

## Original Research Article

# Assessment of psychological distress and its association with socio-demographic variables among cancer patients in a tertiary care hospital in Bengaluru, Karnataka: a cross sectional study

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**Received:** 03 July 2023

**Accepted:** 21 August 2023

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## ABSTRACT

**Background:** Cancer diagnosis is known to cause significant mental distress and anxiety. Psychologically distressed patients are less compliant to treatments and endure longer hospitalization. Assessment of distress is critical to develop necessary interventions. Our research aims to assess the severity, contributing factors, and relationships between socio-demographic characteristics and psychological distress in cancer patients.

**Methods:** A cross sectional study with random sample of 188 cancer patients were assessed for distress with NCCN distress thermometer (DT) from a tertiary care facility. Descriptive analysis and Chi-square test performed using SPSS-28.

**Results:** 75% reported "moderate and above" distress levels, with a mean distress of  $5.5 \pm 2.99$ . Respondents below 40 years, females, currently unmarried, nuclear families, highly educated, and financially dependent were more likely to experience severe distress (score 8-10). Significant emotional concerns were associated with severe distress, followed by practical problems.

**Conclusions:** Distress can be routinely screened with a simple visual analogue scale like DT. A severely distress patient had 3 or more physical, practical, emotional and 2 or more social and spiritual concerns and a person with mild distress had just one emotional concern and spiritual concern and none of the other three. Early identification, routine screening and psychosocial support can reduce distress with optimal efficacy.

**Keywords:** Cancer, Psychological distress, Distress screening

## INTRODUCTION

Distress in cancer has been defined as "a multifactorial unpleasant experience of a psychological (cognitive, behavioural, emotional), social, spiritual, and/or physical nature that may interfere with one's ability to cope effectively with cancer, its physical symptoms, and treatment. Distress extends along a continuum, ranging from feelings of vulnerability, sadness and fear to problems that can become disabling, such as depression, anxiety, panic and social isolation".<sup>1</sup> Cancer diagnosis is

frequently preceded by distress as per the international psycho-oncology society.<sup>2</sup> Such feelings surface at different stages; during investigations, waiting for reports, diagnosis, treatment, or dreading cancer recurrence. Despite advances in diagnostics and management, cancer continues to be a disease associated with hopelessness, suffering, fear, and death. The ability of a patient to cope with cancer may be harmed by anxiety and distress having a negative impact on cancer patients' and their families' quality of life.<sup>3</sup>

In the past decade several studies globally have attempted to measure the magnitude of psychological distress, its clinical implications and impact on cancer.<sup>4,12</sup> In the Indian scenario, a nation-wide study reported that 40% of cancer patients were severely distressed while 52% experienced mild to moderate distress.<sup>13</sup> Early assessment and evaluation of psychological morbidity in terms of distress and anxiety is essential for optimal cancer care.<sup>14</sup>

Considering distress prevalence and associated negative consequences with healthcare satisfaction, quality of life, treatment adherence and desire for survival, assessing the magnitude of distress is vital. It is also essential to understand its socio-demographic distribution and the associated concerns in patients' lives. According to research from a high-income nation, gender, age, and ethnicity had less impact on distress than previously believed.<sup>4</sup> On the contrary, studies have also shown that women are more likely to experience high levels of stress; and distress significantly varies with age.<sup>5-8</sup>

Studies have observed that alongside physical concerns, cancer patients struggle with emotional, social, practical, and spiritual difficulties. Younger people are more likely to have greater aspirations and filial obligations which may lead to increased stress following health crisis.<sup>9</sup> Social, family support and lifestyles factors play important roles-determining psychological distress.<sup>6,10,12</sup>

With the current practise of people-centered healthcare, there is a need to understand distress at an individual level. Even though globally studies have identified that demographic variables potentially influence an individual's level of distress in cancer diagnosis, there is a dearth of published studies in India to determine if demographic variables contribute to individual's distress or other psychosocial needs and assessment of distress. This research estimates the magnitude of psychological distress, its association with socio-demographic parameters and factors leading to distress among cancer patients who visited tertiary care facility in Bengaluru.

