## ORIGINAL ARTICLE

## PSYCHOMETRIC EVALUATION OF CANCER PATIENTS

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#### **ABSTRACT**

**Background:** Mental health is the balanced development of the individual's personality and the emotional attitude which will enable him or her to live harmoniously with his or her Fellow citizens. Mental health is not exclusively a matter of relation between persons It is also a matter of relation of individuals towards the community in which they live, towards the society of which the community is a part, and towards the social institutions which for a large part guide their life, determine their way of living, working, leisure, and the way they spends and earns the money, the way they sees happiness, stability and security.

**Objective:** To asses and quantify the prevalence of psychological morbidity in cancer patients of government cancer hospital MGM Medical College Indore, M.P.

**Material and Methods**: 100 cancer patients were chosen randomly all of them were interviewed through a questionnaire survey in ward and OPD of cancer hospital in November and December 2009. Data on demographics, and duration of diagnosis were collected.

**Results:** Gender wise prevalence of psychological morbidity Grade II & III were 94% in males and 86% in females. Chi square test was not significant. According to age the Grade II & III psychological morbidity were 41(46%) in 15-45 years age group and 49 (54%) in 46-75 years age group which is significantly higher than previous age group .Chi square test ( $x^2 = 7.54$ ) p value < 0.05 Grade II & III psychological morbidity were 52% in 0-6 months duration while it was 38% in more than 6 months duration Chi square test ( $x^2 = 8.04$ ), P value < 0.05 statistically significant

**Conclusion:** the prevalence of psychological morbidity was slightly higher in males and older age group, and also high psychological morbidity was seen in recently diagnosed cancer patients. A good counseling, stress relaxation and life style modification program is required to make such patients live their life in a positive and better way.

**Key Words:** GHQ General Health Questionnaire, OPD Out Patient Department, WHO World Health Organization

#### **INTRODUCTION**

Mental health is the balanced development of the individual's personality and the emotional attitude which will enable him or her to live harmoniously with his or her Fellow citizens.

Mental health is not exclusively a matter of relation between persons It is also a matter of relation of individuals towards the community in which they live, towards the society of which the community is a part, and towards the social institutions which for a large part guide their life, determine their way of living, working, leisure, and the way they spends and earns the money, the way they sees happiness, stability and security.

Present study concentrates on such a component of health which may be absent in many individuals, but never make them to realize of being ill, as it is a subjective component and as such we cannot demarcate between what is normal and abnormal.

## Consequences of Mental health are:

**A. Cognitive**: Memory problems, Inability to concentrate, Poor judgment, Seeing only the negative aspects, Anxious/racing thoughts, Constant worrying

#### **B.** Emotional:

Moodiness, Irritability, Agitation, Feeling overwhelmed, Sense of loneliness, Depression & unhappiness, Poor ability to relax,

## C. Physical:

Aches & pains, Diarrhea/constipation, Nausea, dizziness, Chest pain, Loss of sex drive, Frequent colds

#### D. Behavioural:

Eating more or less, Sleeping too much or too little, Isolating oneself from others, Neglecting one's responsibilities, Using alcohol, Cigarettes, or drugs to relax, Nervous habits (e.g. nail biting, pacing)

## **GHQ General Health Questionnaire**

David Goldberg described the criteria of assessing psychological wellbeing by which we can measure the psychological morbidity. GHQ-28 (2) is used to assess the psychological morbidity. It is very sensitive in detecting psychological strain.

GHQ-28 concerns with 4 major classes of activities

- 1. Somatic symptoms
- 2. anxiety/insomnia
- 3. Social dysfunction
- 4. Severe depression

These ill health indicators have been assumed to represent relevant stress related outcome variables.

Rating scale has 4 options (4 point scale)

1. Better than usual 1 point 2. Same as usual 2 point 3. Worse than usual 3 points 4. Much worse than usual 4 points

### **METHODOLOGY**

It was a cross sectional, observational study conducted among 100 cancer patients of Government cancer hospital. GHQ-28 (General health Questionnaire -28 (predesigned and pretested)) was used as a screening tool.

