

Original Research Article

A cross sectional study to assess the general health status of immuno-compromised people at selected art center, Gadag district

Shivanand Savatagi¹, Stephen John^{2*}, Dileep S. Natekar³, Suma S. Kumachagi¹

¹Department of Community Health Nursing, RMSS Institute of Nursing Sciences, Gadag, Karnataka, India

²Department of Community Health Nursing, GIMS Government College of Nursing, Gadag, Karnataka, India

³Department of Community Health Nursing, Sajjalashree Institute of Nursing Sciences, Bagalkot, Karnataka, India

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*Correspondence:

Stephen John,

E-mail: stevenfantabulous@gmail.com

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ABSTRACT

Background: In the realm of health and wellbeing, the cursed part is illness. Times elapsed, the health problems and challenges evolved constantly. In 1980s the first case of HIV was reported and according to world health organization 36.9 million people worldwide are living with HIV/AIDS. Life of people living with HIV/AIDS is challenging as opportunistic infections and their life style keeps their health status dynamic. The present study was done to assess and identify the level of general health status of immuno-compromised people at selected ART center, Gadag, Karnataka.

Methods: A cross sectional study was conducted on assessment of general health status of PLHIV using standard general health questionnaire-28 at ART center, GIMS, Gadag from May 2022 to December 2022. Total 300 samples were chosen using purposive sampling method based on inclusion and exclusion criteria. Data analysis was done using version SPSS 20.0.

Results: The majority 90% (270) respondents were in state of distress or caseness and 10% (30) of respondents were in state of wellbeing or no caseness.

Conclusions: our study concluded that overall general health status of PLHIV swung towards state of distress, the main reason for this being inaccessibility of health care services & disruption in availability and accessibility of ART services.

Keywords: HIV/AIDS, PLHIV, Caseness, No caseness, Distress, Wellbeing, Quality of life

INTRODUCTION

After more than two decade of surfacing of first case of human immunodeficiency virus (HIV) leading to acquired immunodeficiency syndrome (AIDS) it is found that the progress made in its treatment is significant but fails in complete recovery as immunological system itself is compromised and cannot be fully restored. The impact of HIV/AIDS is not just limited to physical dimension of health but vastly effects social and mental aspects also. The people living with HIV/AIDS are mostly under-served and call for public awareness, public involvement and prudent

government policies in favour of improving quality of life of people living with HIV/AIDS (PLHIV).¹

The overall general health status of PLHIV as described in terms of prevalence and mortality shows that the prevalence of HIV infection and mortality due to HIV has substantially reduced but the quality of life among infected patients is not enhanced.² According to WHO, HIV/AIDS continues to be a global public health issue. Statistically, in the year 2021, 6.5 lakh people lost lives due to HIV and 1.5 million acquired HIV infection worldwide. As there is no cure, effective prevention measures, early diagnosis, prompt treatment and rigorous care are of prime

importance. As HIV infection have become chronic, life time treatment is inevitable, people living with HIV/AIDS should be motivated to keep up to the healthy practices so as to maintain an acceptable general health status.³

Human immunodeficiency virus/acquired immune-deficiency syndrome also called as slim disease is a chronic illness, fatal by nature and breaks down the immune system of human body. India, into its fourth decade marks HIV epidemic as heterogeneity; not a single epidemic but formed by numerous distinct numbers of epidemic.⁴ The stats for India shows 23.48 lakh actives cases of PLHIV in 2019, amongst which state of Maharashtra is ranked highest with 3.96 lakh active cases, followed by Andhra Pradesh 3.14 lakh active cases and Karnataka 2.69 lakh active cases.⁴

The world AIDS day theme for year 2022 was “equalize” and the world health day theme for year 2023 is “health for all” signifying that irrespective of class, caste, state of health, diseased or healthy, health is a fundamental right. In general and owing to the matter of fact that the COVID-19 pandemic had disrupted the health care service of PLHIV leading to break in the ART services & scope for alterations in the general health status of PLHIV.⁵⁻⁷

Aim and objectives

This study was planned with intent to: assess and identify the level of general health status of immuno-compromised people at selected ART center, Gadag, Karnataka. To formulate hypothesis on general health status of immuno-compromised people at selected ART center, Gadag, Karnataka. To develop an information booklet on maintaining general health status of immune-compromised people at selected ART center, Gadag, Karnataka.