## METHODS

### Study site

Cross-sectional study was conducted at MS Ramaiah teaching hospital (mainly caters to low socio-economy) and HCG Ramaiah cancer center (catering high-profile patients) located in Southern India, Karnataka, Bengaluru from January to May 2022. A total of 450 cancer patients visited the OPD/IPD of these two hospitals.

### Sampling method

It was calculated to be 188 by assuming 95% CI and 6% absolute precision based on 22.92% prevalence of psychological distress by study by Bandiwadekar et al.<sup>3</sup> Simple random sampling with lottery method used to arrive at sample size, where 110 interviewed in MS

Ramaiah memorial hospital and 78 in HCG Ramaiah cancer center.

### Inclusion criteria

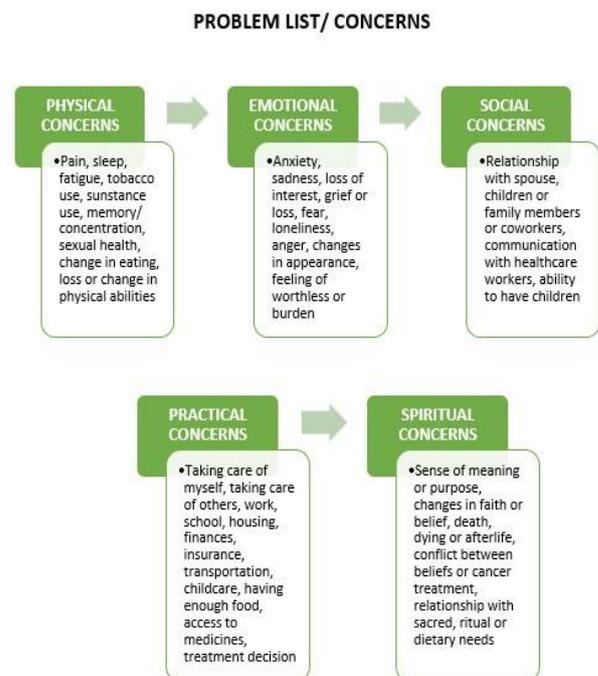
Patients diagnosed with cancer and seeking treatment at study site, those who were conscious, mentally stable, co-operative and willing to participate were included.

### Exclusion criteria

Patients who were unable to consent, too unwell to participate, had low cognitive level and severe disabilities were excluded.

### Data collection tool

Distress was assessed using DT with problem list (PL), a screening tool used by doctors for cancer patients to assess distress. It is VAS measuring psychological distress during past week. Patients being asked to answer "How distressed have you been during the past week on a scale of 0 to 10?", they rate from '0' (no distress) to '10' (extreme distress).<sup>15</sup> Previous studies have shown that a cut-off score of  $\geq 4$  indicates clinically significant distress which requires intervention.<sup>5,16</sup> Second component reviews nature of concern across different types of distress. List includes 9 physical, 9 emotional, 12 practical, 6 social and 6 spiritual concerns that are potentially experienced by cancer patients. First part of questionnaire included socio demographic profile. Questionnaire was translated to Kannada (state official language) for linguistic validity.



**Figure 1: List of concerns as per DT.**

A revised cut-off of 4 or above is recommended (NCCN cut was  $\geq 5$  in 2006) as significant but generally mild distress, whereas 4-7 denotes moderate and 8 or higher denotes severe distress. Problem checklist is an important addition to the thermometer that reveals potential unmet needs that may be linked to reported distress. Diagnostic validity evaluations of the DT show a good sensitivity but a poor specificity.<sup>15,17</sup> Information on a range of difficulties faced by cancer patients is provided in Figure 1, they will be operationally addressed as 'concerns' in this study.

### **Statistical analysis**

Data was analysed using SPSS (Statistical package for social sciences) version-28.0. Descriptive statistics of distress score summarised in terms of mean with standard deviation. Demographic and distress screening variables (pertaining to the DT and PL) were analysed in a multivariate ordinal logistic regression model to determine factors associated with increasing levels of distress. Chi square test was used to examine the univariate associations between the variables.

