

# EFFECTIVENESS OF SELF INSTRUCTIONAL MODULE ON KNOWLEDGE AND PRACTICE REGARDING PREVENTION OF CLD (CHRONIC LIVER DISEASE) AMONG WOMEN ATTENDING GASTROINTESTINAL OPD AT VPIMS, LUCKNOW

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**Abstract---** **Background-** Worldwide it is estimated that approximately 13% of all adults are obese and 29% are overweight. This increasing prevalence of chronic liver disease is a reflection of increases in sedentary behavior and life style changes and in composition of standard diets comprised of energy dense foods that are high in sugar and fat content. This pattern of lifestyle changes, metabolic syndrome and associated conditions are on the rise. As a direct result, within hepatology non-alcoholic fatty liver disease has become one of the leading causes of chronic liver disease. **Objectives-** The objectives were to assess the knowledge regarding chronic liver disease among women, to assess the effectiveness of a self-instructional module on knowledge and practice regarding prevention of chronic liver disease among women and to associate the pre-test knowledge scores with their selected socio demographic variables. **Method-** a Quantitative evaluative research approach and Quasi experimental one group pre-test post-test design was used. By using purposive sampling technique total 76 women client attending OPD i.e. gastrointestinal OPD at V.P.I.M.S, Lucknow were selected. **Result-** In pre-test the majority of women, 76.3% had moderate knowledge, 3.9% of women had inadequate knowledge where as 19.7% of women had adequate knowledge. In post-test majority 89.5% women had adequate knowledge, 10.5% women had moderate knowledge whereas none of the women had inadequate knowledge. **Conclusion-** The study concluded that after the distribution of self –instructional module on knowledge and practice regarding prevention of chronic liver disease women have gained their knowledge.

**Index Terms----** Effectiveness; self –instructional module; knowledge; practice& chronic liver disease.

## I. INTRODUCTION

Worldwide it is estimated that approximately 13% of all adults are obese and 29% are overweight. This increasing prevalence of chronic liver disease is a reflection of increases in sedentary behavior and life style changes and in composition of standard diets comprised of energy dense foods that are high in sugar and fat content. This pattern of lifestyle changes, metabolic syndrome and associated conditions are on the rise. As a direct result, within hepatology non-alcoholic fatty liver disease has become one of the leading causes of chronic liver disease.

Cirrhosis usually develops over a period of years following exposure to one or more risk factors such as alcohol misuse, hepatitis B or C and non-alcoholic fatty liver disease, which cause inflammation and cell death within the liver. However, not everyone who is at risk will eventually develop cirrhosis. Thus, the proportion of individuals who develop cirrhosis who abuse alcohol or have chronic viral hepatitis is around 10–20%, whereas with non-alcoholic fatty liver disease it is around 5–10%. Better recognition of individuals at risk of cirrhosis would allow for more timely intervention.

## II. METHODS AND MATERIAL

**RESEARCH APPROACH:** A Quantitative evaluative research was applied form of research that involved finding out how well a program, practice, procedure or policy was working.

**RESEARCH DESIGN :** “Quasi experimental (one group pre- test post- test design)”.

Variables: Variable includes in the present study are:-

**Demographic variables:** A demographic variable is a variable that is collected by researches’ to describe the nature and distribution of the sample used with inferential statistics.<sup>30</sup> In this study demographic variables were Age in year, Religion, Marital status, Educational, Level Employment status, Monthly Household income in a month, Locality, Diet , Any previous knowledge.

**Independent variables:** Independent variable is the presumed cause for the resulting effects on the dependent variables.<sup>30</sup> In this study, the independent variable was a SELF INSTRUCTIONAL MODULE on prevention of CLD.

**Dependent variables:** In this present study the dependent variable was the knowledge and practice regarding prevention of CLD (chronic liver disease) among women attending gastrointestinal OPD at VPIMS, Lucknow.

