule	Frequency of exercise.

Data Assortment

Data was collected through schedule by structured questionnaire and anthropometrical measurements were taken.

Information Analysis

Data was entered in MS excel. Statistical analysis was done with MS excel and SPSS using descriptive and inferential statistics.

Study Variables

Height, Weight, BMI, food groups, General awareness, and dietary pattern.

Results

- Out of total selected respondents, majority of them were from Upper lower socio-economic status, followed by respondents from lower, upper and lower middle and no one belonged from Upper socio-economic status.
- Out of total selected respondents' majority of them were overweight.
- Out of total selected respondents, majority of them falls in the category of very good nutritional practices that too because of the diet prescribed by the doctor.
- Adequate knowledge of nutrition is very important to be able to make appropriate Dietary decision with respect to food selection and consumption.
- It was observed that out of 120 selected respondents, maximum percentage of women were illiterate (74.1%), among whom 69.6% respondents scored poor marks for

nutritional knowledge, with score ranging between 0-5, followed by 30% scored average Nutritional knowledge ranging from 6-10, it was revealed that among the group of respondents who were obtained education at primary level (25.8%), a majority (67.7%) of them scored poor marks got nutritional knowledge. The group was also represented by respondents who scored average marks for nutritional knowledge (32.2%).

- On overall basis, among the total of 120 respondents, majority of them belonged to poor nutritional knowledge.

Limitations of Study

- This study was done only in private hospital
- Small sample size
- Only women were included in the study
- Only assessment was done for the following topic

Suggestions for further Researches

- Govt. hospitals can be included as well
- Large sample size can be taken of both male and female population
- An awareness program can be conducted
- Nutrition education can be imparted

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