### **Ethical considerations**

The MS Ramaiah University of Applied Sciences review board and the university ethics committee for human trials provided institutional approval and Ramaiah medical college ethical committee for data collection. Patients were given a detailed explanation in a vernacular language about the study and autonomy was ensured for participation.

## **RESULTS**

### **Socio-demographic characteristics**

The study comprised of 188 participants out of which 44.1% were male and 55.91% were female. The data showed an equitable distribution across the 4 (<40, 41-49, 50-59, >60 years) strata of age groups. 87.2% were Hindu and 12.8% were non-Hindus. 89.4% were married. 94.1% lived with family, while 4.8% were living with spouse and the only 1.1% were living alone (Table 1).

Overall, our results show one-fourth face low distress, while 31.9% experience severe distress. A large proportion (>40%) of patients from all age groups show 'moderate' distress while across gender, marital status, religion, education, occupation, family type and financial dependence >30% have 'moderate' distress. Severe distress is more visible among female (36.2%), currently unmarried (36.8%) and non-Hindu (37.5%). Members in nuclear family are severely distressed as compared to 27% of those staying in joint families. Despite no significant differences in income, 35.4% of financially dependent individuals were severely distressed as compared to 26.7% independent. However, the statistical test of difference was insignificant (Table 2).

### **Behavioural factors**

Lesser proportion of non-vegetarians had both low and severe distress, 43.3% having trouble with sleeping habits demonstrated higher distress. Interestingly, those who consume alcohol/tobacco experienced significantly low distress as compared to those who don't. At the same time, those who do not indulge into any addiction, much lesser proportion experienced severe distress.

### **DT**

Of the total participants, 16% responded to score 8 (being the highest responded score) and 2.7% responded as 10 (least responded score). Mean distress score is 5.54 with a standard deviation of 2.989. Overall, 25% had mild, 43% had moderate and 32% had severe distress.

### **Physical concerns**

While 57% having low distress had no physical concern, two-out of five having severe distress had three or more physical concerns. One-fifth had no physical concern, while around 22% had issues associated with physical problems (Table 3).

Of nine physical concerns, pain, sleep disorder and fatigue varied significantly across distress. While only 27.7% with low distress had body pain, prevalence of body pain was much higher among severely distressed (68.3%). Even though none with low distress faced sleep disorder, 45% with severe distress had sleep disorder. Prevalence rate of fatigue was thrice among severely distressed (75%) as compared to low distress. Tobacco/substance use, change in eating habits and loss of physical abilities were not very commonly reported, and did not vary significantly along distress levels (Table 4).

### **Emotional concerns**

While 45% experienced three or more emotional concerns, nearly 90% having low distress did not have more than one emotional concern. More than three out of four with moderate distress, had two to four emotional concerns. 82% having severe distress had three and more emotional concerns (Table 5).

Out of nine emotional concerns, anxiety, depression, loss of interest, fear, loneliness, and changes in appearances were found to be significantly varying across levels of distress. Anxiety (95%), fear (81.7%) and depression (76.7%) were extremely frequent among severely distressed. A good share of the sample with moderate distress also complained about these three emotional concerns. Although nearly one-fourth with low distress were also struggling with anxiety, depression or fear was relatively much lower among them. Among severely distressed, 25% faced loss of interest (six times higher than low distressed), 41.7% felt lonely (almost ten times

higher than low distressed), and 13.3% were disturbed with changes in appearance (Table 4).

**Social concerns**

More than three out of four faced no social concern. While 95.7% with very low distress had no social concern, one-fifth with severe distress face two or more social concerns (Table 6).

Relationships with children, family, friends/colleagues were significantly more vulnerable among severely distressed. Prevalence of discordant spousal relationships were not very common (Table 7).

**Practical concerns**

34.6% did not face any practical concern while one out of five faced three or more such concerns. However, around 33% who faced severe distress reported at least three practical concerns (Table 8).

Taking care of others, professional responsibilities, household chores, financial operations, and childcare are significantly more prevalent with severe distress. Among

the severely distressed, one-fourth found it difficult to take care of others as against 4.3% of low distressed, one-third faced difficulty in their professional work as compared to 2.1% of low depressed, and more than half of them faced troubles in household activities as compared to only 4.3% of low distressed counterparts. Two out of five severely distressed had financial troubles and 22.3% struggled with childcare (Table 7).