#### **Inclusion criteria:**

- 1. Male age 15-75 yrs
- 2. Female age 15-75 yrs
- 3. All cancer cases
- 4. All confirmed cases
- 5. Confirmed cases for follow up
- 6. Taking chemo/radiotherapy

#### **Exclusion criteria**

- 1. Males <15&>75 yrs
- 2. Female age <15&>75 yrs
- 3. Completed their scheduled treatment
- 4. Suspected cases
- 5. Diagnosis not confirmed

#### **Informed Consent-**

A written informed consent was obtained from all the study participants.

After considering the inclusion & exclusion criteria, the patients were selected randomly on first contact basis. Out of 100 patients 50 patients were from inpatients department and 50 were from out patients. Among the 50 inpatients and 50 outpatients 25 were male and 25 were females in each category. The selected cases were interviewed.

A predesigned and pretested questionnaire was used which was developed by Goldenberg the respective responses were marked on the questionnaire and data was collected, compiled, analyzed and then interpreted.

Likert style<sup>4</sup> scoring procedure was used for analyzing the data which is a four point scale The scale has following scoring system Better than usual representing 1 point and Much worse than usual representing 4 points.

The Maximum score is -112,

The Minimum score is -28, and

Threshold score is -56.

### Grading of the scores

28-56 represent Grade 1 (mild) considered as negative.

56-84 represent Grades 2(moderate) considered as positive.

84-112 represent Grade 3(severe) considered as positive.

>56 are considered positive in screening test.

## **OBSERVATIONS & INTERPRETATIONS**

According to Likert scale, Grade II and III psychological morbidities were 90 percent combine.

**Table 1:** Prevalence of psychological morbidity

| Grade | Severity | Percentage |
|-------|----------|------------|
| I     | mild     | 10         |
| II    | moderate | 72         |
| III   | severe   | 18         |

**Table 2:** Gender wise prevalence of psychological morbidity

| Grades | Males (%) | Females (%) |
|--------|-----------|-------------|
| I      | 3 (6)     | 7 (14)      |
| II     | 33 (33)   | 39 (78)     |
| III    | 14 (28)   | 4 (8)       |

Grade II & III were 47 (94%) in males and 43 (86%) in females. Chi square test was not significant.

**Table 3:** Psychological morbidity according to age

| Age group | Grades   | No. (%) |
|-----------|----------|---------|
| 15-45 yrs | II & III | 41 (46) |
| 46-75 yrs | II & III | 49 (54) |

Grade II & III psychological morbidity were found to be 41(46%) in 15-45 years age group and 49 (54%) in 46-75 years age group which is significantly higher than previous age group (Chi square test (x2 = 7.54) p value < 0.05)

**Table 4:** Psychological morbidity according to Duration of illness

| Duration of illness | Grades (%)    |
|---------------------|---------------|
| 0-6 months          | II & III (52) |
| More than 6 months  | II & III (38) |

Grade II & III psychological morbidity were 52% in 0-6 months duration while it was 38% in more than 6 months duration (Chi square test (x2= 8.04), P value < 0.05 statistically significant)

### DISCUSSION

In our study it was observed that higher grades of psychological morbidity were present among cancer patients, as cancer is a chronic illness leading a patient to live in stress and which in turn develop psychological morbidity.

In our study males have slightly more psychological morbidity 47(94%) as compared to

female's 43(86%). This fact can be explained as in most of the families, males usually have the responsibility to run their families and when chief earning member of family falls terminally ill it will affects the entire family.

In the present study the psychological morbidity was 41(46%) in 15 – 45 years age group, and 49 (54%) in 46-75 yrs age group. The psychological morbidity was significantly higher in older age group. In the older age group individual already had some health problem which leads to development of more psychological problems and thus increases psychological morbidity.

In our study the psychological morbidity was found to be higher in 0-6 month duration (52%) as compared to (38%) in >6months duration. There was a statistically significant association in the duration of illness because as soon as the individual came to know that he is suffering from terminal illness like cancer, the affected person becomes shocked some time the person do not even accept the fact that he or she is suffering from such terminal illness. With the passage of time the affected person adapts and accommodate him or herself in a better way with the situation and thus reduces the morbidity and suffering

## LIMITATIONS:

Study was done with small sample size and in a single hospital set up.

#### **RECOMMENDATIONS:**

Study with large sample size may be undertaken. Stress relaxation session like Mood therapy, laughter therapy, stresses relieving therapy & meditation must be organized. Good counseling about disease and stress management is necessary. Recreation facility like television, magazines, news papers and spiritual books shall be made available in the hospital.

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