**Study Setting :** This study conducted in **Gastrointestinal OPD in Vivekananda Polyclinic Institute of Medical Sciences, Lucknow, U.P.**

#### **POPULATION :**

**Target population:** In this study target population was **the women attending gastrointestinal OPD V.P.I.M.S., Lucknow.**

**Accessible population:** In this study accessible population was the women attending gastrointestinal OPD V.P.I.M.S., Lucknow, who met the inclusion criteria.

### **INCLUSION AND EXCLUSION CRITERIA FOR SAMPLE SELECTION**

#### **INCLUSION CRITERIA**

In the present study the inclusive criteria will be:-

- Who will be age group of 20-40 years women.
- Who will be available at the time of data collection.
- Who are willing to participate in this present study.

#### **EXCLUSION CRETERIA**

n the present study the exclusive criteria will be:-

- Who will not be willing to participate in the Study.
- Women who are already in the medical field.

#### **SAMPLE SIZE**

The sample for the present study comprises **76 women client** attending gastrointestinal OPD at V.P.I.M.S, Lucknow.

**SAMPLING TECHNIQUE:** In this present study, the sample were selected who were fulfilling the inclusion criteria by the use of check list **purposive sampling** was adopted.

#### **SAMPLE SIZE CALCULATION**

Sample size was calculated by previous study participants population by using (**Cochran formula**).

$$\text{Sample Size } n = N * [Z^2 * p * (1-p)/e^2] / [N - 1 + (Z^2 * p * (1-p)/e^2)]$$

$$n=86*[1.962*0.5*(1-0.05)/0.052]/[86-1+(1.962*0.5*(1-0.05)/0.052] \quad n=76$$

N=Population size,

Z =Critical value of the normal distribution at the required confidence level, p = Sample proportion,

e = Margin of error

### **SCORING INTERPRETATION**

#### **Section A- Socio Demographic Data**

Researcher was prepared the coding sheet for socio demographic data which was provided as responded by the women attending gastrointestinal OPD.

**Section B-Self-Structure questionnaire on knowledge regarding prevention of CLD (chronic liver disease).** Knowledge questionnaire will be awarded 1 mark for each correct response and 0 mark for non-answered and wrong response. Total 25 items will be awarded under knowledge aspect. The score interpretations are as follow:

#### **Score Interpretation of Structured Knowledge Questionnaire**

| S.NO. | SCORE LEVEL | PERCENTAGE LEVEL | LEVEL OF KNOWLEDGE  |
|-------|-------------|------------------|---------------------|
| 1     | 0-8         | 50% & below      | Inadequate          |
| 2     | 9-16        | 51-75%           | Moderately Adequate |
| 3     | 17-25       | 76-100%          | Adequate            |

#### **DATA COLLECTION PROCEDURE**

The data collection procedure refers to identification of samples and precise systematic gathering of information/data relevant to the research purpose or the specific objective, questions or hypothesis of the study.

- Written permission was taken from the research ethical committee of Vivekananda College of Nursing, Lucknow.
- After obtaining formal permission from the hospital superintendent of Vivekananda Polyclinic and Institute of Medical sciences, samples were selected by purposive sampling technique.

- Written consent was obtained from the participants after explaining the purpose of the study and confidentiality was assured to all samples..
- Samples were selected by purposive sampling technique.
- The investigator administered self- structured knowledge questionnaire for pre-test and after the pre-test on the same day a Self –Instructional Module on knowledge and practice regarding prevention of chronic liver disease among women attending gastrointestinal OPD at V.P.I.M.S., Lucknow.
- Then on 7<sup>th</sup> day of every pre-test ; post-test was conducted by the same self structure knowledge questionnaire to assess whether they gained knowledge or not from a self instructional module and also evaluate practice score for CLD prevention.

#### PLAN FOR DATA ANALYSIS:

##### Descriptive statistics

- Frequency and percentage will be used to analyze the demographic variable.
- Mean and standard deviation will be used to analyze the knowledge regarding prevention of CLD among women client attending gastrointestinal OPD .

##### Inferential statistics

- paired t-test use for comparison of pre-test and post test knowledge & practice score.
- chi-square will be planned to be computed in order to associate the pre – test knowledge score with selected demographic variables.