**Spiritual concerns**

Out of six spiritual concerns, we were unable to elicit any associations to death and ritual dietary adjustments since the respondents did not exhibit any such concerns. The prevalence of changes in faith/belief was 18 times higher among severely distressed (38.3%) as compared to low distressed. Establishing a relationship with the sacred were opined to be a concern only among moderately (1.2%) and severely distressed (13.3%) (Table 7).

According to our findings, severely distressed had at least three physical, practical, and emotional issues and at least two social and spiritual concerns for each of them. Less distressed had just one emotional and spiritual concern and none of the other three.

**Table 1: Percentage distribution of level of distress across Socio-demographic profiles.**

Variables	Categories	N (%)	Mean	Std. error
Age (In years)	<40	48 (25.5)	5.063	1.343
	40-59	42 (22.3)	4.158	1.308
	>60	43 (22.9)	3.553	1.274
Gender	Male	83 (44.1)	4.032	1.246
	Female	105 (55.9)	4.484	1.327
Religion	Hindu	164 (87.2)	4.123	1.210
	Non-Hindu	24 (12.8)	4.393	1.387
Marital status	Currently unmarried	19 (10.1)	3.901	1.084
	Currently married	168 (89.4)	4.820	.860
Educational status	Primary and lower	60 (31.9)	4.367	1.353
	Higher secondary	78 (41.5)	3.729	1.265
	Graduation and above	50 (26.6)	4.678	1.329
Occupation	Agriculture	34 (18.1)	4.597	1.422
	Unskilled and self-employed	27 (14.4)	4.594	1.380
	Formal sector	34 (18.1)	4.269	1.324
	Not working	93 (49.5)	3.571	1.319
Type of family	Nuclear	122 (64.9)	4.443	1.231
	Joint	66 (35.1)	4.073	1.314
Financial dependence	Independent	75 (39.9)	4.150	1.302
	Dependent	113 (60.1)	4.365	1.282

**Table 2: Level of distress as per the sociodemographic profile.**

Variables	Categories	N (%)	Level of distress (%)			Chi square
			Low	Moderate	Severe	
Age (in years)	<40	48 (25.5)	18.80	41.70	39.60	0.231
	40-49	42 (22.3)	14.30	47.60	38.10	
	50-59	43 (22.9)	32.60	44.20	23.30	
	60 and above	55 (29.3)	32.70	40.00	27.30	
Gender	Male	83 (44.1)	25.30	48.20	26.50	0.322
	Female	105 (55.9)	24.80	39.00	36.20	

Continued.

Variables	Categories	N (%)	Level of distress (%)			Chi square
			Low	Moderate	Severe	
<b>Religion</b>	Hindu	164 (87.2)	26.80	42.10	31.10	0.318
	Non-Hindu	24 (12.8)	12.50	50.00	37.50	
<b>Marital status</b>	Currently unmarried	19 (10.1)	31.60	31.60	36.80	0.373
	Currently married	168 (89.4)	23.80	44.60	31.50	
<b>Educational status</b>	Primary and lower	60 (31.9)	23.30	48.30	28.30	0.256
	Higher secondary	78 (41.5)	26.90	46.20	26.90	
	Graduation and above	50 (26.6)	24.00	32.00	44.00	
<b>Occupation</b>	Agriculture	34 (18.1)	23.50	50.00	26.50	0.666
	Unskilled and self-employed	27 (14.4)	25.90	29.60	44.40	
	Formal sector	34 (18.1)	20.60	50.00	29.40	
	Not working	93 (49.5)	26.90	41.90	31.20	
<b>Type of family</b>	Nuclear	122 (64.9)	23.00	42.60	34.40	0.525
	Joint	66 (35.1)	28.80	43.90	27.30	
<b>Financial dependence</b>	Independent	75 (39.9)	26.80	44.60	28.60	0.907
	Dependent	113 (60.1)	30.40	39.10	30.40	
<b>Total</b>			25.00	43.10	31.90	

