A Study to Assess the Level of Psychological Stress Among the Patients Diagnosed with Haematologic Malignancies and Their Immediate Caretakers in A Selected Quaternary Care Centre in Delhi

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I. INTRODUCTION

"Without belief, we would be left with nothing but an overwhelming doom, every single day. And it will beat you i didn't fully see, until the cancer, how we fight everyday against the creeping negatives of the world, how we struggle daily against the slow slapping of cynicism"

– Lance Armstrong

Haematologic malignancies are common malignant disorders. Their prevalence has increased significantly in recent decades, especially in developed countries and, therefore, they are a significant health problem with marked consequences for society and the economy. In the Indian studies, a wealth of evidence demonstrates that haematologic malignancies have adverse effects in a variety of domains, including quality of life, physical and mental health, and healthcare-related costs. The diagnosis, treatment and surveillance of haematological cancers often have a profound psychological impact on patients and their families and can result in clinically significant problems and increased carer stress. These may manifest at any stage from diagnosis to death or living as a survivor.

Most measuring instruments provide a holistic, overarching approach to psychological stress, which includes assessing a number of different aspects, such as social, family and work functioning, psychological well-being as well as environmental factors that may affect, at least to some degree, an individual's quality of life, such as physical environment, financial resources, educational attainment and employment opportunities

BACKGROUND OF RESEARCH

Patients with hematologic malignancies have a high symptom burden throughout the illness journey. Stress management interventions effectively reduces the symptoms.

Therefore, the study of psychosocial factors influencing the course and the experience of the severe disease has received increased attention, which is associated with the increasing acceptance of the biopsychosocial (BPS) model of health, in the scientific and in the clinical community. Psycho-oncology, the field examining cancer through the lens of psychology, suggests that most cancer patients deal with numerous personal and interpersonal problems and fears that have been called the 6 D's. These issues include discomfort, dependency, disability, disfigurement, disruption and death. Studies examining depression in haematological cancer patients revealed that those patients experience several burdens. Specifically, a review of Allart-Vorelli et al. (2015), based on various depression assessment tools results, pointed out that haematological cancer patients appear to have lower quality of life in the physical, psychological, emotional and social domains compared with the general population. Unsurprisingly, patients with hematologic malignancies exhibit lower overall health and extremely high levels of fatigue and pain, which are common features of such medical conditions. Patients also show cognitive impairments, such as problems with memory and attention, increased levels of anxiety and depression and decreased sexual activity, which is also linked to the development of a negative body image.

Their relationships with family members, although in many cases are likely to be strengthened, are characterized by high-stress levels, uncertainty and fear, while the person's friendly relationships may also be disrupted. These individuals also face work-related and financial challenges which are associated with the suppression caused by their disease and with the fact that hematologic cancer treatment is often expensive and takes place, almost exclusively, in urban areas, forcing patients and probably family members to temporarily change their residence from one place to another place.

NEED OF STUDY

The purpose of this study is to investigate psychological stress among the patients diagnosed with haematological malignancies and quality of life among patients and immediate care takers with hematologic malignancies and the possible relationships between them.

a) Patients show cognitive impairments, such as problems with memory and attention, increased levels of anxiety and depression and decreased sexual activity, which is also linked to the development of a negative body image.

b) Their relationships with family members, although in many cases are likely to be strengthened, are characterized by high-stress levels, uncertainty and fear, while the person's friendly relationships may be disrupted.

c) The purpose of this study is to assess psychological distress of patients with haematological malignancies.

PROBLEM STATEMENT

A study to assess the level of psychological stress among the patients diagnosed with haematologic malignancies & their immediate caretakers in a selected Quaternary Care Centre in Delhi.

AIM OF THE STUDY:

- ❖ To assess the level of psychological stress among the patients diagnosed with haematologic malignancies & immediate caretakers.

OBJECTIVES OF THE STUDY:

- ❖ To assess the psychological stress among the patients diagnosed with haematological malignancy.
- ❖ To assess the psychological stress among the immediate caretakers of the patients with haematologic malignancy.
- ❖ To assess the association between factors affecting psychological stress.
- ❖ To modify the treatment strategy for the patients diagnosed with haematologic malignancy.

OPERATIONAL DEFINITION:

- Assess

The word assess means to evaluate the psychological stress of patients.

- Psychological Stress:

Psychological stress can be defined as a state of worry or mental tension caused by a difficult situation (WHO)

- Haematological malignancies:

Haematological malignancies are cancers that begin in blood-forming tissue, such as the bone marrow, or in the cells of the immune system. (National Institute of Health)

- Quaternary Care Hospital:

Quaternary care has been defined as an extension of tertiary care in reference to advanced levels of medicine which are highly specialised and not widely accessed, and usually only offered in a very limited number of national and international centres.

- Care taker:

Any person, including a family member, who provides care or
assistance to one who is ill.

RESEARCH HYPOTHESIS

H1: There is a correlation between psychological stress and diagnosis of hematological malignancies

H0: There is no association between psychological stress and diagnosis of hematological malignancies

SELECTED DEMOGRAPHIC VARIABLES ARE:

- Age
- Sex
- Education level
- Occupation
- Social status
- Residence
- Diagnosis
- Duration of disease

SCOPE OF STUDY:

- The study will give awareness to patients to cope up with the haematological malignancy among the patient and their care takers.
- This study will help to identify the gap in knowledge and compliance so that further reinforcement in health education can be done.
- This study will help to understand the importance of improving mental and physical health outcomes and of reducing psychosocial stress of patients.

INCLUSION CRITERIA:

- ❖ Patients diagnosed with haematologic malignancy in AH R&R.
- ❖ Immediate caretakers of patients with haematologic malignancy.

EXCLUSION CRITERIA:

- ❖ Patients who have non-malignant haematological disorders.
- ❖ Patients/caretakers who are below 18yrs

DELIMITATIONS:

- ❖ Study is limited to the haematological malignancy patients and care givers of Quaternary care hospital.
- ❖ Data collection period is limited to 04 weeks
- ❖ Psychological stress of other patients and care givers are not assessed.
- ❖ Small sample size
- ❖ Other medical /surgical comorbidities.
- ❖ Health status of caretaker

II. REVIEW OF LITERATURE

A Literature Review is "a systematic, explicit, and reproducible method for identifying, evaluating, and synthesizing the existing body of completed and recorded work produced by researchers, scholars, and practitioners."

- Sarah Smith

Literature review is a comprehensive summary of previous research on a topic. The literature review surveys scholarly articles, books, and other sources relevant to a particular area of research. The review should enumerate, describe, summarize, objectively evaluate and clarify this previous research. It should give a theoretical base for the research and helps to determine the nature of the research. The literature review acknowledges the work of previous researchers, and in so doing, assures the reader that the work has been well conceived. It is assumed that by mentioning a previous work in the field of study, that the author has read, evaluated, and assimiliated that work into the work at hand. Review of literature is considered as an essential step of research process. It involves a systematic identification, location, scrutiny and survey of written material that contain information as a research problem.

The overall process of review of literature is to develop a strong knowledge base to carry out research and clinical practice activities. It helps to determine gaps and consistencies in the literature about a subject under study. Review of literature guides the investigator to design the proposed study in a scientific manner to achieve the desired results. It gives an overview of what has been said, who the key writers are, what the prevailing theories are and hypothesis, what questions are being asked, and what methods and methodologies are appropriate and useful.

Review of Literature related to:

• Haematologic malignancies

• Stress among patients with haematologic malignancy

• Stress among caretakers of patients with haematologic malignancy

A) REVIEW OF LITERATURE RELATED TO HEMATOLOGICAL MALIGNANCY:

In recent years, there has been an increased recognition that the principles of palliative care should be made available earlier in the course of any chronic terminal illness, and that these principles can be delivered alongside therapies intended to prolong life. Despite this, the available evidence got from a cross-sectional study conducted by Merrole Cole- Sinclair et al among 200 patients published in Journal of pain and symptom management in the year 2011 suggests that patients with haematological cancers are less likely to access palliative care services, and those who do are more likely to do so at a later stage of illness than patients with other malignancies.

A study that was conducted in 2021 by Department of Haematology, Medline, Embase, Cochrane by Vanessa Manitta et al among 200 patients to analyse the burden of haematological malignancy & treatment patterns, published online in Clinical lymphoid & myeloid leukemia, the results from Indian studies on adult Haematologic malignancy are heterogeneous, reporting a diverse incidence and poor overall outcomes using varied non-contemporaneous treatment protocols adapted from the developed world. They suggest that a comprehensive countrywide approach to diagnosis, treatment, and follow-up and the potential incorporation of novel therapies could improve the prognosis and outcomes of adult ALL in India.

Another study conducted by Rachel Zordan which was published in American Society of Haematology in the year 2014 gave a conclusion as there are significant challenges in the management of Haematological malignancy in India. The major reason for not proceeding with treatment is the absence of financial resources. Induction deaths are related to a high incidence of multi-drug resistant organisms and fungal infections. The biggest constraint is the cost of the treatment and the absence of a health security net to treat all patients with this diagnosis.

B) REVIEW OF LITERATURE RELATED TO STRESS AMONG PATIENTS WITH HAEMATOLOGIC MALIGNANCY

A study to evaluate whether chronic stress enhances progression of acute lymphoblastic leukemia via β-adrenergic signalling published online in National library of Medicine suggest that stress-related bio behavioural factors can accelerate progression of hematopoietic cancers such as acute lymphoblastic leukemia (ALL), but it is unclear whether such effects are causal or what biological pathways mediate such effects. Given the network of sympathetic nervous system (SNS) fibres that innervates the bone marrow to regulate normal (non-leukemic) hematopoietic progenitor cells, we tested the possibility that stress-induced SNS signalling might also affect ALL progression.

According to a cross-sectional study conducted by Psychiatry department of University of "Sotiria", Athens General Hospital Athens, Greece published in the journal of MEDICINE & PHARMACY REPORTS in the year 2020 a study to assess depression, anxiety & stress among patients with haematological malignancies and the association with quality of life showed result that health-related Quality of Life in haematological patients undergoing chemotherapy is affected by psychological distress. Qol domains such as physical Health, psychological Health, social relationships and general Health are negative affected by depression, anxiety and stress in patients with hematologic malignancies.

A study conducted by Department of Psychooncology in the year 2018 in assessing traumatic stress in acute leukemia patients concluded that symptoms of Acute Stress Disorder are common and often persist or recur following diagnosis or relapse of Acute Leukemia. They recommend research urgently to determine the impact of interventions to prevent and treat psychological distress in this population.

C) REVIEW OF LITERATURE RELATED TO PSYCHOLOGICAL STRESS AMONG CARETAKERSOF PATIENTS WITH HAEMATOLOGIC MALIGNANCY:

A study conducted by Department of Nursing, University of Peloponnese, published in the international journal of Indian Psychology to assess stress and coping among primary caregivers of patients with haematological malignancies found that most of the caregivers of hematologic cancer patients experience moderate stress and had average coping skills. It is important to establish a care program, so that the caregivers can their own health and provide the best care to the patient.

A study published in Top Legal Education in India in the year 2018 to assess the stress experienced and coping strategies adopted by the mothers of children suffering from Leukemia, it is shown that majority of the mothers of children suffering from Leukemia had been experiencing moderate level of stress and Coping Strategies adopted by them in most of the samples also were moderately successful. There was negative correlation between the experienced stress and adopted coping strategies; i.e., when stress experience was increasing, coping was decreasing and also had significant correlation. There was no significant association between stress and selected variables and coping strategies also had no significant association with selected variables.

According to study conducted by Department of Psychology, Faculty of Humanities Sciences, Islamic Azad University Sari Branch, Sari, Iran published in Journal of Nursing & midwifery sciences indicated that positive thinking training has a great impact on depression, anxiety, and several areas of quality of life in this group of mothers of children with Leukemia compared to control group. Hence, using positive thinking intervention can be a helpful and supportive therapy to traditional training.

III. METHODOLOGY

INTRODUCTION

Research methodology is a systematic way to solve the research problem. In this chapter the research methodology is described in terms of design, methods, population, instruments and procedures used for data collection as well as procedures used during the data analysis. The research design enables the researcher to achieve the purpose and objectives of the study.

RESEARCH APPROACH

Research approaches are the plans and procedures for research that span the steps from broad assumptions to detailed methods of data collection, analysis and interpretation. The approach used by the researcher was descriptive study with the help of self–administered structured questionnaire and standardized tools. Descriptive research provides an accurate account of characteristics of an individual, event or group in real life situations.

RESEARCH DESIGN

The research design is a blueprint or outline for conducting the study in such a way that maximum control will be exercised over factors that could interfere with the validity of the research results. It is the researcher's overall plan for obtaining answers to the research questions guiding the study. Designing helps researchers to plan and implement the study in a way that will help them to obtain the intended results, thus increasing the chances of obtaining information that could be associated with the real situation.
The study design adopted by the investigator in the present study is non-experimental design.

The study was conducted in two phases.

❖ Phase I:

- Identifying the target population

- Administration of self-administered structured questionnaire and standardized tools

❖ Phase II:

- Tabulation
- Analysis and interpretation
- Inference of data collected.

RESEARCH SETTING

The research setting is the physical, social and cultural site in which the researcher conducts the study. The main study was conducted in the Haematology department of a quaternary care hospital. In this study the data was collected from patients who are diagnosed with hematological malignancies and their immediate care takers.

POPULATION

Population is defined as the totality of all subjects that conform to a set of specifications, comprising the entire group of persons that is of interest to the researcher and to whom the research results can be generalized. Patients diagnosed as a case haematological malignancies and their immediate care takers of haematology department were selected as our sample population.

IDENTIFICATION OF TARGET AND ACCESSIBLE POPULATION

Target population is the entire set of unit for which the research data is used to make inference whereas accessible population is subset of target population from where samples are drawn.
In this study, the target population identified was all adult patients diagnosed with haematological malignancies and their immediate care takers in the haematology ward and day care centre. The accessible population was the patients with haematological malignancies and their immediate care takers in the haematology department of a quaternary care hospital at the time of data collection period fulfilling the inclusion criteria and willing to participate in the study.

