SSRG International Journal of Humanities and Social Science
ISSN: 2394-2703/ https://doi.org/10.14445/23942703/IJHSS-V13I5P102

Volume 13 Issue 5, 9-20, Sep-Oct 2026

Original Article

Psychosocial Experience of Cancer Diagnosis in India: Disclosure Practices, Coping Mechanisms, and Barriers to Mental Health Support

Sasha Rastogi

The Shri Ram School, Moulsari, Gurugram, Haryana, India.

Corresponding Author : sasharastogi11@gmail.com

Received: 05 July 2026 Revised: 11 August 2026 Accepted: 04 September 2026 Published: 18 September 2026

Abstract *- Cancer diagnosis brings tremendous psychological turmoil in India; psychosocial and neuropsychological coping, however, are under-researched in a family-centred Indian health system with limited psycho-oncology support structure. The present study was designed to investigate psychosocial distress among cancer patients after diagnosis, with the objectives of assessing the severity of emotional distress following diagnosis, disclosure patterns, coping strategies specific to the Indian context, and barriers to accessing mental health care in a government hospital in India. Primary data was collected through a self-designed questionnaire, and there were a total of 77 respondents from the National Cancer Institute (NCI), AIIMS, and Badsa. The results indicated a high level of emotional distress (mean = 3.36, SD = 0.86) and the primary pattern of diagnosis disclosure was through family members (67.5%) instead of by physicians directly, showing the family-oriented approach to healthcare. Almost half of the sample experienced social withdrawal following the diagnosis (48.1%), and the most common coping mechanisms included acceptance (45.5%), prayer/meditation (40.3%) and family support (64.9% as a factor supporting initial acceptance). Family support showed a small, negative but statistically non-significant correlation with overall perceived stress ($r = -.20$, $p = .088$), while its association with day-to-day emotional distress was negligible and non-significant ($r = -.02$, $p = .875$); a distinct anxiety measure was not available in this dataset. High distress nonetheless co-occurred with high family support, suggesting that there is more to psychological buffering than family support alone. Although there is a high unmet need for mental health care, structural barriers such as financial access and stigma, along with the lack of standardised psychosocial care guidelines, hinder access to professional mental health care. In the context of this finding, the importance of culturally sensitive, family-centred psycho-oncology interventions in cancer care at government facilities in India is highlighted.*

Keywords *- Cancer Coping Strategies, Diagnosis Disclosure, Emotional Distress, Family Support, Psycho-Oncology.*

1. Introduction

Cancer diagnosis is not just a clinical event; instead, it is an extremely profound psychological turning point that can completely disrupt a sense of identity, future plans, and relationships (Holland & Gooen-Piels, 2003). A meta-analysis that included 94 interview-based studies found that mood disorders are present in 30-40% of cancer patients in hospital settings (Mitchell et al., 2011). What makes this issue extremely prevalent for the Indian context is that India's cancer burden is projected to rise sharply, and the number of new cases is expected to reach 1.7 million by 2035 (Mallath et al., 2014). As of 2012, over one million new cases of cancer were recorded as of 2012 (Mallath et al., 2014), and cancer mortality was concentrated among individuals aged 30-69 years (Dikshit et al., 2012). This age range overlaps with the most productive, earning, and caregiving years, which could be additionally psychosocial stressors. Psychosocial and neuropsychological dimensions of coping remain under-researched, especially within a family-centered Indian healthcare model. So there is a clear gap in mental healthcare for Indian cancer patients, and this gap is compounded by cultural factors such as family-driven decision-making throughout the entire cancer journey (Chaturvedi, Loiselle & Chandra, 2009), stigma surrounding mental illness, and low psychological literacy among both patients and caregivers. Recent Indian survey data found that 85% of patients and 75% of caregivers reported experiencing at least one form of perceived, experienced, or internalised cancer-related stigma (Squiers et al., 2021). Additionally, psycho-oncology as a field is still in the early phases of development in India, and there is no routine integration of psychosocial care into the cancer treatment, even at centers where organised support does exist (Chaurvedi, 2012).