**Table 3: Number of physical concerns across distress categories.**

Level of distress	Number of physical concerns (Total 9) (%)						Chi square significance
	0	1	2	3	4	5	
<b>Low</b>	57.4	27.7	12.8	2.1	0.0	0.0	0.000
<b>Moderate</b>	8.6	33.3	38.3	16.0	2.5	1.2	
<b>Severe</b>	6.7	28.3	25.0	31.7	8.3	0.0	
<b>Total</b>	20.2	30.3	27.7	17.6	3.7	0.5	

**Table 4: Physical and emotional concerns across levels of distress.**

Concerns	Low	Moderate	Severe	Total	Chi-square
<b>Physical concerns</b>					
Pain	27.7	61.7	68.3	55.3	0.001
Sleep disorder	0	30.9	45.0	27.7	0.001
Fatigue	25.5	59.3	75.0	55.9	0.001
Tobacco use	2.1	2.5	1.7	2.1	0.948
Substance use	0	4.9	3.3	3.2	0.312
Memory loss	0	2.5	1.7	1.6	0.565
Change in eating habit	2.1	9.9	6.7	6.9	0.252
Loss of the physical abilities	2.1	2.5	5.0	3.2	0.628
<b>Emotional concerns</b>					
Anxiety	23.4	85.2	95.0	72.9	0.001
Depression	4.3	42.0	76.7	43.6	0.001
Loss of interest	4.3	8.6	25.0	12.8	0.002
Grief or loss	0	0	1.7	0.5	0.346
Fear	6.4	64.2	81.7	55.3	0.001
Loneliness	4.3	24.7	41.7	25	0.001
Anger	6.4	9.9	13.3	10.1	0.498
Changes in appearance	0	3.7	13.3	5.9	0.007
Feeling of the worthlessness	2.1	0	3.3	1.6	0.282

**Table 5: Number of emotional concerns across distress categories.**

Level of distress	Number of emotional concerns (Total 9) (%)								Chi square (Sig)
	0	1	2	3	4	5	6	7	
<b>Low</b>	61.7	27.7	8.5	2.1	0.0	0.0	0.0	0.0	0.000
<b>Moderate</b>	4.9	13.6	38.3	28.4	12.3	1.2	1.2	0.0	
<b>Severe</b>	0.0	3.3	15.0	33.3	28.3	16.7	1.7	1.7	
<b>Total</b>	17.6	13.8	23.4	23.4	14.4	5.9	1.1	0.5	

**Table 6: Number of social concerns across distress categories.**

Level of distress	Number of social concerns (Total 6) (%)					Chi square (Sig)
	0	1	2	3	4	
Low	95.7	2.1	2.1	0.0	0.0	0.005
Moderate	81.5	11.1	6.2	1.2	0.0	
Severe	60.0	20.0	16.7	1.7	1.7	
Total	78.2	11.7	8.5	1.1	0.5	

**Table-7: Types of concerns across levels of distress.**

Concerns	Low	Moderate	Severe	Total	Chi-square
<b>Social concerns</b>					
Relationship with spouse	0	1.2	3.3	1.6	0.375
Relationship with children	4.3	11.1	25	13.8	0.005
Relationship with family members	2.1	12.3	25	13.8	0.002
Relationship with friends or colleagues	0	2.5	11.7	4.8	0.008
<b>Practical concerns</b>					
Taking care of myself	0	7.4	6.7	5.3	0.171
Taking care of others	4.3	19.8	25.0	17.6	0.015
Work	2.1	34.6	33.3	26.1	0.001
School	0	2.5	1.7	1.6	0.565
Housing	4.3	34.6	53.3	33	0.001
Finances	8.5	34.6	40.0	29.8	0.001
Insurance	0	1.2	1.7	1.1	0.696
Transportation	2.1	0	0	0.5	0.221
Childcare	2.1	23.5	36.7	22.3	0.001
Having enough food	0	1.2	0	0.5	0.519
Access to medicines	4.3	0	1.7	1.6	0.182
Treatment decisions	0	3.7	6.7	3.7	0.198
<b>Spiritual concerns</b>					
Sense of meaning or purpose	0	2.5	3.3	2.1	0.480
Changes in faith or beliefs	2.1	14.8	38.3	19.1	0.001
Conflict between beliefs and the cancer treatment	0	3.7	0	1.6	0.134
Relationship with sacred	0	1.2	13.3	4.8	0.001