METHODS

Before the commencement of the study, Institutional ethical clearance was obtained from Gadag Institute of Medical Sciences (GIMS), Gadag. Permission to conduct study was obtained from the competent authority and written informed consent was taken from participants of the study. This cross-sectional study was conducted at Anti-Retroviral Therapy (ART) center, GIMS, Gadag. Data were collected from people living with HIV/AIDS (PLHIV) at ART center, Gadag during May 2022 to December 2022. The total samples included in the study was 300 & sample size was calculated using formula,

$$n = (Z_{1-\alpha/2})^2 \times p \times (1 - p) / E^2$$

Where, $Z_{1-\alpha/2} = 1.96$ (95% confidence interval), $p=0.269$, $E=0.0538$ (Relative error=20% of p); therefore, $n=261$. Considering attrition rate and the total number of participants available, the final sample size was rounded off to 300. After employing purposive sampling technique 300 samples fulfilling the inclusion criteria were selected for the study.⁸

To achieve the objective of the study a standardized tool was sought, in this regard “general health questionnaire” to assess the “general health status” among people living with HIV/AIDS was found to be suitable. In addition, Questionnaire on demographic data was developed and validated to collect demographic details of participants.

Description of the tool

The general health questionnaire was developed by British Scholar Goldberg in 1972. It is one of the most popular screening instruments for recognition and measurement of mental health. The scoring of the tool is binary (i.e.) 0 and 1. The minimum score is 0 (no distress or wellness or no caseness) and the maximum score is 84 (high distress or illness or caseness). The tool’s interpretation shows that any score above 04 indicates caseness or presence of distress or state of illness. The general health questionnaire consists of 28 items, the validity and reliability of the tool was pre calculated as it is a standard tool. The reliability of tool is found to be 0.85. Therefore, the tool was found to be feasible. Demographic data included Age, Gender, type of family, Education occupation, Marital Status, Family monthly income and Extra Marital relationship. The tool consists of two sections: Section I: It consists of 8 questions on demographic data. Section II: It consists of 28 General Health Questionnaire of people living with HIV/AIDS; Which are divided into 4 aspects: Somatic, Social dysfunction, Anxiety insomnia and Severe depression. The General Health Questionnaire tool assess health related complaints over the past four weeks. The conceptual framework selected for this study was based on “Roy’s adaptation model”.¹⁰

RESULTS

After data collection, the data collected was subjected to analysis using software SPSS.20.0. The Findings of the study are as follows: Socio-Demographic characteristics, State of caseness/wellness, formulation of hypothesis & Development of information booklet on maintaining general health status of immune-compromised people at selected ART center.

The major findings of the study are as follows; Age: 11% of the respondents are of <25 years, 65% of the respondents are of 26-50 years, 24% of respondents are of 51-75 years, 1% of respondents are of belongs to 76-100 years. Gender: Majority 53% of respondents were Females and rest 47% of respondents were Males. Type of family: In this study, Majority 68% comprised of Nuclear Family and 32 belonged to Joint Family.

Education status: Majority of respondents are not literate (35%), following 32% primary education, 26% Higher education and 7% Graduates. Employment status: Majority 74% of respondents worked in unorganised sectors. 15% respondents were self-employed, 5% respondents were private employee and 5% of respondents were Government employee. Marital status:

Majority 91% respondents were married and rest 9% were unmarried.

Table 1: Classification of respondents by socio demographic factors (n=300).

Socio-demographic factors	N	%
Age (years)		
Less than 25	32	11
26 to 50	194	65
51 to 75	72	24
76 to 100	2	1
Gender		
Male	141	47
Female	159	53
Type of family		
Joint Family	96	32
Nuclear Family	204	68
Marital status		
Married	274	91
Unmarried	26	9
Education status		
Illiterate	104	35
Primary education	96	32
Higher education	79	26
Graduated	21	7
Employment status		
Govt.	15	5
Private	16	5
Self employed	46	15
Other unorganised sect.	223	74

Diagnosis: Majority 90% (270) respondents were diagnosed as caseness and 10% (30) of respondents were diagnosed as no caseness. Majority 90% i.e., 270 respondents had issues regarding: somatic wellbeing, Anxiety insomnia, social dysfunction and severe depression whereas only 10% i.e., 30 of respondents were in the state of good health. The above graph shows that majority (90%) of PLHIV lead their lives under distress, where the quality of life is compromised, whereas only (10%) of PLHIV lead their lives in state of wellness and the quality of life is acceptable.

Table 2: Classification of respondents by diagnosis of State of Caseness/wellness (n=300).