Kübler-Ross' Stage Model (1969) describes the five stages of grief: denial, anger, bargaining, depression and finally acceptance, which provides a useful historical framework, but it cannot be viewed as a fixed sequence. Individuals may skip stages, go back to a previous stage, or experience multiple stages at once. Instead, Lazarus & Folkman's Transactional Model (1984) provides the main theoretical foundation for this study. It argues that distress depends on how a threat is appraised and the coping resources available for the individual, which links psychological appraisal to the HPA axis and cortisol stress responses. Additionally, Folkman's later work argues that coping changes continuously as illness circumstances evolve, so the survey responses from this study measure a snapshot of coping at one particular moment, rather than stable personality traits.

The appraisal of stress depends on the information patients receive about their illness as well. In India specifically, families often mediate or restrict diagnosis disclosure, which reflects the collectivist cultural norms prevalent in Indian societies (Chaturvedi et al., 2009). Families withhold selected information to protect the patients, so collusion is not complete but partial (Chaturvedi, Loiselle, & Chandra, 2009).

Family involvement can present as both a challenge to accurate appraisal as well as one of the strongest protective factors after diagnosis (Chaturvedi, 2012). Indian psycho-oncology research consistently identifies family support and religious or spiritual practices as the most common coping strategies (Chaturvedi, 2012). Existing research in this field shows what coping strategies are used, but does not provide much evidence on whether these strategies effectively reduce distress to clinically meaningful levels. India lacks a well-developed psycho-oncology infrastructure compared to other countries like the US, UK, and parts of Europe.

Existing literature is often theoretical or review-based, conducted in private tertiary hospitals and tends to be less representative of the broader Indian cancer population. A 2025 narrative review of eighty-five studies from India also reported a wide range of psychosocial distress (22%–62%) and that collusion around the disclosure of the diagnosis was reported up to 75% of the time, indicating limited documentation of psychosocial experience specifically within government-hospital populations (Deodhar et al., 2025).

The purpose of this study is to address the existing gap in the literature by collecting primary data from the National Cancer Institute, AIIMS Badsa. It focuses specifically on patients across a wide age range in a government hospital where financial and structural barriers to mental healthcare are the greatest. This study investigates the severity of emotional distress after diagnosis, patterns of diagnosis disclosure, coping strategies used by patients, and structural and cultural barriers to accessing formal mental health support. The aim is to produce findings which are specific to the Indian healthcare context, rather than extrapolated from Western or private-sector settings. Thereby, the study fills a gap in the existing literature, where previous Indian studies have identified specific coping strategies and support resources that patients appeal to, but have rarely attempted to test statistically whether such resources are related to reduced distress in the same study population, which is directly tested here using correlational and subgroup analyses.

2. Methods

2.1. Participants

The respondents were seventy-seven (N = 77) individuals who were recruited from the oncology ward of the National Cancer Institute (NCI), AIIMS, Badsa using a convenience sampling technique during the study period of one month, and approached by the researcher and ward nurse. The respondents included those over 18 years except for parents who completed the questionnaire on behalf of paediatric patients, 43 (55.8%) male and 34 (44.2%) female. Current age was fairly evenly distributed, with most in the 18–30 (27.3%) and 46–60 (24.7%) age groups, while age at diagnosis was grouped at 21–60 (63.7% combined). The majority (39.0%) had completed secondary school, while 26.0% had an undergraduate degree, though only 6.5% had gone on to postgraduate study (15.6% had not started school at all). Cancer stage at diagnosis also ranged, but almost one-third of respondents (32.5%) did not know the stage and of those who did, Stage I (22.1%) was the most common. There was no exclusion based on cancer type, stage or treatment status.