SAMPLE

A sample is a subset of population selected to participate in a study. In this study sample consisted of 50 haematology malignancy patients and their immediate care takers from the selected quaternary care hospital.

SAMPLING TECHNIQUE

Sampling is the process of selecting cases to represent an entire population so that inferences about the population can be made. A research population is generally a large collection of individuals or objects that is the focus of scientific study. Due to large size of population researchers often cannot test every individual in the population as it is too expensive and time consuming. This is the reason why researchers rely on sampling techniques.
The investigator used simple random sampling technique for the study. In this type of sampling design, every population member has a similar chance of being picked as the subject. The researcher included patients with haematological malignancies and their immediate care takers

who were available during the data collection period in both in-patient and out-patient department. Considering the limited period and availability of the sample, simple random sampling was selected as it is more appropriate and suitable for this study.

SAMPLE SIZE

Sample size refers to the number of sample elements from which the data is collected to evaluate the findings to be statistically significant. Sample size in our study is 50.

INCLUSION CRITERIA

a) Patients diagnosed with hematologic malignancy in AH R&R and their immediate care takers.

EXCLUSION CRITERIA

a) Patients who have non-malignant haematological disorders.
b) Patients who are below 18yrs

VARIABLES

Variables are qualities, properties or characteristics of persons, things or situations that change or vary. In this study the research and demographic variables are as follows:

- Research variables:
- Socio- Demographic variables:

TOOL AND TECHNIQUES

The DASS is a 21-item self-report instrument designed to measure the three related negative emotional states of depression, anxiety and tension/stress. The principal value of the DASS in a clinical setting is to clarify the locus of emotional disturbance, as part of the broader task of clinical assessment. The essential function of the DASS is to assess the severity of the core symptoms of depression, anxiety and stress. As the scales of the DASS have been shown to have high internal consistency and to yield meaningful discriminations in a variety of settings, the scales should meet the needs of both researchers and clinicians who wish to measure current state or change in state over time (e.g., in the course of treatment).

DEVELOPMENT OF BLUE PRINT

A blue print of the instruments was developed. The first part was the socio demographic questionnaire consisting of 10 items. The second part of the tool was a standardized questionnaire (DASS SCALE) to assess the psychological stress among patients who diagnosed with haematological malignancies.

VALIDITY

Validity is the degree to which inferences made in a study are accurate and well founded. Content validity refers to the degree to which an instrument measures what it is supposed to measure. Socio demographic questionnaire was submitted to experts to ensure content validity. The experts were selected based on their clinical/ teaching experience and interest in the problem studied.

The semi-structured socio demographic questionnaire was validated by the following experts:
(01) Brig Rajan Kapoor VSM, HoD, Medical & Clinical Hematology
(02) Col Rajeev Kumar, Senior Advisor, Medical & Clinical Hematology
(03) Maj Priyadarshika Pradhan, Onco Matron
As per their suggestions and guidance necessary changes were made and final tool was formed.

RELIABILITY

Reliability is the degree of consistency or dependability with which an instrument measures an attribute. The reliability of a measuring instrument is a major criterion for assessing its quality and adequacy. Dass scale standardized scale.

TRANSLATION OF TOOL

The socio demographic questionnaire was translated to Hindi versions.

DESCRIPTION OF INSTRUMENT

Data collection instruments refer to devices used to collect data such as standardized self-report questionnaire and semi-structured demographic questionnaire. The most important and crucial aspect of any investigation is the collection of appropriate information which would provide necessary data.

Questionnaire is the most efficient and objective method and it is a quick and generally inexpensive means of obtaining data from many respondents. A semi-structured questionnaire was constructed to assess the socio demographic data of the subjects. After obtaining permission from the author, investigator used DASS SCALE for assessing the stress in patients who are diagnosed with haematological malignancies. The tool was selected according to the objectives of the study.

TESTING OF THE TOOL

Testing of the structured tool was done to avoid ambiguity in the language and to establish appropriateness of the term used and to determine the clarity in direction.

Tool was found to be clear, understandable and unambiguous. The average time spent for each respondent was 20 minutes to answer the questions.

APPROVAL

The study proposal was scrutinized thoroughly by the subject experts to exclude violation of human rights and was agreed upon by the ethical committee board of the institution.

PERMISSION

The investigator had obtained formal permission to conduct the research study from the administrative authorities of the quaternary level hospital mentioned in the study.

CONSENT

The participants were given the full right of self-determination as to whether to participate in the study. Participant's right to privacy was maintained. Informed consent was taken from each

subject after explaining the purpose of the research. The principles were not violated, and emphasis was given to the sensitive aspects of human behaviour.

PRIVACY

No revelation of any information identifying the participant, or the study setting was mentioned in the tool. Their names were represented as codes in the compiled data sheet. Anonymity of all the participants and confidentiality of the information conveyed was ensured throughout the study.

PROTECTION

The respondents were not subjected to any kind of physical or psychological harm. No subjects were forced into the study. Lastly the information gathered was not misused in any form to exploit the participants.

DEBRIEFING

The purpose of the research was briefed to the participants

REWARDS/PROMISES

There were no rewards or promises offered to the participants. However, informational and technical assistance and support was extended to all the participants by the investigator during their period of association with hospital.

FINAL DATA COLLECTION

After obtaining the formal permission from the concerned hospital authorities the data collection commenced in the months of April, May and June.

The haematology department authorities were approached and explained the nature of help and cooperation required for conducting the research. Self-introduction was given and then rapport was established with the respondent. The following steps were followed:

- Informed written consent was obtained from willing and eligible participants.
- Separate code numbers were used for each respondent.
- The patient's data was collected through interviewing.
- Respondents were interviewed for collecting socio demographic data
- They were provided DASS scale for self-reporting.
- The socio demographic data and quality of life scores were entered to an Excel database and analysed.

DATA ANALYSIS PROCEDURE

After organizing data on the master sheet, tabulation and analysis was done using the following descriptive and inferential statistics:

The analysed data is presented in the form of tables, figures and graphs

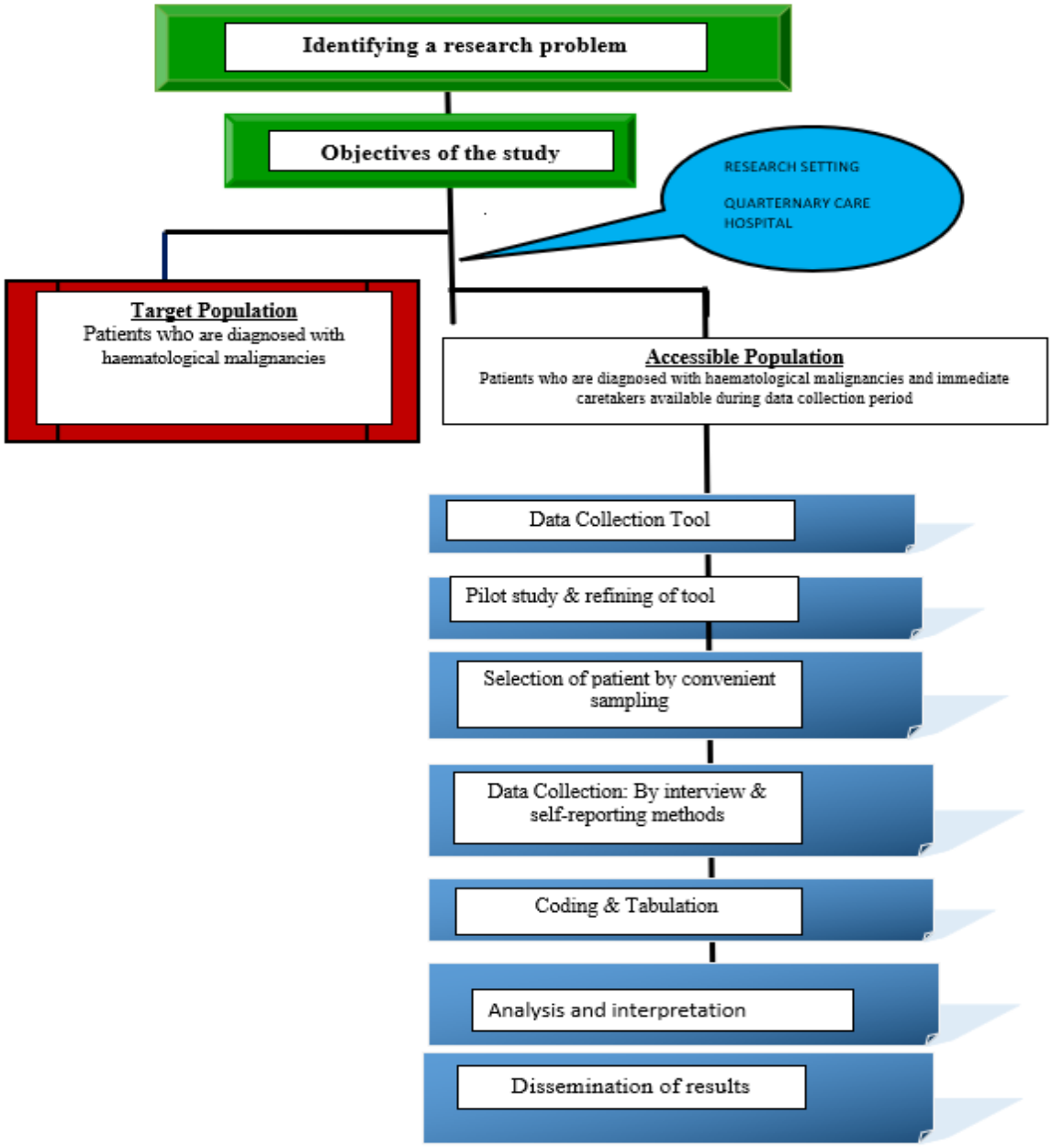


Fig1: Schematic Presentation of Research Methodology

SUMMARY

This chapter explicitly described the sequence in which the investigator had carried out the research. It described the research approach, research design, setting, sample, sampling method, research tool, validity and reliability of tool, pilot study and data collection procedure adopted for the study.

IV. DATA ANALYSIS AND INTERPRETATION

Analysis and interpretation of data is the most important phrase of research process which involves computation of certain measures along with searching of patterns of relationships that exist among data groups. Analysis is "categorizing, ordering, manipulating and summarizing the data to obtain the answer of the question."

Analysis is done to interpret and understand the data collected so that the researcher can reach the conclusion. It is performed based on objectives and hypothesis of the study. Through this the research problem can be studied and tested.
In this chapter the data collected from the samples are organized, coded, tabulated, analyzed, described and interpreted using descriptive statistics in the form of tables and graphs.
The data collected includes socio-demographic variables and structured questionnaire to assess the psychological stress among the patients diagnosed with hematological malignancies and quality of life among patients and immediate care takers with hematological malignancy patients admitted in a Quaternary care hospital, Delhi.

OBJECTIVE OF THE STUDY

i) To evaluate psychological distress of patients with hematological malignancies, as well as to identify the prognostic factors that aggravate their condition.
ii) To assess the psychological distress of their immediate care takers.
iii) To modify the treatment modality by including frequent counselling sessions for patients as well as their caretakers.

ORGANISATION OF STUDY FINDINGS

The data collected are organized, tabulated, analyzed and presented under the following headings-

- Section I: -Description of socio demographic variables. This section deals with the description of socio-demographic variables of the selected sample. The social demographic variables include
  - Gender
  - Age
  - Marital status
  - Number of children
  - Education
  - Employment
  - Residence
  - Living arrangement
  - Disease
  - Duration of disease

- Section II - Assessment of the psychological stress level by DASS scale among hematological malignancy patients and their care takers admitted in quatenary Care Hospital, Delhi. The data has been analyzed using descriptive statistics and distribution of sample in relation to the demographic variables has been explained. They have been represented with the help of tables and graphs.

Table -1: Distribution of gender in frequency and percentage:

n = 50

GENDER:

Gender	No	%
Male	17	34
Female	33	66

Table 1: depicts, males are 17 (34%) among the sample and females are 33 (66%) among the samples.

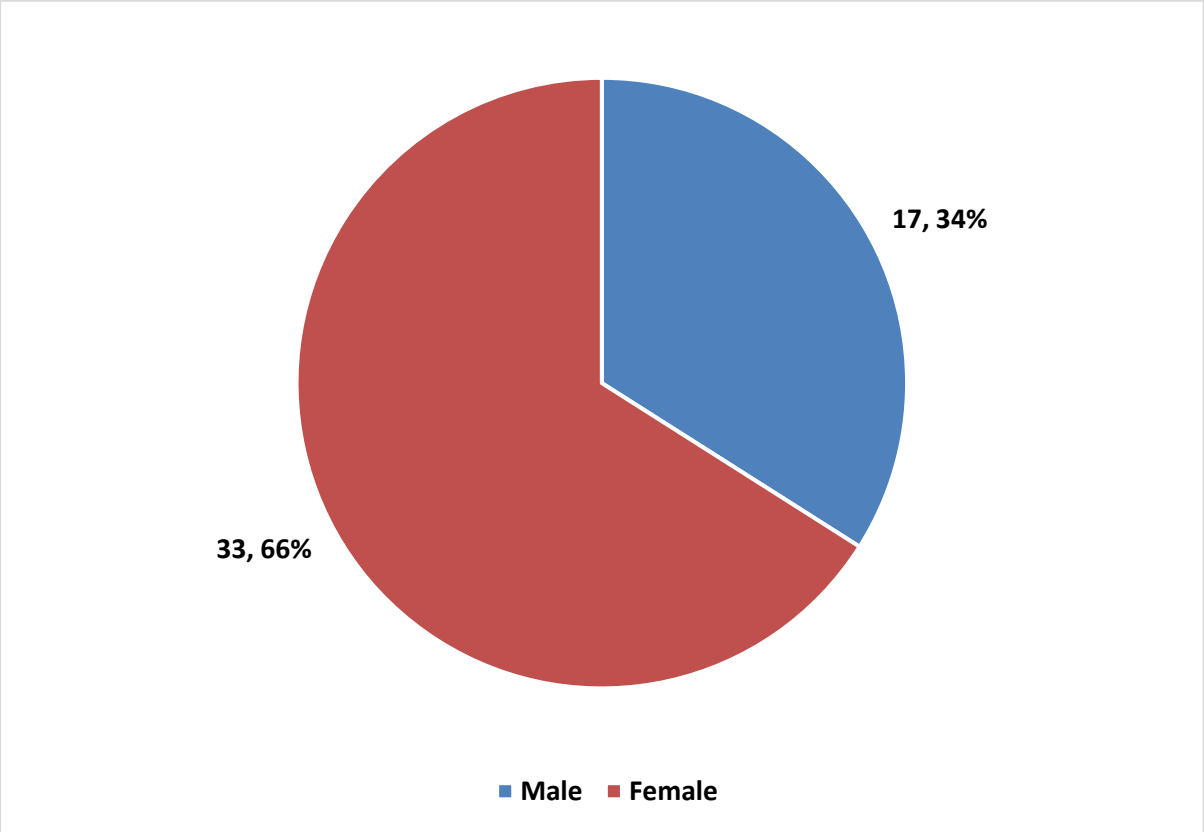


Figure 1: Simple pie graph representing distribution of gender with respect to haematological malignancy patients.