Diagnosis	N	%
Caseness/distresses	270	90
No caseness/wellness	30	10
Total	300	100

Developed hypothesis

Our study hypothesizes that disruption of ART services, social isolation, economic burden and weak coping mechanism causes deterioration of general health status among 90% people living with HIV/AIDS.

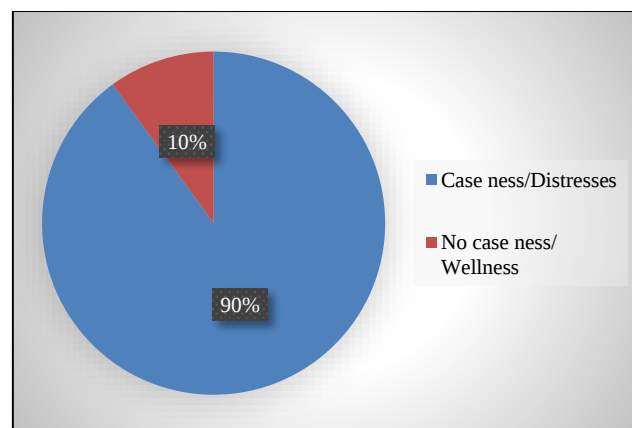


Figure 1: Graphical representation of respondents by diagnosis of State of caseness/wellness.

DISCUSSION

In today's scenario, where advancement in clinical test and clinical treatment in regard to HIV/AIDS have kept the promise to save life, but on the other side of the coin the quality of life of PLHIV is compromised. The reasons being multi factorial, among which many people living with HIV/AIDS find it very difficult and certain time impossible to offer strength in completing daily task or even an activity of daily living because of insufficient nutrition, no physical strength, social isolation and a sense of depression amplified with a feeling of nothing is left to live.¹¹ The same is affirmed in this study by noting that maximum number of participants are in the state of caseness/distress and only 10% of participants showed acceptable level of quality of life falling in state of wellbeing. According to the World Bank, 83% of people living with HIV/AIDS are in age group of 15 years to 49 years which very well synchronizes with finding of present study where majority 65% of the respondents are in age group of 26-50 years.¹² This study does not agree with the finding of a study on gender inequality and the spread of HIV/AIDS where the HIV infection and quality of life is lower in females than males. In the present study, Majority 53% of respondents affected with HIV/AIDS were Females and rest 47% of respondents were Males.¹³ The findings of marital status in this study makes a significant association with the findings of the study on association of intimate partner with HIV infection among married women, majority 91% respondents were married and female who are affected with PLHIV.¹⁴ Hence, our study concluded that the physical damage or impairment is not only the direct effect of HIV/AIDS but mental weakness, social isolation & economic burden makes it very difficult to maintain the general health status of people living with HIV/AIDS.¹⁵⁻¹⁷

Limitations

Limitations were; the study is limited to people living with HIV/AIDS, who are receiving treatment at selected ART center, GIMS, Gadag, Karnataka. The sample size for the

study was limited to 300 participants only. The results of the findings cannot be generalized as the geographical coverage is limited to Gadag district only.

CONCLUSION

Current study concluded that there were more people living with HIV/AIDS who were distressed due to their illness among participants and it's the need of the hour and a prudent indicator towards deepening of concentrated efforts to be taken by health care professionals in assessing the general health status of people living with HIV/AIDS & planning health care services to ease their way of living, thereby consolidating the quality of life of PLHIV. The COVID-19 times & post COVID-19 assessment of general health status of PLHIV has shown that the overall health status of PLHIV swung towards state of distress, the main reason for this being inaccessibility of health care services & disruption of ART services. Owing to the impact HIV/AIDS has on an individual, policy making & its implementation can be planned. To control HIV/AIDS & serve global agenda of health for all, adequate attention at all levels of health care delivery system & political commitment in addition to the works of National AIDS control organization & ART centres are recommended. In an attempt to mitigate this problem & avoid long term devastations, adaptation is the only valid key. Collecting data related to General Health Status of PLHIV, studying the trends & pattern of HIV epidemic can give us valuable input of how to control and prevent it. As our country is most populous, the number of cases may increase exponentially, therefore, making clusters, state wise or district wise to conduct rigorous testing & effective treatment of HIV/AIDS will give us an edge towards achieving Health for all. International standards to be followed strictly at workplace by health care professionals, especially safe handling of syringes & right way of disposal of needles to avoid needle prick injury. Fight against HIV/AIDS cannot be successful unless multi-sectoral approach is not adopted. Therefore, multi-sectoral approach should be internal part of planning and implementation of strategies to prevent or control HIV/AIDS in India.

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Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee

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