2.2. Materials

Considering the lack of a standardised tool to measure the psychosocial experience, disclosure and coping in the Indian cancer context, a self-designed 30-item structured questionnaire, in multiple-choice, Likert scale and open-ended format was used to collect data. This included demographic and clinical background, disclosure and understanding of the diagnosis, emotional distress, coping resources and supports, and mental health service use and barriers, with select-all-that-apply items subsequently coded as binary indicators and Likert-type items coded as 1–4 or 1–5 scales for analysis. The full questionnaire, including wording of the items, the possible answers, and the structure of the sections, is presented in Appendix A (Supplementary Material) for readers to assess content directly; in this study, the instrument was not formally psychometrically validated, nor was there a pilot study before data collection, which is discussed in Section 5.

The questionnaire was in English and Hindi, depending on the preference of the respondents, and it was read out by a

family member or the researcher for those who struggled to read it. It was given as a paper-based test and required about 10–15 minutes per participant to complete.

2.3. Procedure

The data was collected from patients (and some parents of paediatric patients) who were at the time of data collection present in the oncology ward at NCI, AIIMS Badsa. All respondents were over the age of 18, and n = 77. The sample included patients across different stages of cancer, different treatment types, and different types of cancer - there was no exclusion criteria.

The participants were approached by the researcher and a nurse from the ward, and convenience sampling was used, so the sample consisted of participants who were present in the ward during the data collection window. Informed consent was obtained both verbally and in writing (signed consent forms) prior to questionnaire administration.

The questionnaire was self-administered, with two accommodations: family members reading it aloud for some respondents and the researcher personally reading it aloud for some, in cases of literacy difficulty. The questionnaire was available in both English and Hindi, which was selected by the participants based on language comfort. The questionnaire was administered in paper form and took approximately 10-15 minutes per respondent. Data was collected over a one-month period, and the paper responses were digitised (entered manually) after collection on Google Forms. The questionnaire was self-made in its entirety, consisting of 30 items. It was a mixed-type with multiple choice, Likert scale and some open-ended questions. Questions included: Cancer stage, treatment type, disclosure of diagnosis, emotional distress, mental health supports (and why it was not received).

2.4. Data Analysis

The raw response file was examined for completeness and consistency before being analysed. No responses were excluded from the final analytic sample (N = 77) because they had the same response pattern; this would only occur if the same answers were given by the same respondents or if answers were duplicated or incorrectly. All the demographic, clinical and psychosocial variables were subjected to descriptive statistics, including frequencies, percentages, means and standard deviations. Items were coded numerically (from low to high intensity) to calculate means and standard deviations in addition to categorizing by frequency to facilitate reporting. Items allowing multiple responses (coping strategies used, factors supporting diagnosis acceptance, reasons for not consulting a mental health professional) were coded as separate binary indicators, with percentages reflecting the proportion of the total sample endorsing each option; these percentages therefore sum to more than 100%.

Data cleaning, coding, and initial descriptive tabulation were done in Google Sheets, while inferential analyses were carried out in R. To examine the relationship between perceived family/social support and psychological outcomes, Pearson correlation coefficients were calculated between the emotional-support item and both the emotional-distress-frequency item and the overall-stress item. Overall perceived stress was compared by gender using an independent-samples t-test with Welch's correction, supported by a Mann-Whitney U test given the ordinal nature of the stress measure. Statistical significance was set at $p < .05$ for all inferential tests, and all analyses were based on the complete dataset of 77 respondents. Due to the small number of respondents and the ordinal nature of the outcome variables, comparisons of distress and stress across the following subgroups were done using the non-parametric Kruskal-Wallis test rather than analysis of variance and the epsilon-squared (ε^2) reported as the effect size: age, education, cancer stage and treatment status. Cancer type was collapsed into the four most frequent categories plus an ‘other’ category because most individual types had fewer than five respondents. Effect sizes (Cohen’s d, rank-biserial correlation) and 95% confidence intervals were also calculated for the correlation and gender-comparison results, and the subgroup comparisons reported in Section 3.9 should be interpreted as exploratory given the number of tests conducted relative to the sample size.