Table -2: Distribution of age in frequency and percentage

n = 50

AGE:

Age	No	%
20-34	16	32
35-49	20	40
50-64	11	22
65-80	3	6

Table 2 depicts, 16 were in the age group of 20-34(32%); 20 in the age group of 35-49 (40%); 11 in age group 50-64 (22%); 3 in age group 65-80yrs (6%).

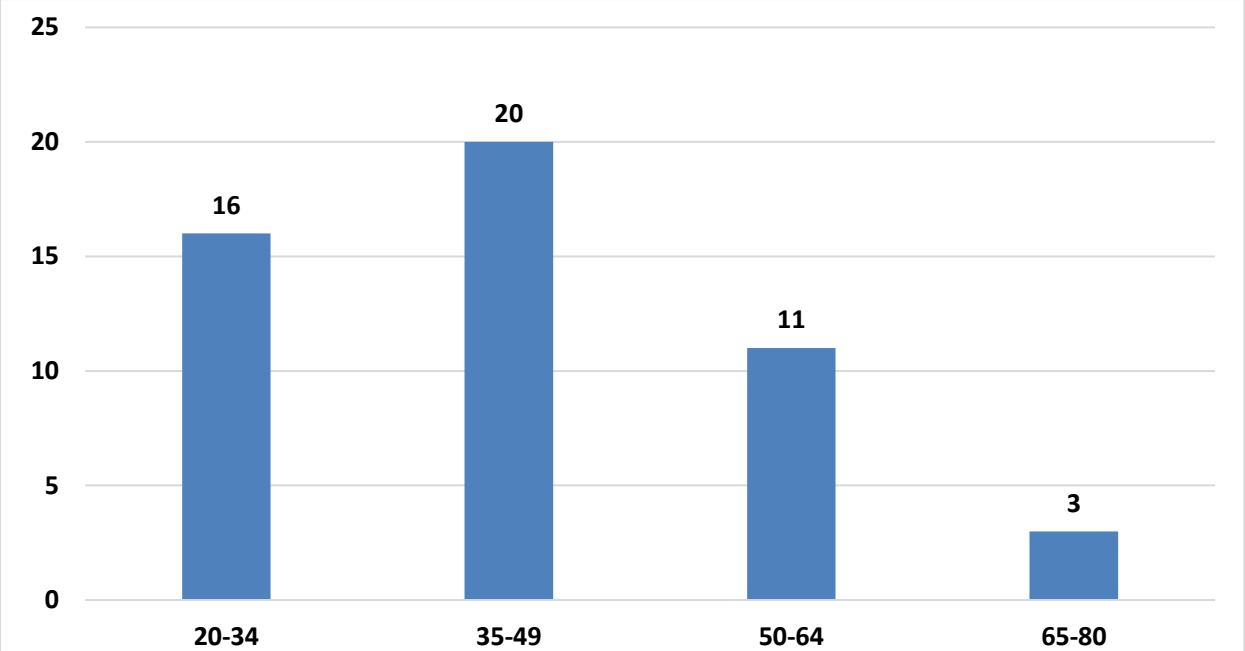


Figure 2: Simple bar diagram representing age wise distribution of samples

Table -3 : Distribution of marital status in frequency and percentage:

n = 50

MARITAL STATUS:

Marital status	No	%
Married	46	92
Unmarried	4	8

Table 3 depicts, 46 were married (92%) and 4 were unmarried (8%)

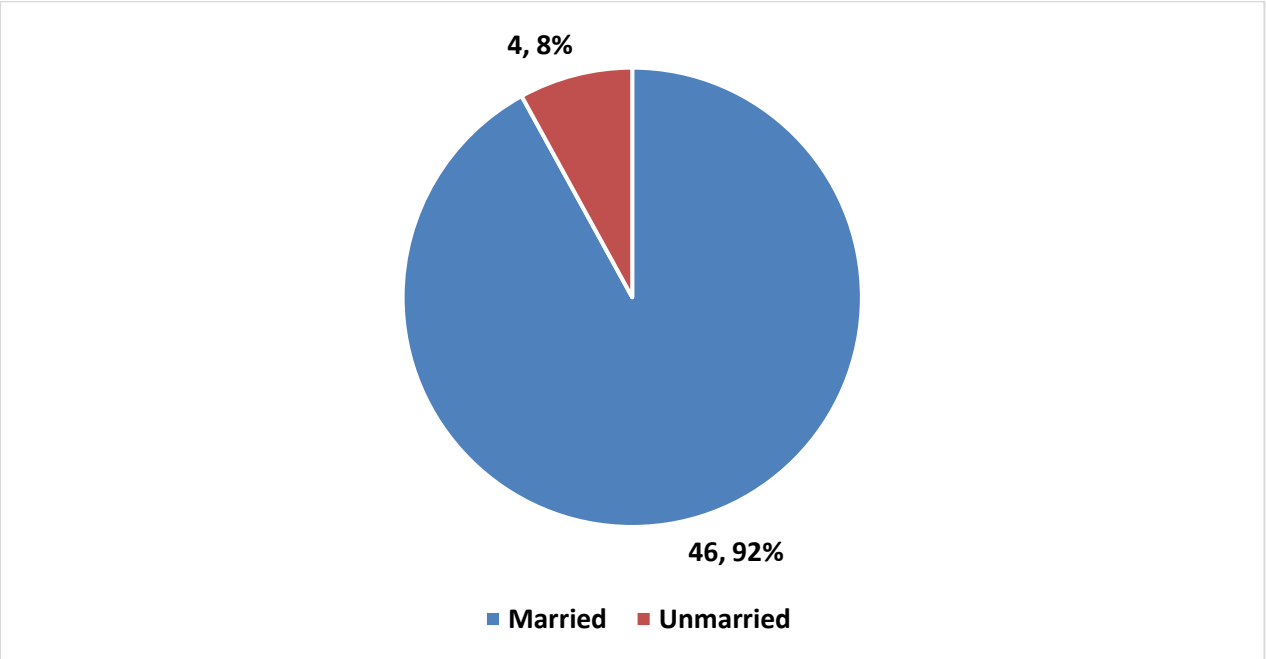


Figure 3: Simple pie graph representing distribution of samples with respect to their marital status

Table -4: Distribution of no of children in frequency and percentage

n = 50

NO. OF CHILDREN:

No. of children	No	%
0	8	16
1 to 2	39	78
>2	3	6

Table 4 depicts, 8 were not having children (16%); 39 were having 1-2 children (78%); 3 were having more than 2 children (6%).

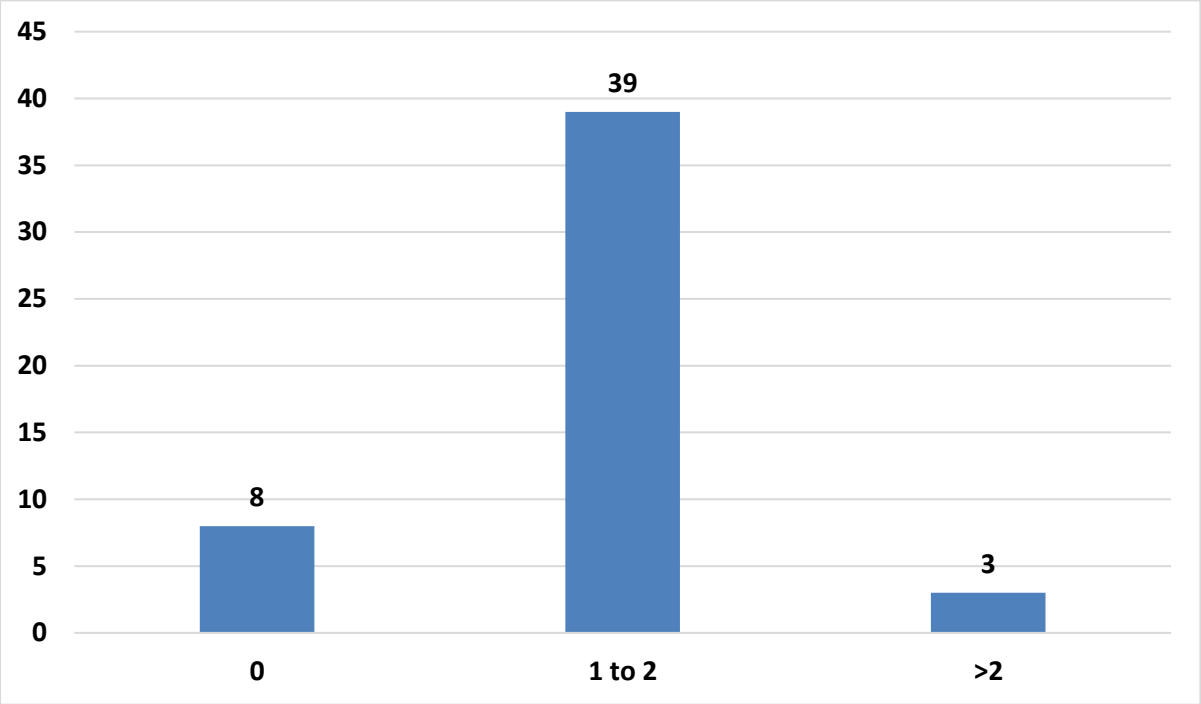


Figure 4: Simple bar diagram representing children wise distribution of samples

Table -5 : Distribution of educational qualification in frequency and percentage

n = 50

EDUCATION:

Education	No	%
Illiterate	7	14
Read & write	26	52
Diploma	8	16
Bachelor	9	18

Table 5 depicts, 7 were illiterate (14%); 26 were able to read and write (52%); 8 were completed diploma (16%);9 were bachelor (18%).

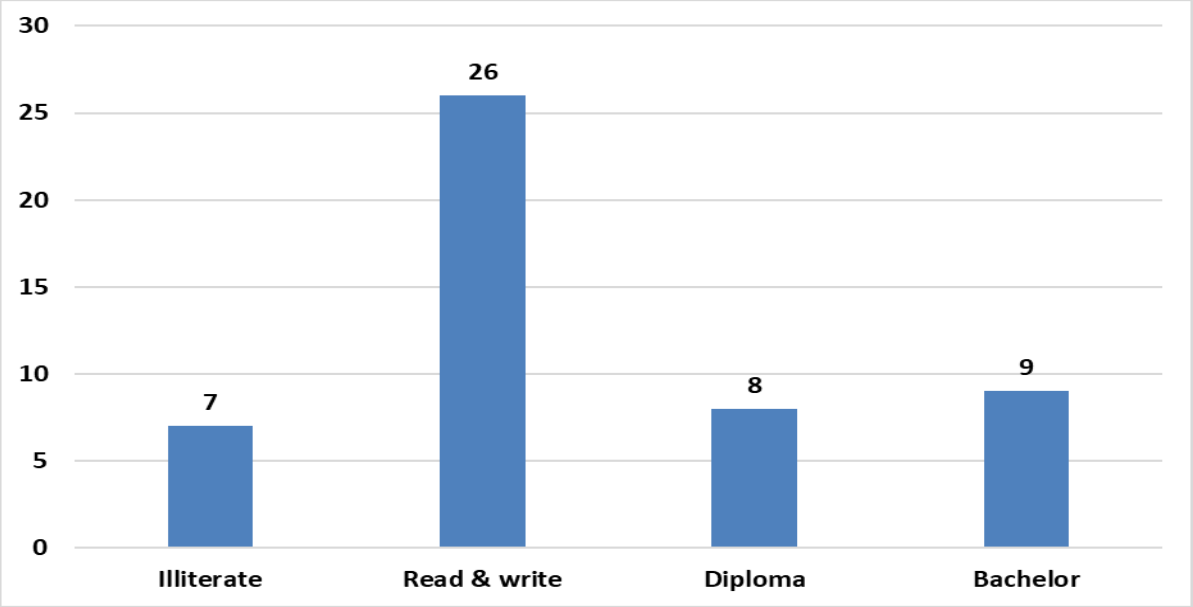


Figure 5: Simple bar diagram representing educational qualification of samples

Table -6 : Distribution of employment status in frequency and percentage

n = 50

EMPLOYMENT STATUS:

Employment	No	%
Clerical	6	12
Technical	16	32
House wife	14	28
Retired	3	6
Not working	11	22

Table 6 depicts, 6 were doing clerical job (12%); 16 were doing technical job (32%); 14 were housewife (28%); 3 were retired; 11 were not working (22%).