#### SECTION-1

##### DESCRIPTION OF FEMALE ACCORDING TO THEIR SOCIO- DEMOGRAHIC VARIABLES

Majority of women, 38.20% were in the age group of 20-25Years, 26.30% women were in the age group 36-40 Years, 23.70% were in the age group 26-30 Years, and 11.80% were in the age group of 31-35 Years. This indicate that majority of women were belongs to 20-25 years of age. Majority of women 82.90% were from the Hindu religion and 17.10% women were from Muslim religion. This indicates that maxim number of women were from the Hindu religion and none of them from Christian, Sikh and other religion. Majority of women 51.30% were married, 44.70% women were unmarried, 2.60% women were widow, and 1.30% women were separated. This indicate majority of women were married. Majority of women were 30.30% completed high school, 27.60% women were completed graduation, 22.40% women were completed intermediate, and 19.70% women were completed post graduate. This indicates that the maximum number of women had high school qualification. Majority of women 90.80% were unemployed, 5.30% women were private job, 3.90% women were government job and none of women were retired. This indicate that the maximum number of women were unemployed .Majority of women 59.20% belongs to rs.5000-15000, 23.70% were belongs to rs.16000-25000rs., 7.90% were belongs to 26000-35000 rs. And 9.20 % were belongs to rs.50,000 and more. This indicates that the majority of women were belonged to the income of rs.5000-15000. Majority of women 53.90% were from urban area and 46.10% women were rural area. This indicates that the maximum number of women of under from urban. Majority of women are 76.30% were from vegetarian, and 23.70% women were non – vegetarian .this indicate that the maximum number of women were from vegetarian. Majority of women had 40.80% had knowledge previously 59.20% women not have any previous knowledge regarding chronic liver disease. Majority of female 40.80% had previous knowledge regarding CLD in which, 58.10% had previous knowledge from Social Media, and 41.90% had previous knowledge from family.

#### SECTION II

##### ANALYSIS OF PRE-TEST AND POST-TEST KNOWLEDGE SCORE AND TO ANALYZED EFFECTIVENESS OF A SELF-INSTRUCTIONAL MODULE ON KNOWLEDGE REGARDING PREVENTION OF CHRONIC LIVER DISEASE AMONG WOMEN ATTENDING GASTROINTESTINAL OPD.

| S.NO. | TEST           | LEVEL OF KNOWLEDGE  | NUMBER OF RESPONDANTS | PERCENTAGE % |
|-------|----------------|---------------------|-----------------------|--------------|
| 1.    | Pretest level  | Inadequate          | 3                     | 3.9%         |
|       |                | Moderately adequate | 58                    | 76.3%        |
|       |                | Adequate            | 15                    | 19.7%        |
|       |                | Total               | 76                    | 100.0%       |
| 2.    | Posttest level | Inadequate          | 0                     | .0%          |
|       |                | Moderately adequate | 8                     | 10.5%        |
|       |                | Adequate            | 68                    | 89.5%        |
|       |                | Total               | 76                    | 100.0%       |

The data were analyzed by applied paired “t” test for significance. The finding are presented Table 4.2.2

| Pre-test score  | N  | Mean  | SD   | Mean Difference | t value | p value                 |
|-----------------|----|-------|------|-----------------|---------|-------------------------|
|                 | 76 | 14.17 | 3.07 | 6.76            | -14.766 | <0.001<br>(Significant) |
| Post-test score | 76 | 20.93 | 3.13 |                 |         |                         |