2.5. Ethical considerations

Informed consent was both written and verbal and was obtained from all participants prior to participation. No names or identifying information were collected on the questionnaires, so responses were linked to no personal identifiers, which ensures anonymity in data entry and analysis. The data was stored securely and accessible only to the researcher.

Participation was voluntary, and respondents could decline without any consequences. Respondents were also free to withdraw at any point during the questionnaire without any penalties or consequences.

3. Result

3.1. Diagnosis Disclosure Patterns and Comprehension

In line with a family-centred disclosure model, immediate family members were the first to learn of the diagnosis in 52 cases (67.5%), while 24 respondents (31.2%) were informed first themselves, and 1 (1.3%) had extended family informed first. Regarding how the diagnosis was initially communicated, 28 respondents (36.4%) reported that the family learned first and then passed the information on to them, 26 (33.8%) were told directly by the doctor, 17 (22.1%) had the diagnosis explained by the doctor with family present, and 6 (7.8%) were informed gradually across several visits. Often, family members mediated disclosure,

but the majority of respondents reported they knew a reasonable amount of the information in the diagnosis, M = 3.06, SD = 1.00, on a 1-4 scale. 34 (44.2%) knew very well, 21 (27.3%) somewhat, 15 (19.5%) very little, and 7 (9.1%) not at all.

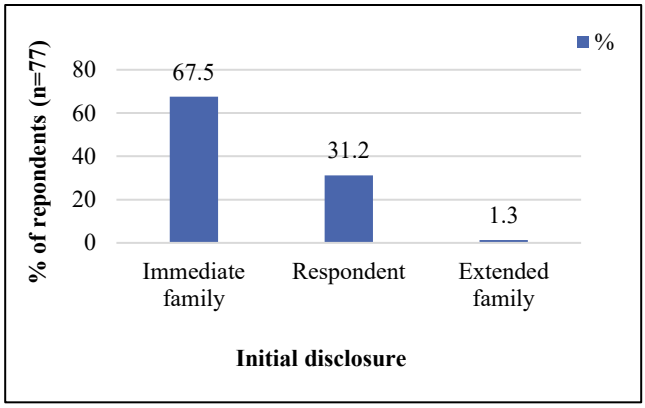

Fig. 1 Initial disclosure of diagnosis (N = 77)

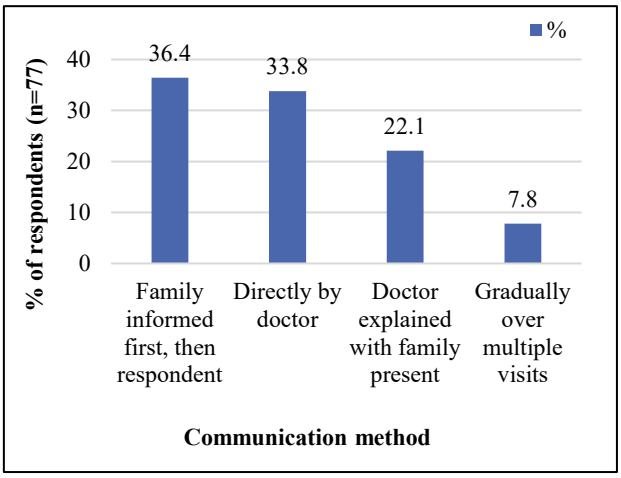

Fig. 2 Initial communication of diagnosis (n=77)