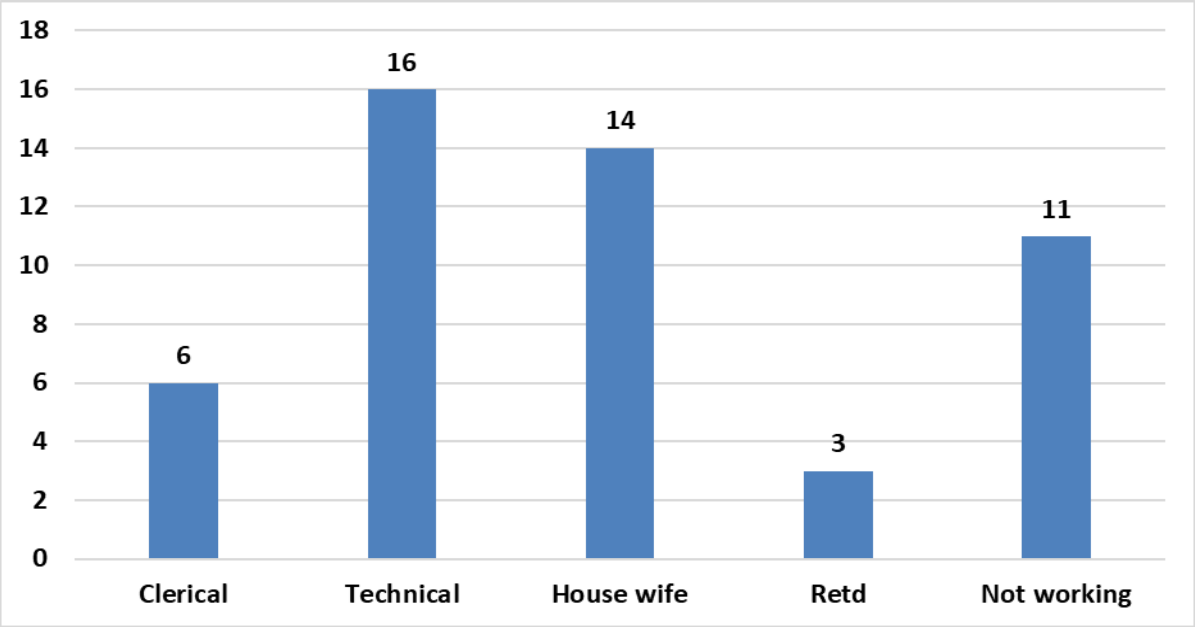


Figure 6: Simple bar diagram representing educational status of samples

Table -7 : Distribution of residential area in frequency and percentage

n = 50

RESIDENCE:

Residence	No	%
Urban	10	20
Semi urban	21	42
Rural	19	38

Table 7 depicts, 10 were from urban area (20%); 21 were from semi urban area (42%); 19 were from rural area (38%).

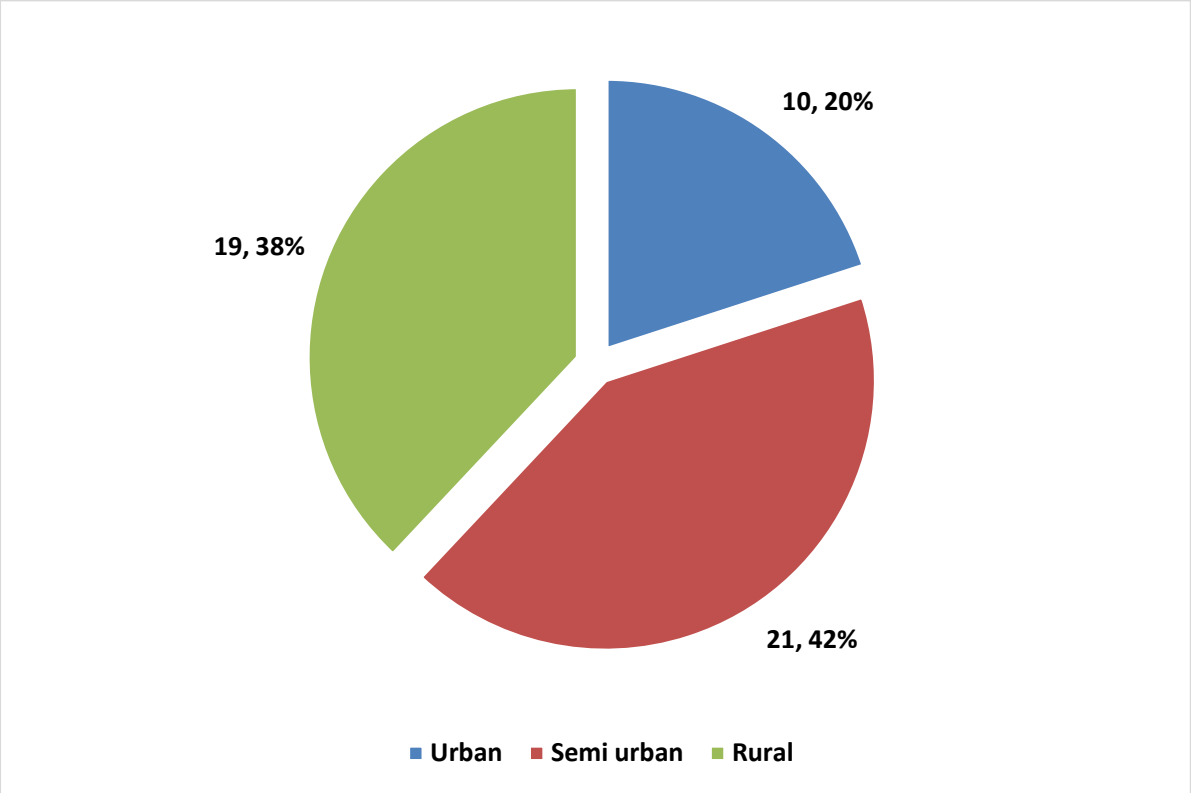


Figure 7: Simple pie graph representing distribution of samples with respect to the residential area

Table -8: Distribution of living arrangement in frequency and percentage

n = 50

LIVING ARRANGEMENT:

Living arrangement	No	%
Alone	4	8
With family	46	92

Table 8 depicts, 4 were living alone (8%); 46 were living with family (92%).

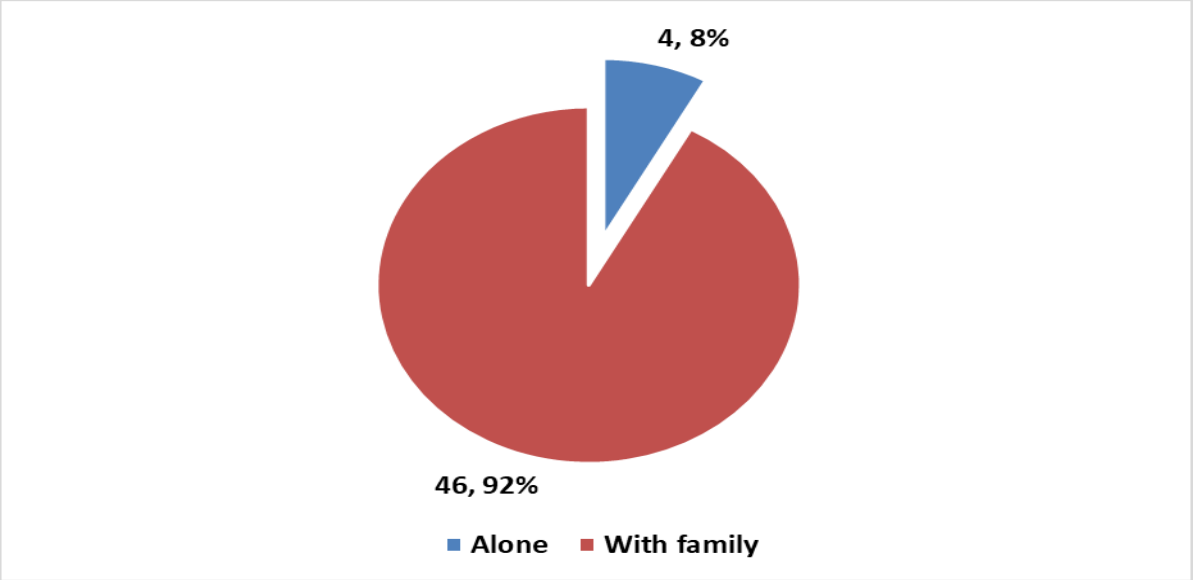


Figure 8: Simple pie graph representing distribution of samples with respect to their living status

Table -9 : Distribution of sample disease in frequency and percentage

n = 50

DISEASE:

Disease	No	%
Leukemia	25	50
Lymphoma	6	12
MM	9	18
MDS	3	6
Other	7	14

Table 9 depicts, 25 were leukemia patients (50%); 6 were lymphoma patients (12%); 9 were myeloma patients (18%);3 was MDS patients (6%); 7 were having other haematological malignancies (14%)

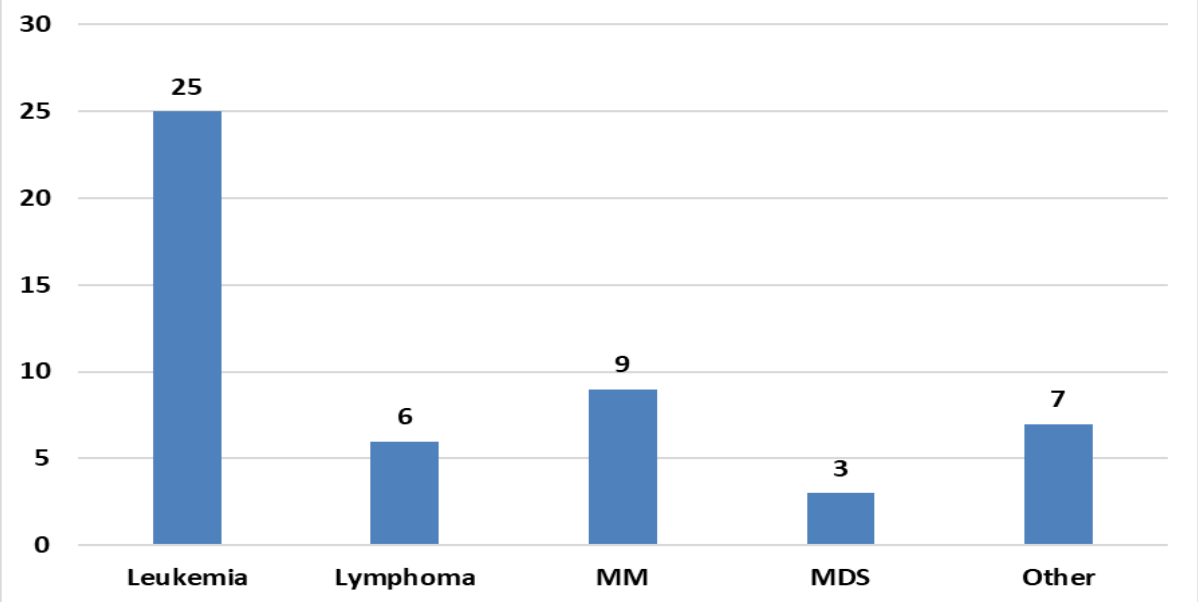


Figure 9: Simple bar diagram representing the disease of samples.

Table -10: Distribution of disease duration in frequency and percentage

n = 50

DURATION OF DISEASE:

Duration of disease	No	%
<5 yrs	34	68
>5 yrs	16	32

Table 11 depicts, 34 were having more than 5 yrs of disease (68%); 16 were having less than 5 yrs of disease (32%).

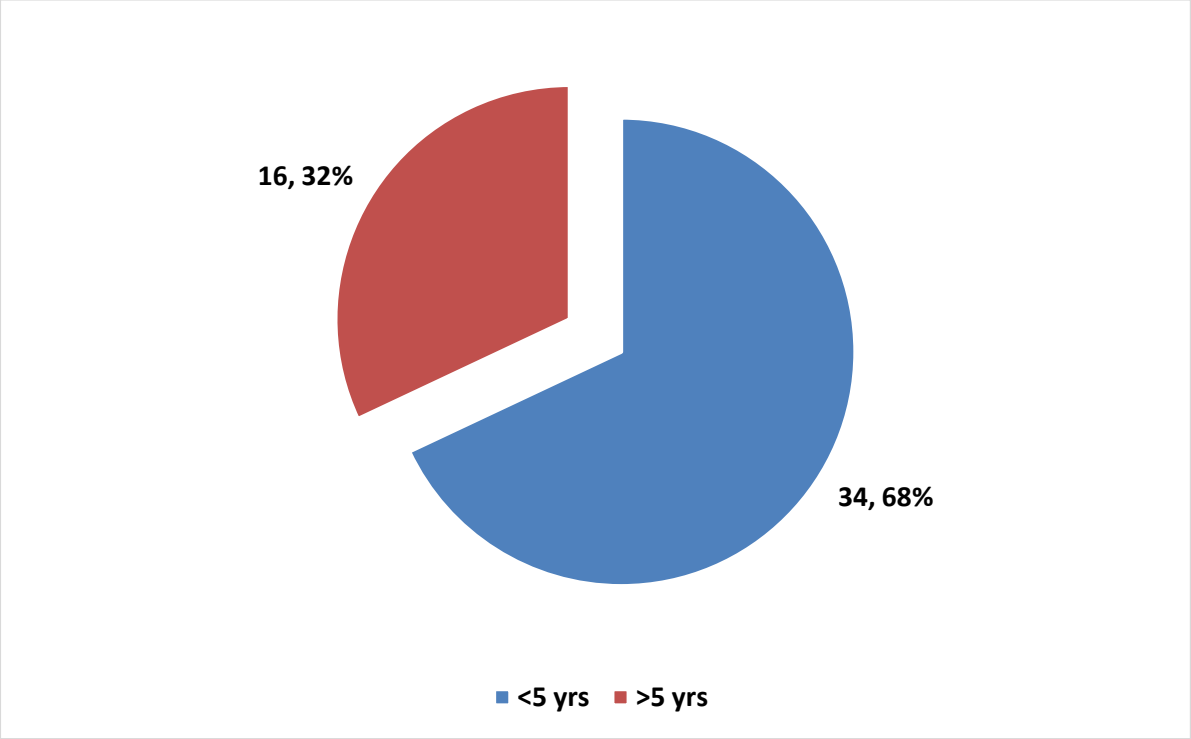


Figure 11: Simple bar diagram representing the disease duration of samples

Table -12 : Distribution of stress among samples in frequency and percentage

n = 50

STRESS

Stress	No	%
Extremely severe	23	46
Mild	3	6
Moderate	12	24
Normal	6	12
Severe	6	12

Table 14 depicts, 23 were extremely stressed (46%); 3 were mildly stressed (6%); 12 were moderately stressed (24%); 6 were normal (12%); 6 were severely stressed (12%).