**Table 8: Number of practical concerns across distress categories.**

Level of distress	Number of practical concerns (Total 12) (%)								Chi square (Sig)
	0	1	2	3	4	5	6	7	
Low	83.0	8.5	6.4	2.1	0.0	0.0	0.0	0.0	0.000
Moderate	22.2	29.6	25.9	12.3	7.4	1.2	0.0	1.2	
Severe	13.3	20.0	33.3	18.3	11.7	1.7	1.7	0.0	
Total	34.6	21.3	23.4	11.7	6.9	1.1	0.5	0.5	

**DISCUSSION**

This study showed that cancer caused severe psychological distress among one-out of three patients and three physical, six emotional, three social, five practical, and the two spiritual concerns strongly appear with severe psychological morbidity. Another Indian study following the same methodology stated majority of the cancer patients had a distress score more than seven, our study found that nearly half the patients had scores above six.<sup>3</sup> According to a study in the Netherlands, the mean distress score was five.<sup>18</sup>

Our results showing severe distress to be more prevalent among younger patients was in line with other studies.<sup>3,21</sup> It is possible that middle-aged experience more distress following an unexpected cancer diagnosis because cancer incidence rises with age.<sup>6</sup> Similar to the study by Singh et al severe distress was more among females.<sup>20</sup> Unmarried individuals had the 31.6 percentages distress when compared to married individuals having the 23.8 percentages. The kind and magnitude of roles and responsibilities of married individuals is substantially different; however, they may get emotional and practical support from their spouses and children.

Even though earlier studies have showed that married patients report less distress than single patients Broeckel et al., Zabora et al., Kamen found that there was no difference in distress between married and unmarried if there was poor relationship support.<sup>4,21,22</sup> Those patients with very high levels of social support had less distress<sup>10</sup> whereas social remoteness lead to higher emotional distress.<sup>6,12</sup> Nuclear family seems to be less beneficial in dealing with distress as one-third of them were severely distressed unlike 27% of those with joint family as familial support and work burden is shared which reduces practical and financial concerns.<sup>23</sup>

Alcohol or smoking/tobacco have all been proved to be probable causes of cancer in various studies. Intriguingly our study shows, those who consume alcohol/cigarettes reported much lower distress, as compared to those who do not which was in line with other studies. But managing their stress with such risky behaviours or becoming more sedentary may have a weaker response to treatment or a poorer quality of life after treatment.<sup>24</sup> Nonetheless, it's known that using healthy coping mechanisms to combat stress, such as relaxation and stress management, have reduced levels of depression and anxiety as well as long-lasting reduction in cancer symptoms and treatment.

Among our respondents, the most common was physical concerns, followed by emotional, practical, spiritual, and family/social issues. These findings were consistent with previous researches with 60% physical concerns.<sup>3,18,25,26</sup> Similar to the study by Valdes-Stauber et al our study also reported high prevalence of fatigue and pain among severely distressed.<sup>27</sup> While fatigue, sleeping and eating disorders were noted in some studies, others found, higher prevalence of anxiety and depression among severely distressed.<sup>3,20,28,29</sup> The strong link between distress score and emotional disorders is supported by Spiegel et al who found that depression is prevalent among 20-50% of cancer patients.<sup>30</sup> Mehnert et al also found that more than one-third of severely distressed cancer patients struggle with financial obligations and childcare.<sup>28</sup>

A change in prevalence of faith was seen as a patient goes through profound transformation in his/her belief system and outlook on life after a cancer diagnosis. Changing faiths/beliefs with level of distress mirrors the constructivist paradigm, by which people build their own understanding and knowledge of the world by their experiences and reflections on them.<sup>31</sup>