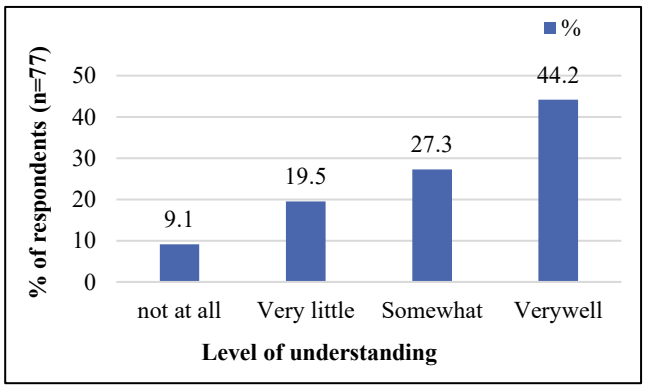

Fig. 3 Understanding of diagnostic information (n=77)

3.2. Emotional Distress and Perceived Stress

After diagnosis, emotional distress was common; 42 (54.5%) respondents indicated feeling distressed very often, 26 (33.8%) sometimes, 4 (5.2%) rarely, and 5 (6.5%) did not at all (M = 3.36, SD = 0.86, on a 1–4 scale). The overall perceived stress along the cancer journey was skewed toward the higher end of the 1–5 scale, with 34 respondents (44.2%) rating the journey as extremely stressful and 15 (19.5%) as very stressful, 13 (16.9%) as moderately stressful, 13 (16.9%) as slightly stressful, and 2 (2.6%) as not stressful at all (M = 3.86, SD = 1.23, n = 77).

Table 1. Emotional Distress and Perceived Stress (N = 77)

Variable / Category	n	%
Overall stress of cancer journey, 1–5 (M = 3.86, SD = 1.23, n = 77)		
1 – Not stressful	2	2.6
2 – Slightly stressful	13	16.9
3 – Moderately stressful	13	16.9
4 – Very stressful	15	19.5
5 – Extremely stressful	34	44.2

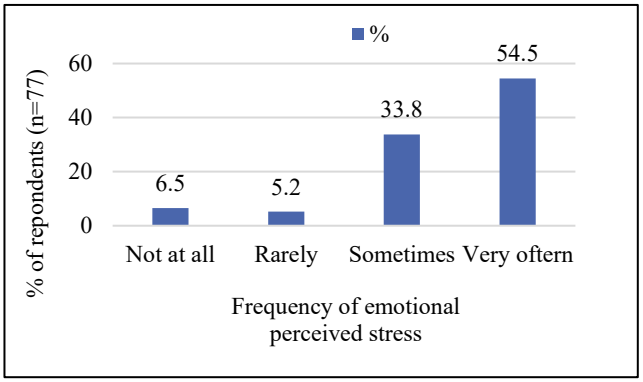

Fig. 4 Emotional Distress (N = 77)

3.3. Coping Strategies and Diagnosis Acceptance

The most commonly reported coping strategy on the select all that apply coping item was acceptance (n = 35, 45.5% of respondents), followed by prayer/meditation (n = 31, 40.3%) and talking to others about their feelings (n = 20, 26.0%). Work, TV, or routine was reported as a means of distraction (10 – 13.0%), avoidance or denial (6 – 7.8%), and humour (2 – 2.6%).

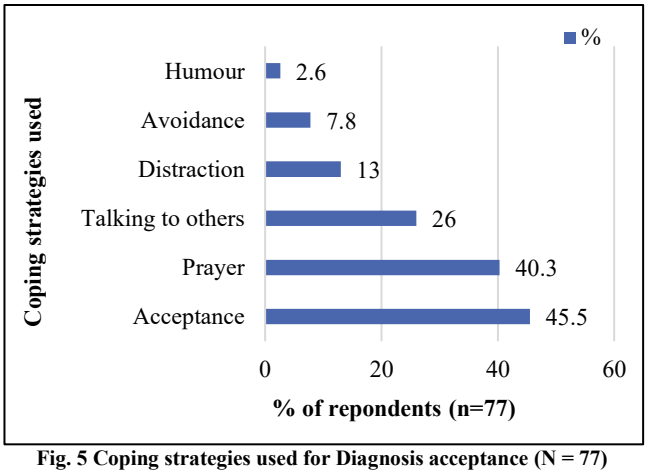

Fig. 5 Coping strategies used for Diagnosis acceptance (N = 77)

Regarding what helped respondents accept their diagnosis, family support was mentioned by far the most (n = 50, 64.9%), followed by doctor's reassurance (n = 30, 39.0%) and faith/spirituality (n = 18, 23.4%), with the least mentioned being time, friends, peer support, and information-seeking.