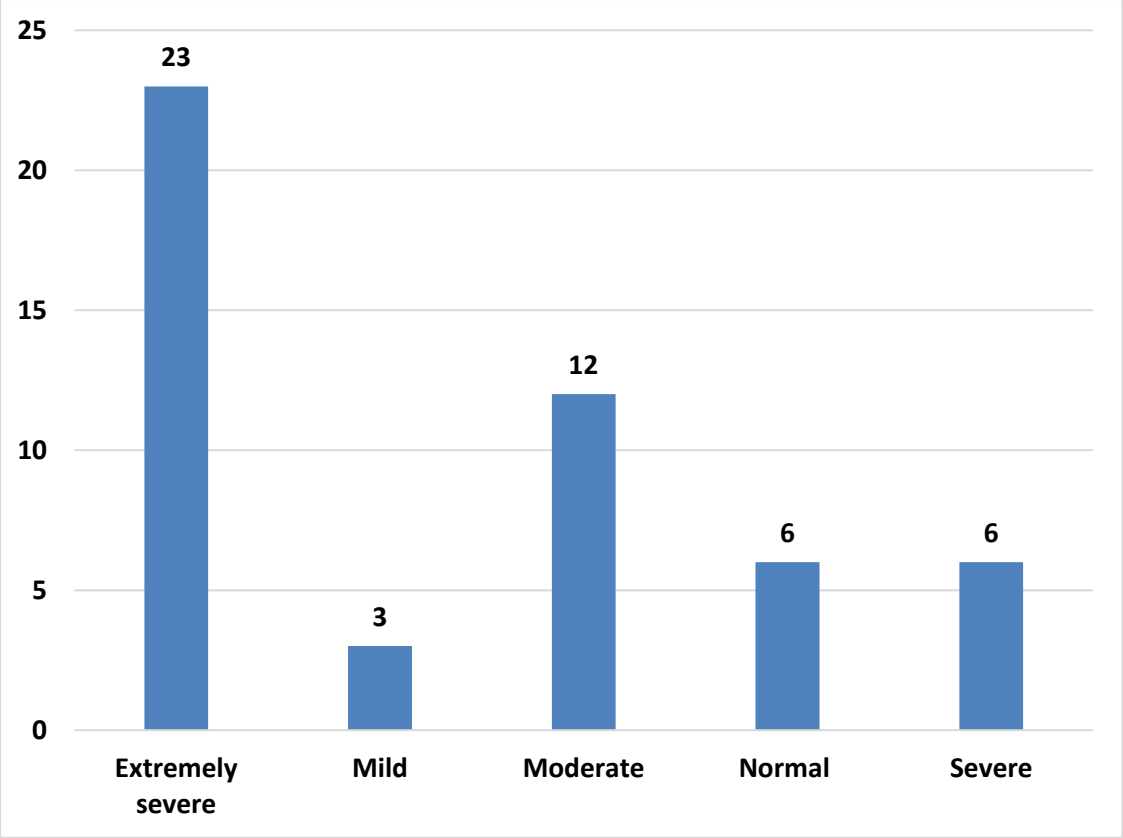


Figure 12: Simple bar diagram representing stress among distribution of samples.

Table -13 : Distribution of stress vs disease in frequency and percentage

n = 50

STRESS VS DISEASE:

Stress/Disease	Leukemia	Lymphoma	MDS	MM	OTHERS	Total
Extremely severe	10	6	2	4	1	23
Mild	2	0	0	0	1	3
Moderate	8	0	1	1	2	12
Normal	3	0	0	1	2	6
Severe	2	0	0	3	1	6
Total	25	6	3	9	7	50

Table 13 depicts, 23 were extremely stressed (66%); 3 were mildly stressed (6%); 6 were normal (12%) ; 6 were severely anxious (12%).

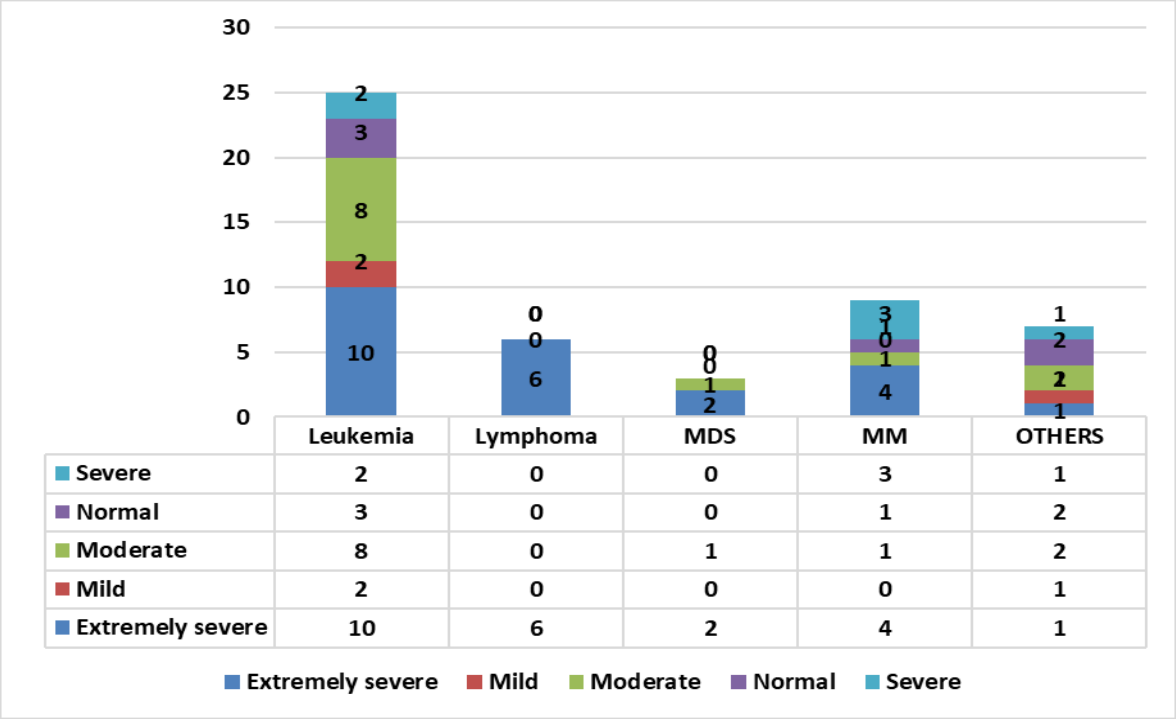


Figure 13: Simple bar diagram representing stress vs disease wise distribution of samples.

Table -14 : Distribution of gender vs disease in frequency and percentage

n = 50

GENDER VS DISEASE:

Gender/Disease	Leukemia	Lymphoma	MDS	MM	OTHERS	Total
Female	17	5	3	5	3	33
Male	8	1	0	4	4	17
Total	25	6	3	9	7	50

Table 18 depicts, 33 were female among the sample vs disease (66%): 17 were male among the sample vs disease (34%).

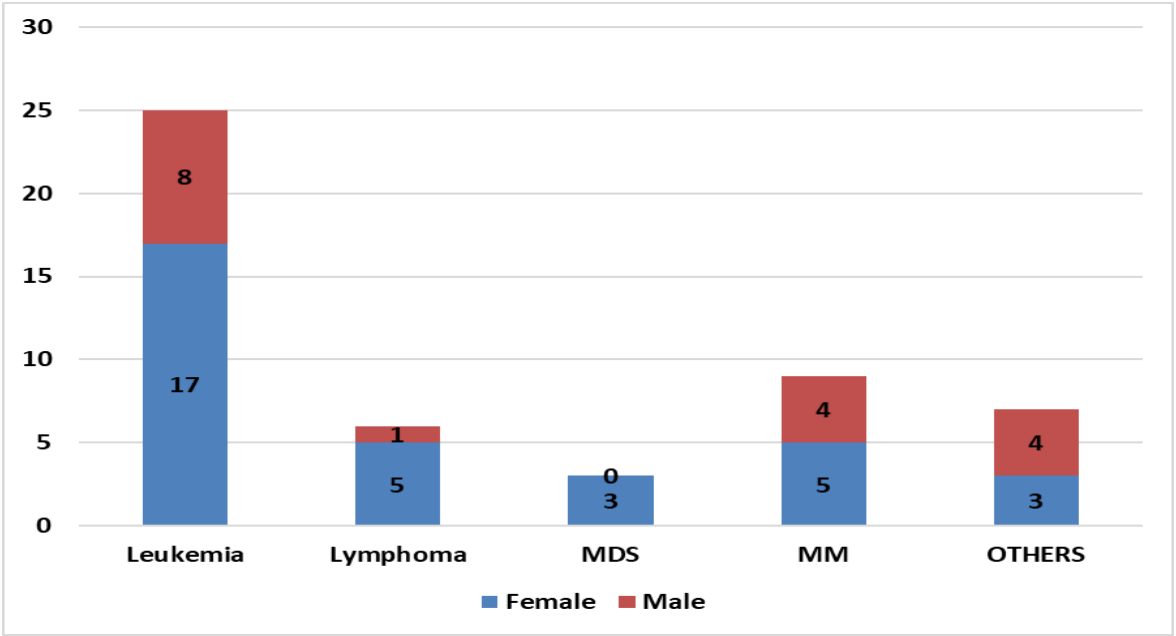


Figure 14: Simple bar diagram representing gender vs disease wise distribution of samples

Table -15 : Distribution of age vs disease in frequency and percentage

n = 50

Age/disease	Leukemia	Lymphoma	MDS	MM	Others	Total
20 - 34	12	0	2	0	2	16
35 - 49	7	3	1	4	5	20
50 - 64	4	3	0	4	0	11
65 - 80	2	0	0	1	0	3
Total	25	6	3	9	7	50

AGE VS DISEASE:

Table 15 depicts, 16 (32%) were in the age group of 20-34yrs among the disease; 20 (40%) were in the age group of 35-49yrs among the disease; 11(22%) were in the age group of 50-64yrs among the disease ;2 (4%) was in the age group 65 -80yrs among the disease

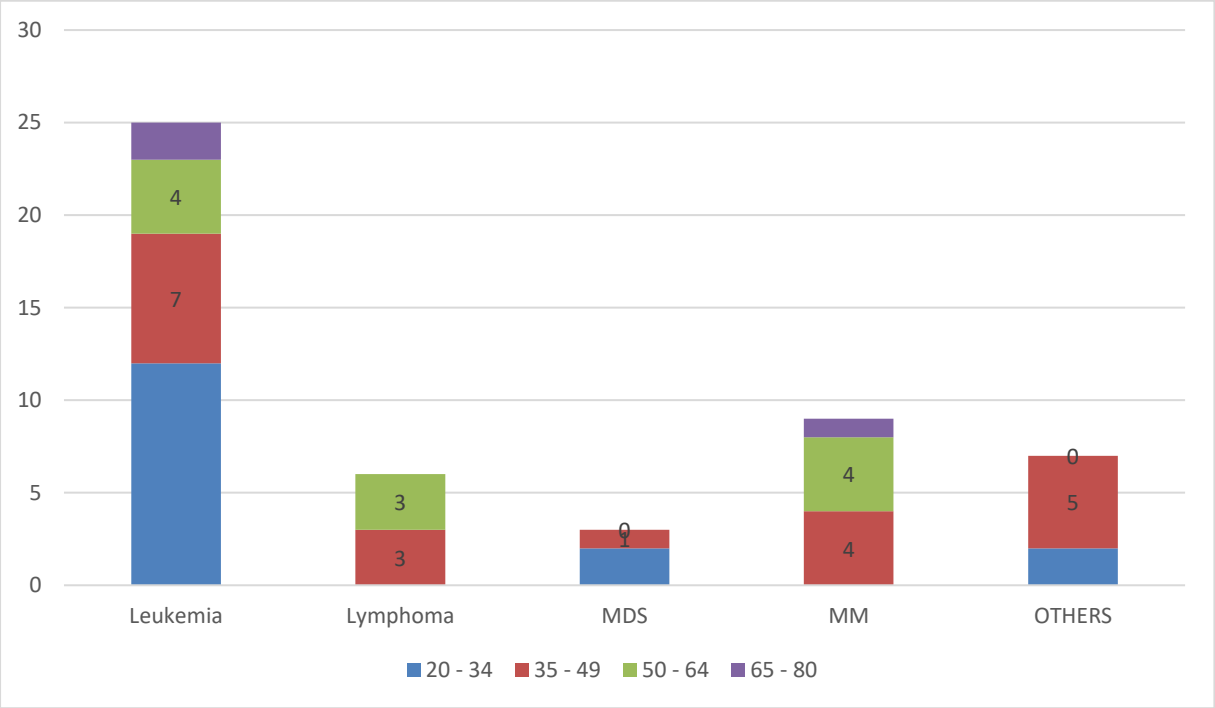


Figure 15: Simple bar diagram representing age wise distribution of samples

Table -16: Distribution of age vs stress in frequency and percentage: n = 50

AGE Vs STRESS:

Age	Stress									
	Extremely severe		Mild		Moderate		Normal		Severe	
	no	%	no	%	no	%	no	%	no	%
20 - 34	7	44	1	6	6	38	1	6	1	6
35 - 49	8	40	1	5	3	15	5	25	3	15
50 - 64	6	55	1	9	2	18	0	0	2	18
65 - 80	2	67	0	0	1	33	0	0	0	0

Table 16 depicts the severity of stess level according to the age level among the samples .