t= -14.766 and p<0.05

### SECTION III

#### ASSOCIATION BETWEEN THE PRE-TEST KNOWLEDGE SCORES WITH THEIR SELECTED SOCIO-DEMOGRAPHIC VARIABLES

| Socio-Demographic variables |            | Pre test level      |       |                                  |       |                    |       | $\chi^2$<br>value<br>(df) | p-value |
|-----------------------------|------------|---------------------|-------|----------------------------------|-------|--------------------|-------|---------------------------|---------|
|                             |            | Inadequate<br>(n=3) |       | Moderately<br>adequate<br>(n=58) |       | Adequate<br>(N=15) |       |                           |         |
|                             |            |                     |       |                                  |       |                    |       |                           |         |
| N                           | %          | N                   | %     | N                                | %     |                    |       |                           |         |
| AGE                         | 20- 25year | 1                   | 33.3% | 17                               | 29.3% | 11                 | 73.3% | 10.61<br>(6)              | 0.101   |
|                             | 26-30 year | 1                   | 33.3% | 15                               | 25.9% | 2                  | 13.3% |                           |         |
|                             | 31-35 year | 0                   | .0%   | 8                                | 13.8% | 1                  | 6.7%  |                           |         |
|                             | 36-40 year | 1                   | 33.3% | 18                               | 31.0% | 1                  | 6.7%  |                           |         |
| RELIGION                    | Hindu      | 1                   | 33.3% | 48                               | 82.8% | 14                 | 93.3% | 6.35<br>(2)               | 0.042   |
|                             | Muslim     | 2                   | 66.7% | 10                               | 17.2% | 1                  | 6.7%  |                           |         |
|                             | Sikh       | 0                   | .0%   | 0                                | .0%   | 0                  | .0%   |                           |         |
|                             | Christian  | 0                   | .0%   | 0                                | .0%   | 0                  | .0%   |                           |         |
|                             | Other      | 0                   | .0%   | 0                                | .0%   | 0                  | .0%   |                           |         |

|                |                |   |        |    |       |    |       |              |       |
|----------------|----------------|---|--------|----|-------|----|-------|--------------|-------|
| MARITAL STATUS | Unmarried      | 1 | 33.3%  | 21 | 36.2% | 12 | 80.0% | 9.74<br>(6)  | 0.136 |
|                | Married        | 2 | 66.7%  | 34 | 58.6% | 3  | 20.0% |              |       |
|                | Widow          | 0 | .0%    | 2  | 3.4%  | 0  | .0%   |              |       |
|                | Separated      | 0 | .0%    | 1  | 1.7%  | 0  | .0%   |              |       |
| EDUCATION      | High school    | 2 | 66.7%  | 20 | 34.5% | 1  | 6.7%  | 15.71<br>(6) | 0.015 |
|                | Inter mediated | 0 | .0%    | 16 | 27.6% | 1  | 6.7%  |              |       |
|                | Graduation     | 1 | 33.3%  | 14 | 24.1% | 6  | 40.0% |              |       |
|                | Post Graduate  | 0 | .0%    | 8  | 13.8% | 7  | 46.7% |              |       |
| OCCUPATION     | Private Job    | 0 | .0%    | 3  | 5.2%  | 1  | 6.7%  | 4.66<br>(4)  | 0.324 |
|                | Government Job | 0 | .0%    | 1  | 1.7%  | 2  | 13.3% |              |       |
|                | Retired        | 0 | .0%    | 0  | .0%   | 0  | .0%   |              |       |
|                | Unemployed     | 3 | 100.0% | 54 | 93.1% | 12 | 80.0% |              |       |

|   |                          |   |       |    |       |    |       |             |       |
|---|--------------------------|---|-------|----|-------|----|-------|-------------|-------|
| <b>MONTHLY INCOME</b>                   | <b>Rs. 5000 - 15000</b>  | 2 | 66.7% | 36 | 62.1% | 7  | 46.7% | 7.49<br>(6) | 0.278 |
|   | <b>Rs. 16000 - 25000</b> | 1 | 33.3% | 15 | 25.9% | 2  | 13.3% |             |       |
|   | <b>Rs. 26000 - 35000</b> | 0 | .0%   | 3  | 5.2%  | 3  | 20.0% |             |       |
|   | <b>Rs. &gt;50,000</b>    | 0 | .0%   | 4  | 6.9%  | 3  | 20.0% |             |       |
| <b>LOCALITY</b>                         | <b>Rural</b>             | 2 | 66.7% | 28 | 48.3% | 5  | 33.3% | 1.61<br>(2) | 0.448 |
|   | <b>Urban</b>             | 1 | 33.3% | 30 | 51.7% | 10 | 66.7% |             |       |
| <b>DIETARY PATTERN</b>                  | <b>Vegetarian</b>        | 1 | 33.3% | 44 | 75.9% | 13 | 86.7% | 3.96<br>(2) | 0.138 |
|   | <b>Non- vegetarian</b>   | 2 | 66.7% | 14 | 24.1% | 2  | 13.3% |             |       |
| <b>ANY PREVIOUS KNOWLEDGE ABOUT CLD</b> | <b>Yes</b>               | 2 | 66.7% | 20 | 34.5% | 9  | 60.0% | 4.08<br>(2) | 0.130 |
|   | <b>No</b>                | 1 | 33.3% | 38 | 65.5% | 6  | 40.0% |             |       |