As socio-demographic factors influence cancer occurrence and with the practice of people centered healthcare it is essential to adopt screening as a routine practice. Studies show that clinical psychologists address psychological concerns in roughly 15% of the sessions only and oncologists do not routinely inquire about psychological challenges.<sup>32-36</sup> Many a times, the focus is more on physical complaints and medical challenges and psychological concerns are missed leading to unmet

psychosocial care hence distress should be recognised and monitored through regular and repeated screening, and treated promptly.<sup>15,37,38</sup>

### ***Policy implications***

This study clearly highlights prevalence of distress across all sections of society, and their lives and livelihoods get immensely affected with increasing level of distress. Psychosocial implications are more significant than ever as the incidence and prevalence of cancer rises.<sup>39</sup> The institute of medicine's 2007 report "Cancer care for the whole patient: addressing psychosocial health needs" acknowledged that cancer patients' psychological care is still lacking in terms of detection, diagnosis, therapy, and follow-up.

Screening, using a brief, multi-domain, and accurate tool, is one technique to improve care quality and detection of distress but it cannot be used in isolation.

Knowing that cancer patients are on high doses of pharmaceuticals, opting for psychosocial care by conducting group sessions and activities with Psycho-oncologists will minimise pharmaceutical intake while also providing relaxation, positivism, and increased willpower to combat cancer. Having a platform whereby bringing in all the cancer survivors to share in their stories with others will be more effective in fighting the anxiety.

### ***Strengths***

The study's diversified sample of cancer patients with data on psychological distress (through the DT) and various forms of concerns offers a more comprehensive clinical picture of patient requirements than earlier studies. To our knowledge, there are limited studies that have looked at the link between demographic, clinical, and concerns across the DT's categories of mild, moderate, and severe distress. The purpose of this study is to clarify how these elements may differently influence a person's need for psychosocial care, hence has contributed to an under-researched topic and is unique to do so. We analysed for any associated health concerns to ensure the psychological distress caused was only due to cancer and no other health issues.

### ***Limitations***

The DT linear scale is sensitive to interpretation, DT performs well in relation to distress, but only marginal in relation to anxiety and depression. Our study assessed the level of distress among all cancer patients, regardless of new diagnosis, stage of cancer/treatment, or those in recovery phase (post-surgery or chemo). However, we were unable to elicit a change in distress levels across treatment and recovery phases. Hence more research is needed to elicit these changes.

## CONCLUSION

Around 32-43% of all cancer patients experience significant psychological distress and is imperative to note that it's not given significance throughout the care continuum. Age considerably attenuated an association, with the link being much stronger in less than 40 years (39.6%) than in 60 years or above (27.3%). Among other socio-demographics factors, distress was higher among females (36.2%), currently unmarried, those living in a nuclear family, with low education levels and financially dependent. Even if there is little evidence linking socio-demographic characteristics to distress levels, understanding the gravity of distress and its association with several concerns is essential. Additionally, because people are the center of healthcare, it is critical to comprehend several associations for better patient outcomes. Emotional problems were significantly associated with increasing levels of distress as the most prevalent causes were anxiety (89.5%), fatigue (70.4%), relationship with family (75.6%), fear (69.3%), pain (69.1%) and depression (51%).

Cancer patients require psychosocial support, which without screening might go unrecognised and optimal efficacy can be reached through routine screening with a simple visual analogue scale like DT. All cancer patients should receive regular screening for distress and appropriate normal cancer care (chemotherapy/radiation), psychosocial care, rehabilitation, post-treatment follow-up and additionally referral to a clinical psychologist, with an interdisciplinary approach based on the individual's need. Having known the distress levels, more studies to analyse the unmet needs of psychosocial care in the future is essential.

## ACKNOWLEDGEMENTS

The authors are grateful to Dr. Vinod K Ramani, for his statistical advice and support.

*Funding: No funding sources*

*Conflict of interest: None declared*

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

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**Cite this article as:** Pooja S, Savatagi S, Sengupta A, Jayanna K. Assessment of psychological distress and its association with socio-demographic variables among cancer patients in a tertiary care hospital in Bengaluru, Karnataka: a cross sectional study. *Int J Community Med Public Health* 2023;10:3358-66.