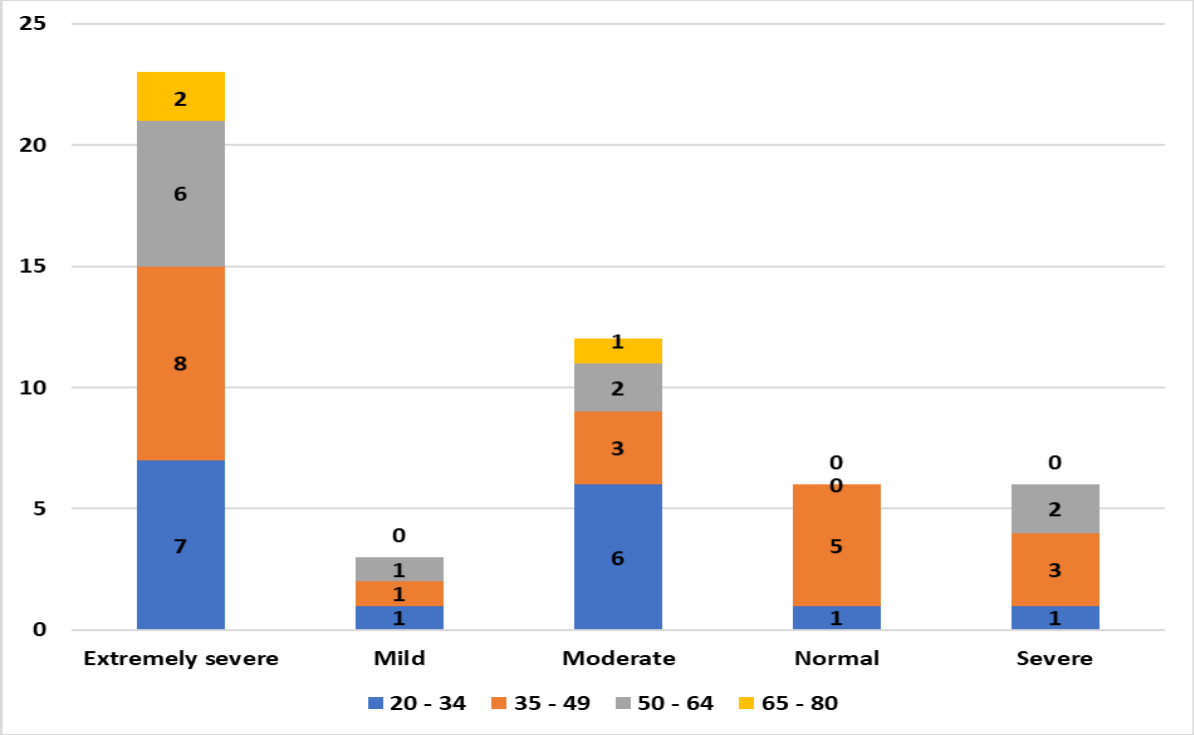


Figure 16: Simple bar diagram representing age vs stress wise distribution of samples.

Table -17 : Distribution of age vs stress in frequency and percentage

n=50

Gender	Stress									
	Extremely severe		Mild		Moderate		Normal		Severe	
	No	%	no	%	no	%	no	%	no	%
Female	15	46	2	6	5	15	6	18	5	15
Male	8	47	1	6	7	41	0	0	1	6

Gender vs stress:

Table 17 depicts severity of stress level among the gender of the samples

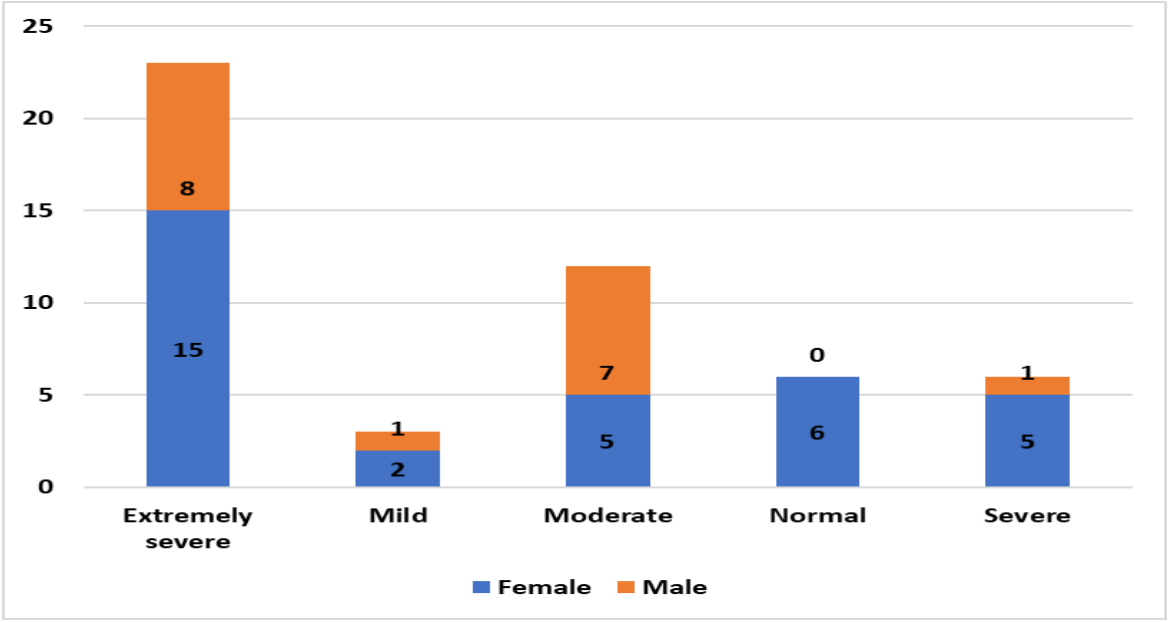


Figure 17: Simple bar diagram representing gender vs stress wise distribution of samples.

Table -18 : Distribution of education vs stress in frequency and percentage

n=50

Education	Stress									
	Extremely severe		Mild		Moderate		Normal		Severe	
	no	%	no	%	no	%	no	%	no	%
Bachelor	2	22	1	11	2	22	3	33	1	11
Diploma	5	63	0	0	2	25	0	0	1	13
Literate	3	43	0	0	1	14	1	14	2	29
Read & write	13	50	2	8	7	27	2	8	2	8

Education vs stress:

Table 18 depicts severity of stress level among the educational status of the samples

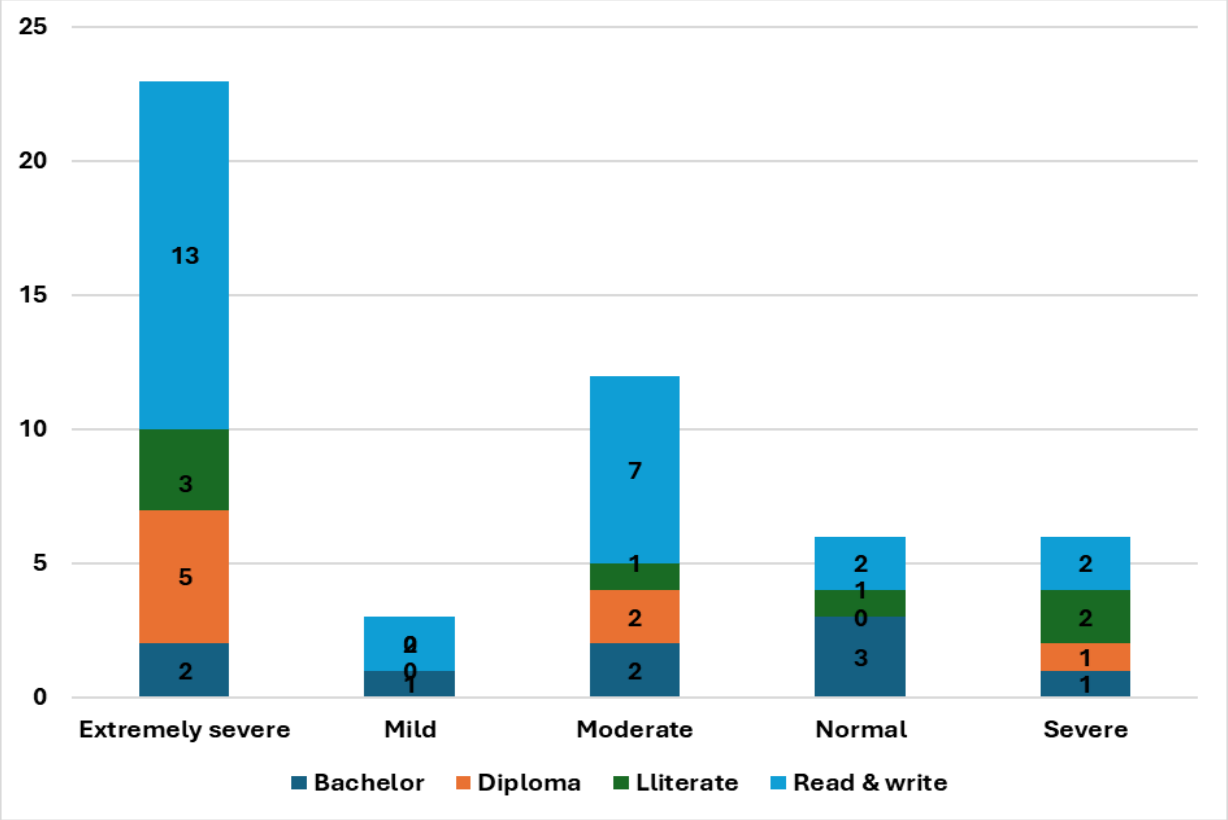


Figure 18 Simple bar diagram representing education vs stress wise distribution of samples

Table -19 : Distribution of marital status vs stress in frequency and percentage

n=50

Marital_status	Stress									
	Extremely severe		Mild		Moderate		Normal		Severe	
	no	%	no	%	no	%	no	%	no	%
Married	20	44	2	4	12	26	6	13	6	13
Unmarried	3	75	1	25	0	0	0	0	0	0

MARITAL STATUS VS STRESS

Table 19 depicts severity of stress level among marital status of the samples

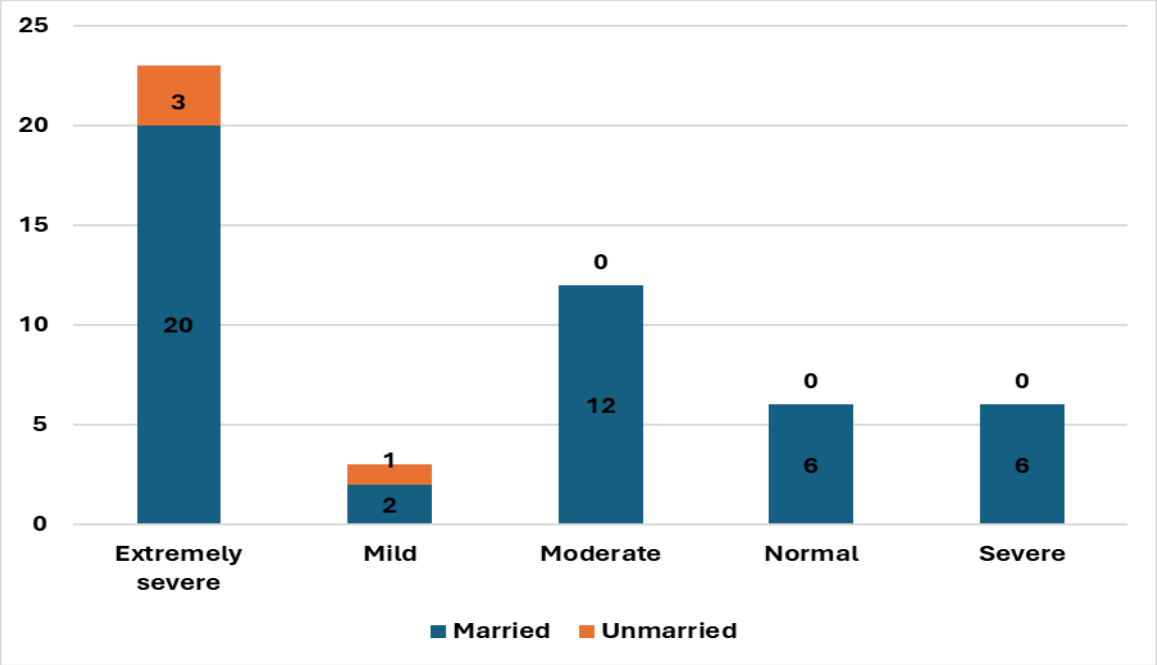


Figure 19 Simple bar diagram representing marital status vs stress wise distribution of samples

Table -20 : Distribution of residence vs stress in frequency and percentage

n=50

Residence	Stress									
	Extremely severe		Mild		Moderate		Normal		Severe	
	no	%	no	%	no	%	no	%	no	%
Rural	8	42	2	11	2	11	4	21	3	16
Semi urban	10	48	1	5	9	43	0	0	1	5
Urban	5	50	0	0	1	10	2	20	2	20

RESIDENCE VS STRESS

Table 20 depicts severity of stress level among the residential area of the samples