Table 2. Factors Supporting Diagnosis Acceptance (N = 77)

Category	n	%
Factors that helped initial acceptance		
Family support	50	64.9
Doctor's reassurance	30	39.0
Faith/spirituality	18	23.4
Time	8	10.4
Friends	7	9.1
Peer support from other patients	5	6.5
Gaining information about cancer	1	1.3

3.4. Family and Social Support

Overall, perceived emotional support from family and friends was high: 57 respondents (74.0%) always felt supported, 10 respondents (13.0%) most of the time, 2 respondents (2.6%) sometimes, 3 respondents (3.9%) rarely, and 5 respondents (6.5%) none of the time (M = 4.44, SD = 1.15, on a 1–5 scale).

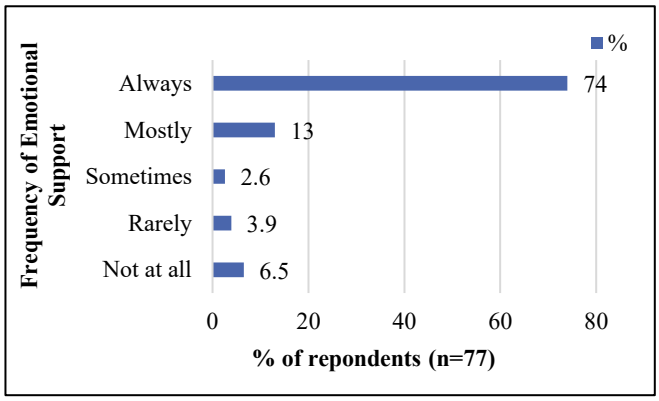

Fig. 6 Emotional support received from family and friends

The majority of respondents indicated immediate family (n = 68, 88.3%), healthcare professionals (n = 21, 27.3%), friends (n = 12, 15.6%), other cancer patients or survivors (n = 7, 9.1%), and religious/community leaders (n = 3, 3.9%) as part of the main support system (most respondents named more than one source.

Table 3. Family and Social Support (N = 77)

Variable / Category	n	%
Main support system		
Immediate family	68	88.3
Healthcare professionals	21	27.3
Friends	12	15.6
Other cancer patients/survivors	7	9.1
Religious or community leaders	3	3.9

3.5. Social Withdrawal and Difficult Social Interactions

Despite generally high perceived support, social withdrawal after diagnosis was common: 37 respondents (48.1%) reported avoiding their social circle, 28 (36.4%) said their interactions stayed roughly the same, and 12 (15.6%) reported interacting more with their social circle. A minority (n = 18, 23.4%) reported that interactions within their social circle had made coping more difficult, while 54 (70.1%) reported no such difficulty and 5 (6.5%) were unsure.

Table 4. Social Life After Diagnosis (N = 77)

Variable / Category	n	%
Social interactions made coping more difficult.		
No	54	70.1
Yes	18	23.4
Not sure	5	6.5