|                        |                     |   |       |    |       |   |       |             |       |
|------------------------|---------------------|---|-------|----|-------|---|-------|-------------|-------|
| <b>If yes (source)</b> | <b>Social media</b> | 1 | 50.0% | 12 | 60.0% | 5 | 55.6% | 0.11<br>(2) | 0.948 |
|                        | <b>Friend</b>       | 0 | .0%   | 0  | .0%   | 0 | .0%   |             |       |
|                        | <b>Family</b>       | 1 | 50.0% | 8  | 40.0% | 4 | 44.4% |             |       |
|                        | <b>Colleagues</b>   | 0 | .0%   | 0  | .0%   | 0 | .0%   |             |       |

#### SECTION IV

##### ANALYSIS OF POST-TEST PRACTICE SCORE BY CHECKLIST

| <b>PRACTICE ACTIVITY</b>                         | <b>N</b> | <b>%</b> |
|--|----------|----------|
| Exercise regularly.                              | 75       | 98.7%    |
| Exercise regularly and consistently              | 49       | 64.5%    |
| Physical active throughout day                   | 73       | 96.1%    |
| Eat mine fully /healthy eating                   | 74       | 97.4%    |
| Does meditation.                                 | 15       | 20.0%    |
| Take 7-8 hour sleep in 24 hrs                    | 69       | 90.8%    |
| Sleep at or before 10 pm                         | 22       | 28.9%    |
| Has her weight fluctuated +_ 5 kg.in recent time | 31       | 40.8%    |

#### RECOMMENDATION

On the basis of findings of the study the following recommendation have been made :

- This study can be conducted on large sample for better generalization of research study on large population.
- A comparative study can be carried out to ascertain the knowledge and attitude between.

## REFERENCE

1. Department of Health & Human Services. Cirrhosis of the liver [Internet]. [www.betterhealth.vic.gov.au.2020.Availablefrom:https://www.betterhealth.vic.gov.au/health/conditionsandtreatments/cirrhosis-of-the-liver](https://www.betterhealth.vic.gov.au/2020/Availablefrom:https://www.betterhealth.vic.gov.au/health/conditionsandtreatments/cirrhosis-of-the-liver).
2. **Kumari Neelam** Advance Nursing Practice. 1<sup>st</sup> Edition.Punjab:Pee Vee Publication;2018 page no:25-30
3. **Mansouri, P., Ms, Ghadami, M., Ms, Najafi, S. S., Ms, &Yektatalab, S.,** PhD (2017). The effect of Self-Management Training on Self- Efficacy of Cirrhotic Patients Referring to Transplantation Center of Nemazee Hospital: A Randomized Controlled Clinical Trial. International journal of community-based nursing and midwifery, 5(3), 256–263.
4. **Alfauomy, N, Elshazly S, Abd EL Moneam A.** Effect of Nursing Interventions on Self-management Behaviors of female Geriatric patients with Liver Cirrhosis. Alexandria Scientific Nursing Journal. 2020 Dec 1;22(2):1–18.
5. **Yelmule Pundlik Akash** A study to assess the effectiveness of self instructional module on knowledge regarding ill effects of alcoholism among Autorikshaw drivers of Vidarbha region .IJSR Journal of research, volume:V,Issue:IV,April- 2016.