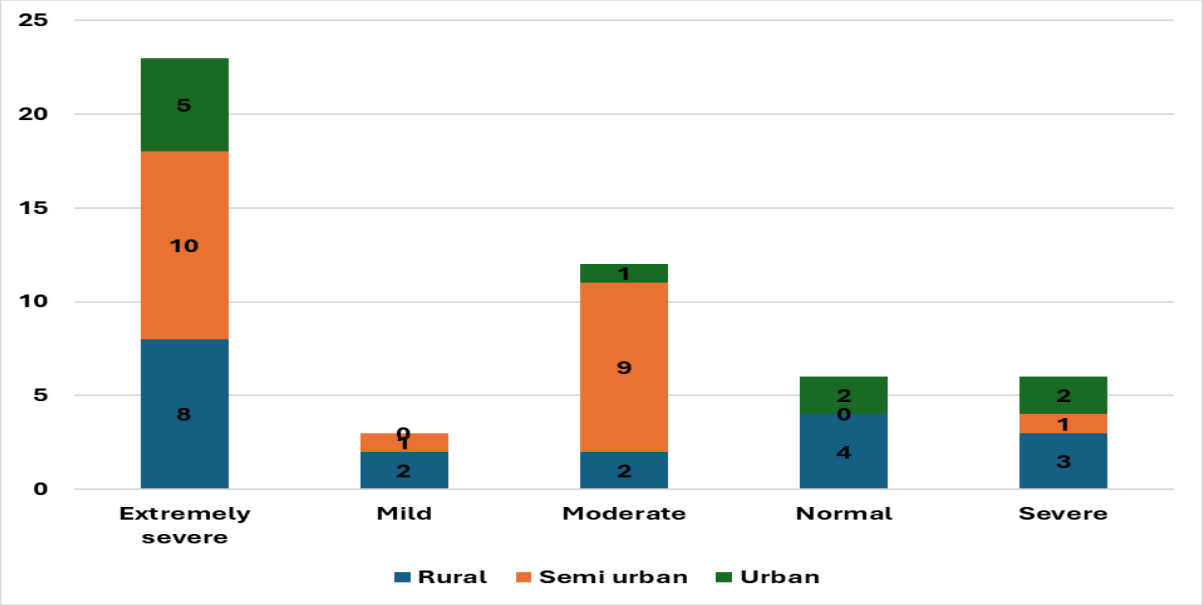


Figure 20 Simple bar diagram representing residence vs stress wise distribution of samples

Table -21 : Distribution of living condition vs stress in frequency and percentage

n=50

Living Condition	Stress									
	Extremely severe		Mild		Moderate		Normal		Severe	
	no	%	no	%	no	%	no	%	no	%
Alone	1	25	1	25	1	25	0	0	1	25
With Family	22	48	2	4	11	24	6	13	5	11

LIVING CONDITION VS STRESS:

Table 21 depicts severity of stress lvel among the living condition of the samples

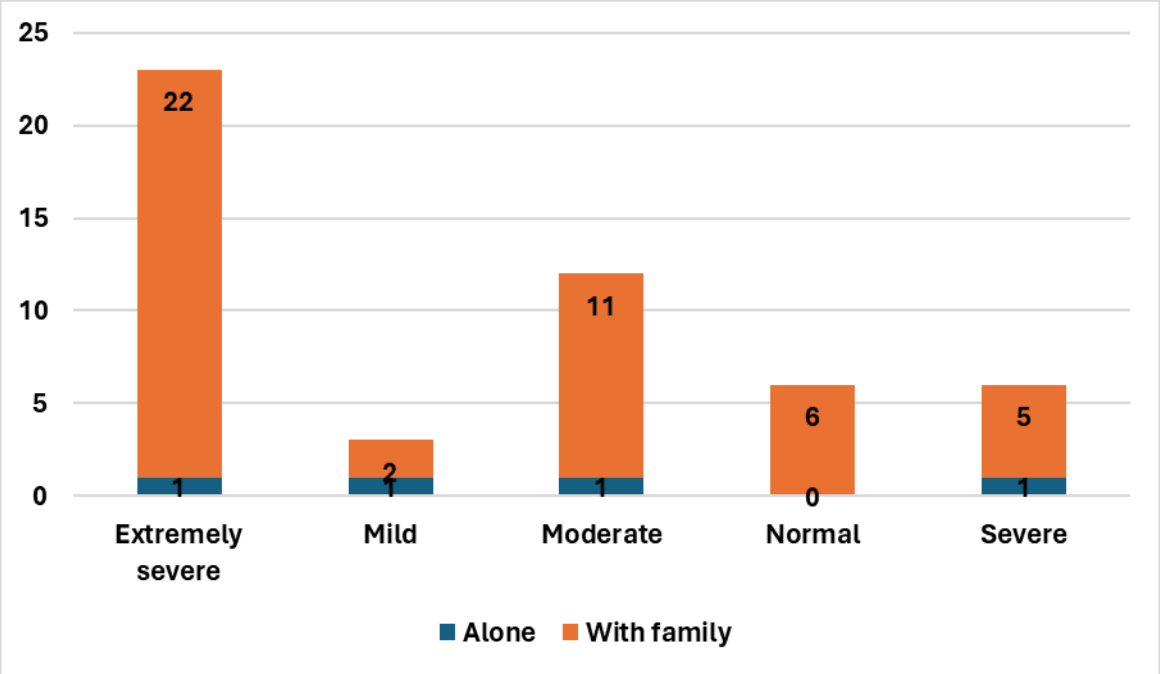


Figure 20 Simple bar diagram representing living condition vs stress wise distribution of samples

Hypothesis testing:

H1: There is a correlation between psychological stress and diagnosis of hematological malignancies.

Discussion: Out of 50 patients, 46% had extremely severe stress, 12% had severe stress, 24% had moderate level of stress, 6% had mild stress, Only 12% had no stress. These findings are consistent with the reviews of literature

CHAPTER V

The chapter presents the major findings of the study, after analyzing the data using descriptive statistics. It also presents a summary of the study and the various recommendations made by researcher based on the findings of the study.

SUMMARY

Problem statement of the study was a descriptive study to assess the level of psychological stress among the patients diagnosed with haematologic malignancies & their immediate caretakers in a selected Quaternary Care Centre in Delhi. The study was conducted in a selected institution after obtaining permission from the head of the selected institution. The validation of tool was done by experts from the field of psychiatry. Sample was chosen as per the inclusion and exclusion criteria.

The sample size was 50 and simple random sampling was done. Informed consent was taken from the sample. Data was collected from the samples using self-administered questionnaires consisting of two sections- socio demographic variables and DASS Scale under researcher's supervision. The data collected was organized, tabulated, analysed and inferences were drawn. The objectives of the study were achieved. Review of literature helped to gain a better understanding of the topic and in formulating appropriate methodology for the study.

The socio- demographic variables were selected. The psychological stress using DASS Scale was assessed under all four domains. Both were then correlated and the associations between them were found out.

SIGNIFICANT FINDING

Section I

1. The maximum samples are female which was 33 (66%) and male which was 17 (34%)
2. The maximum sample were in the age group of 35 to 39 years which was20 (40%) in the age wise distribution of samples.
3. The maximum samples 46 were married (92%) and 4 were unmarried (8%)
4. The maximum samples having 1-2 children were 39 (78%);
5. 26 (52%) of the samples were able to read and write.
6. 16 (32%) of the samples were doing technical job.
7. 21(42%) of the total samples were from semi urban area.
8. 46(92%) samples out of 50 were living along with families.
9. Maximum samples 25(50%) were diagnosed as leukemia.
10. The maximum samples 34(68%) were having the duration disease more than five years.

Section II

1. Most patients 46% found to have extremely severe stress, 12% had severe stress, 24%had moderate stress and 12% had no stress
2. In the age group 65 to >80 years, samples had extremely severe stress whereas age group most patients in age group 35 to 49 yrs had least stress.
3. Most patients who has extremely severe stress are diploma holders and those who have severe stress are illiterate and those who do not have stress are those who are bachelor degree holders.

4. Most patient who developed extremely severe stress had the diagnosis of leukemia and the pattients who had lymphoma presented with least stress.
5. Most patients who are married had extremely severe and severe stress whereas unmarried had least stress
6. The samples who are living alone had extremely severe stress than those who were living with family
7. The samples place of residence, whether urban, rural and semi urban did not contributed anything in the level of stress they experienced
8. The samples duration of disease more than five years of disease have extremely stressed.

IMPLICATION

This study has implications in all the fields of nursing as it covers the subjects with diagnosis of haematological malignancies and includes those admitted or attending OPD in haematology ward of a tertiary care hospital and is helpful for those working in the specialized field of psychiatry, general, education as well as administrative branches of nursing.

1. NURSING SERVICE

Nursing is considered as one of the most challenging profession where the nurses must deal with patients with different disease conditions. This study will help the nurse in assessment and management of patients with haematological malignancy disorder. The study will also help nurses to identify the adverse effect of disease on various domains and thus helps to provide effective care.

2. NURSING EDUCATION

Nursing education is another important area of nursing research where the nursing researcher tries to find out the knowledge regarding haematological malignancy disorder, effect of disease on patients including the physical, psychological, social and environmental domain. The nurse educator can utilize the findings of the study and proactively identify and avoid the psychological stress of haematological malignancy patients and can sensitize the students about the disease condition and its management so that they can provide effective care in their field of work.

3. NURSING ADMINISTRATION

The nurse administrator oversees the overall wellbeing and performance of the staff working under her. Our study on assessment of psychological stress level of hematolgicalpatients help the nurse administrator to identify the level of knowledge of the staff and also help them to plan and formulate appropriate teaching programs. The nurse administrator utilizes the findings of this study making policy for care of patient with haematological malignancy. Nurse administrator also encourages the staff to assess the condition of ADS patient and provide the effective care. The study will help the nurse administrator to assess the requirement of specialized staff in special units and post the staff according to the requirements, to provide quality care to the patient and thus help in smooth functioning of the organization.

4. NURSING RESEARCH

Research is an important part of any profession, which helps it to develop forward. It uplifts the profession and provides for new knowledge and research facts. This study also contributes to the field of nursing and objectively highlights the knowledge regarding effects of stress on patients who are diagnosed with hematological malignancies. The study can be a basis and encouragement of further research and studies in similar areas. It adds to the nursing literature which can be used in future by other nurses and students for reference, quoting more advance researches and bring about evidence-based practice in nursing profession.

RECOMMENDATION

Keeping in view the findings of the study the following recommendations are made:

- ❖ The study can be conducted on the large scale to generalize the findings of the study.
- ❖ Study can be conducted in Indian Army personnel who are diagnosed with haematological malignancies as the stress will adversely affect their job profile.
- ❖ The study can be used to about restructuring and amendment in the policies related to military set up.
- ❖ Therapeutic modalities can be planned and provided according to the domains most effected.
- ❖ The patients who are diagnosed with haematological malignancies get awareness about the different domains of stress which will adversely affect their wellbeing
- ❖ Interventional study can be conducted to assess the effect of intervention in different domains

LIMITATION

The limitations faced by the researcher in the present study were:

- Accuracy of participants self-report
- Unavailability of adequate number of samples.
- Inexperience of the researcher
- Slow turnover of the patient
- Reluctance of the samples to participate

ACKNOWLEDGEMENT

We would like to express our sincere gratitude to the government of India and College of Nursing, Army Hospital (R&R), for allowing us to pursue our Post Basic Diploma in Haematology Nursing (including Stem Cell Transplant) – Residency program. At the outset, we are profoundly grateful to Maj Gen Amita Rani, ADGMNS for all her support and encouragement to conduct the study. She had a pivotal role in moulding and shaping our attitude by her intelligent, firm and pleasant demeanor. We are influenced and inspired by her. Our sincere thanks and gratitude to Maj Gen I Delos Flora, Principal Matron Army Hospital (R&R) for facilitating the study. We would also like to extend our heartfelt thanks to Lt Gen Ashok Kumar Jindal, AVSM, YSM, Commandant Army Hospital (R&R) for giving us permission to conduct the study.

In the course of conducting this study, we are sincerely thankful to Brig Rajan Kapoor, VSM, Consultant & Head of Department, Medical & Clinical Haematologist, Army Hospital AH(R&R), for his technical inputs and design for conducting the study and Col Rajeev Kumar, Sr Adv, Medical & Clinical Haematologist, Army Hospital (R&R) for his support during the course and facilitating the study. We are obliged to Col Dechen Choedon, Professor and Principal, College of Nursing, Army Hospital (R&R), foe extending administrative and academic support to carry out this study. Our sincere thanks to Lt Col Bindu Sara Mathew, Vice Principal OIC Academics, for her expert lectures in research and in her personal support through the study.

We would like to acknowledge our profound obligation and appreciation to our supervision Lt Col Sunita, Tutor and Maj Anju S, Tutor College of Nursing, Army Hospital (R&R), without her care, patience, whole hearted encouragement and tremendous support, the completion of this dissertation would not have been possible. We extend our sincere gratitude for her professional and personal approaches towards the completion of the study. We cannot thank enough for your support and constant feedback that has enabled us to arrive at the shape it is today.

We are obliged to the entire teaching faculty of AH(R&R), Medical and Nursing Officers of AH (R&R) for the valuable inputs for validating our intervention and tools. We thank all the teachers of College of Nursing, Army Hospital (R&R), for shaping our academic upbringing which has influenced our persona to become a more refined professional.

Last but not the least and most importantly we are thankful to all the participants who have participated in our study, without whom this dissertation would not have seen the light of the day. We therefore, humbly dedicate our study to all haematological malignancy patients.

CONCLUSION

The findings of our study indicate that there is a correlation between psychological stress and diagnosis of haematological malignancies. Most patients (88%) were found to have psychological stress after diagnosing with haematological malignancies. Out of which 46% had extremely severe stress; which emphasizes the need for timely intervention to manage stress in patients who are diagnosed with haematological malignancies for improvement of their wellbeing.

ANNEXURE I
LETTER GRANTING PERMISSION BY ETHICAL COMMITTE

सहमति फार्म

1. मैं .....

स्वेच्छा से इस शोध अध्ययन में भाग लेने के लिए सहमत हूँ।

2. मैं समझता हूं कि चाहे मैं अभी भाग लेने के लिए सहमत हूँ, मैं किसी भी समय पीछे हट सकता हूँ या बिना किसी परिणाम के किसी भी प्रश्न का उत्तर देने से इंकार कर सकता हूँ।

3. मेरे अध्ययन का उद्देश्य और प्रकृति मुझे लिखित रूप में समझाई गई थी और मुझे अध्ययन के बारे में प्रश्न पूछने का अवसर मिला था।

4. मैं समझता हूँ कि मेरे द्वारा इस अध्ययन के लिए प्रदान की जाने वाली सारी जानकारी गोपनीय रखी जाएगी।

5. मैं समझता हूँ कि इस शोध के परिणामों पर किसी भी रिपोर्ट में, मेरी पहचान अज्ञात रहेगी।

6. मैं समझता हूँ कि मेरी निगरानी से गुप्त निष्कर्ष का हवाला प्रस्तुति और दस्तावेज में किया जाएगा।

7. मैं समझता हूँ कि यदि मैं शोधकर्ता को सूचित करता हूँ कि मुझे या किसी और को जोखिम या नुकसान है, उन्हें संबंधित प्राधिकारी को इसकी रिपोर्ट करनी पड़ सकती है- वे पहले मेरे साथ इस की चर्चा करेंगे परंतु मेरी अनुमति से या मेरी अनुमति के बिना रिपोर्ट करना आवश्यक हो सकता है।

8. मैं समझता हूँ कि अध्ययन के लिए एक विशिष्ट प्रासंगिक अवधि के लिए हस्ताक्षरित सहमति फार्म सेना अस्पताल अनुसंधान और रेफरल में रखा जाएगा।

9. मैं समझता हूँ कि सूचना की स्वतंत्रता, वैधीकरण के तहत मैं किसी भी समय उस जानकारी का मूल्यांकन करने का हकदार हूँ जो मैंने प्रदान की है, जबकि यह एक विशिष्ट समय पर भंडारण में है।

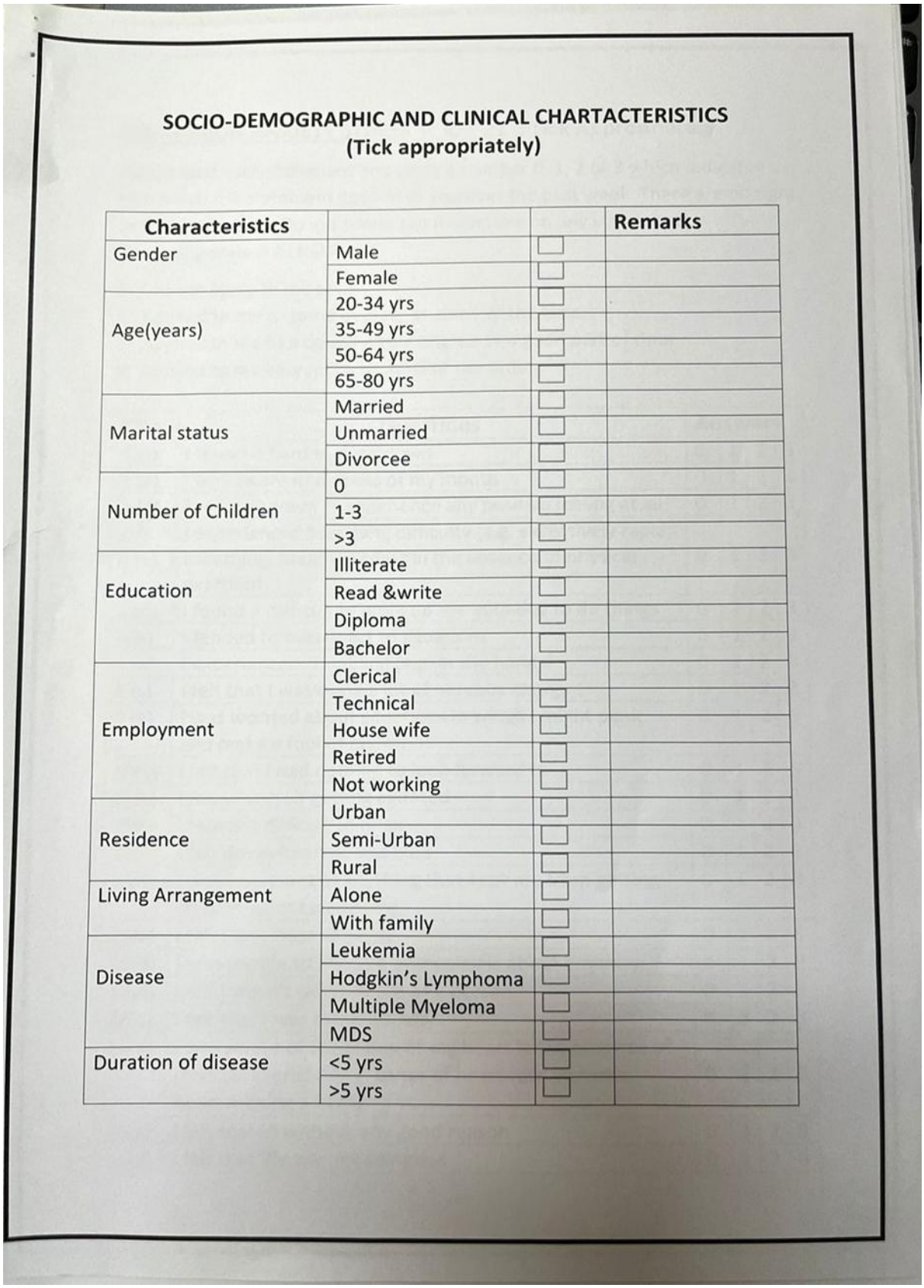
शोध प्रतिभागी के हस्ताक्षर ..... तारीख .....

मुझे विश्वास है कि प्रतिभागी इस अध्ययन में भाग लेने के लिए सूचित सहमति दे रहा है।

शोधकर्ता के हस्ताक्षर ..... तारीख .....

ANNEXURE II

CONSENT FORM FROM THE PARTICIPANT



SOCIO-DEMOGRAPHIC AND CLINICAL CHARTACTERISTICS
(Tick appropriately)

Characteristics			Remarks
Gender	Male	☐	
	Female	☐	
Age(years)	20-34 yrs	☐	
	35-49 yrs	☐	
	50-64 yrs	☐	
	65-80 yrs	☐	
Marital status	Married	☐	
	Unmarried	☐	
	Divorcee	☐	
Number of Children	0	☐	
	1-3	☐	
	>3	☐	
Education	Illiterate	☐	
	Read &write	☐	
	Diploma	☐	
	Bachelor	☐	
Employment	Clerical	☐	
	Technical	☐	
	House wife	☐	
	Retired	☐	
	Not working	☐	
Residence	Urban	☐	
	Semi-Urban	☐	
	Rural	☐	
Living Arrangement	Alone	☐	
	With family	☐	
Disease	Leukemia	☐	
	Hodgkin's Lymphoma	☐	
	Multiple Myeloma	☐	
	MDS	☐	
Duration of disease	<5 yrs	☐	
	>5 yrs	☐	

ANNEXURE III (a)

SOCIO DEMOGRAPHIC DATA

भाग I

सामाजिक-जनसांख्यिकीय और नैदानिक विशेषताएं

(उपयुक्त श्रेणी लिखें)

क्र.सं	विशेषताएँ	वर्ग	उत्तर:	टिप्पणियां
1.	लिंग	1) पुरुष		
		2) स्त्री		
2.	उम्र (साल)	1) 20-34 साल		
		2) 35-49 साल		
		3) 50-64 साल		
		4) 65-80 साल		
3.	वैवाहिक स्थिति	1) विवाहित		
		2) अविवाहित		
		3) तलाक		
4.	बच्चों की संख्या	1) 0		
		2) 1-3		
		3) >3		
5.	शिक्षा	1) निरक्षर		
		2) पढ़ें और लिखें		
		3) डिप्लोमा		
		4) स्नातक		
6.	रोज़गार	1) लिपिक		
		2) तकनीकी		
		3) गृहिणी		
		4) सेवानिवृत्त		
		5) काम नहीं कर रहा		
7.	निवास स्थान	1) शहरी		
		2) अर्ध-शहरी		
		3) ग्रामीण		
8.	रहने की व्यवस्था	1) अकेला		
		2) परिवार के साथ		
9.	बीमारी	1) ल्यूकेमिया		
		2) लिंफोमा		
		3) एकाधिक मायलोमा		
		4) एम.डी.एस		
		5) अन्य रुधिर संबंधी विकृतियां		
10.	रोग की अवधि	1) <5 साल		
		2) > 5 साल		

ANNEXURE III (b)

DASS SCALE

DASS21

Name: Date:

Please read each statement and circle a number 0, 1, 2 or 3 which indicates how much the statement applied to you **over the past week**. There are no right or wrong answers. Do not spend too much time on any statement.

The rating scale is as follows:

0 Did not apply to me at all
1 Applied to me to some degree, or some of the time
2 Applied to me to a considerable degree or a good part of time
3 Applied to me very much or most of the time

1 (s)	I found it hard to wind down	0	1	2	3
2 (a)	I was aware of dryness of my mouth	0	1	2	3
3 (d)	I couldn't seem to experience any positive feeling at all	0	1	2	3
4 (a)	I experienced breathing difficulty (e.g. excessively rapid breathing, breathlessness in the absence of physical exertion)	0	1	2	3
5 (d)	I found it difficult to work up the initiative to do things	0	1	2	3
6 (s)	I tended to over-react to situations	0	1	2	3
7 (a)	I experienced trembling (e.g. in the hands)	0	1	2	3
8 (s)	I felt that I was using a lot of nervous energy	0	1	2	3
9 (a)	I was worried about situations in which I might panic and make a fool of myself	0	1	2	3
10 (d)	I felt that I had nothing to look forward to	0	1	2	3
11 (s)	I found myself getting agitated	0	1	2	3
12 (s)	I found it difficult to relax	0	1	2	3
13 (d)	I felt down-hearted and blue	0	1	2	3
14 (s)	I was intolerant of anything that kept me from getting on with what I was doing	0	1	2	3
15 (a)	I felt I was close to panic	0	1	2	3
16 (d)	I was unable to become enthusiastic about anything	0	1	2	3
17 (d)	I felt I wasn't worth much as a person	0	1	2	3
18 (s)	I felt that I was rather touchy	0	1	2	3
19 (a)	I was aware of the action of my heart in the absence of physical exertion (e.g. sense of heart rate increase, heart missing a beat)	0	1	2	3
20 (a)	I felt scared without any good reason	0	1	2	3
21 (d)	I felt that life was meaningless	0	1	2	3

ANNEXURE IV

DASS 21
डिप्रेशन (अवसाद) चिंता तनाव पैमाना- २१

कृपया प्रत्येक कथन को पढ़ें और कोई एक संख्या 0, १, २ या ३ पर गोला करें .जो यह दर्शाता है कि पिछले एक सप्ताह में कथन आप पर कितना लागू हुआ। कोई भी सवाल सही या गलत नहीं है। किसी भी कथन पर ज्यादा समय न लगाएं।

रेटिंग पैमाना इस प्रकार है:

0 मुझ पर बिल्कुल भी लागू नहीं होता - कभी नहीं

१ मुझ पर कुछ हद तक, या कुछ समय के लिए लागू हुआ - कभी-कभी

२ मुझ पर काफी हद तक, या एक अच्छे खासे समय के लिए लागू हुआ - अक्सर

३ मुझ पर बहुत अधिक या अधिकतर समय लागू हुआ - लगभग हमेशा

१	मुझे आराम करने मे मुश्किल हो रही थी।	0	1	2	3
२	मेरे शुष्क मुँह की मुझे जानकारी थी।	0	1	2	3
३	मैं कोई भी सकारात्मक भावना को महसूस नहीं कर पा रहा था।	0	1	2	3
४	मुझे सांस लेने में कठिनाई का अनुभव हुआ (जैसे, अत्यधिक तेजी से सांस लेना, शारीरिक परिश्रम के अभाव में सांस का फूलना)।	0	1	2	3
५	मुझे चीजों की शुरुआत करने में कठिनाई हुई।	0	1	2	3
६	मैं परिस्थितियों पर अति प्रतिक्रिया करने के लिए प्रवृत्त हुआ।	0	1	2	3
७	मुझे कम्पन का अनुभव हुआ (जैसे, हाथों में)।	0	1	2	3
८	मुझे लगा कि मैं बहुत अधिक नर्वस एनर्जी (तंत्रिका ऊर्जा)का उपयोग कर रहा था।	0	1	2	3
९	मैं उन स्थितियों के बारे में चिंतित था जिनमें मैं घबरा सकता था और खुद को मूर्ख बना सकता था।	0	1	2	3
१०	मुझे लगा कि मेरे पास आगे देखने की कोई उम्मीद नहीं हैं।	0	1	2	3
११	मैंने अपने आप को व्यथित पाया।	0	1	2	3
१२	मुझे आराम करना मुश्किल लगा।	0	1	2	3
१३	मैं उदास और निराश महसूस कर रहा था।	0	1	2	3
१४	मैं जो कुछ कर रहा था उसमे बाध्य रूप कोई भी चीज़ के प्रति मैं असहिष्णु था।	0	1	2	3
१५	मुझे लगा कि मैं दहशत के करीब था।	0	1	2	3
१६	मैं किसी भी चीज़ को लेकर उत्साहित नहीं हो पा रहा था।	0	1	2	3
१७	मुझे लगा कि मैं एक व्यक्ति के रूप में ज्यादा लायक नहीं था।	0	1	2	3
१८	मुझे लगा कि मैं यूँ ही अतिभावुक था।	0	1	2	3
१९	मैं शारीरिक परिश्रम के अभाव में अपने हृदय की क्रिया से अवगत था (उदाहरण के लिए, हृदय गति में वृद्धि की भावना, हृदय की धड़कन का छूटना)।	0	1	2	3
२०	मुझे बिना किसी उचित कारण के डर लग रहा था।	0	1	2	3
२१	मुझे लगा कि जीवन व्यर्थ था।	0	1	2	3