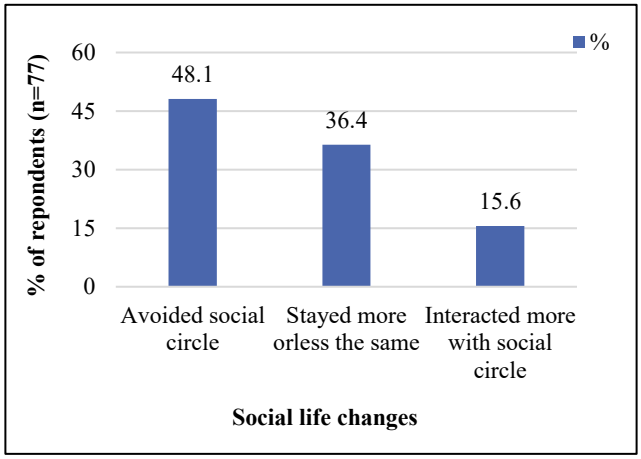

Fig. 7 Social life changes after diagnosis (N = 77)

3.6. Mental Health Service Utilisation and Barriers

Just over half of respondents (n = 44, 57.1%) had consulted a psychologist, counsellor, or therapist during their cancer journey, while 26 (33.8%) had not, and 7 (9.1%) wanted to but were unable to access one. Forty-eight respondents answered the reason-for-non-consultation item.

Among these, financial reasons and not feeling the need were the most common (n = 13 each, 27.1% of those answering), followed by lack of access (n = 11, 22.9%), lack of energy to see another healthcare provider (n = 8, 16.7%), the belief that it would not help (n = 5, 10.4%), the treatment not being suggested by a provider (n = 3, 6.2%), and stigma around mental health (n = 2, 4.2%).

Of the 13 respondents who cited not feeling the need for psychological support, 9 (69.2%) still reported feeling emotionally distressed sometimes or very often on the separate distress item, suggesting that for a substantial subset of this group, distress may have been normalised as an expected part of the cancer experience rather than something warranting support.

Table 5. Mental Health Service Utilisation and Reasons for Non-Consultation

Variable / Category	n	%
Consulted a psychologist/counsellor/therapist (N = 77)		
Yes	44	57.1
No	26	33.8
Wanted to, but could not access one	7	9.1
Reason for non-consultation (n = 48; select-all-that-apply)		
Financial reasons	13	27.1
Did not feel the need	13	27.1
Lack of access	11	22.9
Did not have the energy for another healthcare provider	8	16.7
Thought it would not help	5	10.4
Not suggested by healthcare providers	3	6.2
Stigma around mental health	2	4.2

3.7. Association Between Perceived Support and Distress/Stress

The dataset does not include a separate anxiety scale; the closest available measures are the single-item emotional-support rating, the single-item distress-frequency rating, and the single-item overall stress rating.

The correlation between emotional support and overall perceived stress was small and negative but did not reach statistical significance, $r(75) = -.20$, $p = .088$, 95% CI [−.40, .03], suggesting that respondents reporting higher family/friend support tended to report somewhat lower overall stress, though this trend fell short of significance. Notably, high mean support (M = 4.44) co-occurred with high mean distress (M = 3.36) at the sample level, indicating that perceived support did not correspond to lower day-to-day emotional distress in this sample.

3.8. Gender Differences in Perceived Stress

An independent-samples comparison examined whether overall perceived stress (1–5 scale) differed by gender. Female respondents reported higher mean stress (M = 4.09, SD = 1.03, n = 34) than male respondents (M = 3.67, SD = 1.36, n = 43), though this difference did not reach statistical significance, Welch's $t(74.87) = -1.52$, $p = .132$. A Mann-Whitney U test, appropriate given the ordinal nature of the stress item, similarly found no significant difference, $U = 625.0$, $p = .253$. These results do not support a statistically significant gender difference in overall perceived stress within this sample.

This difference was small to medium (Cohen's d = 0.34, 95% confidence interval for Cohen's d [−0.13, 0.96]), consistent with the non-significant test results, and also the rank-biserial correlation (effect size) was small to medium (0.15), indicating that any true gender difference in stress in this sample is at most small.

Table 6. Gender Differences in Overall Perceived Stress (N = 77)

Gender	n	M	SD	Test Statistic	p
Male	43	3.67	1.36	Welch's t: $t(74.87) = -1.52$	.132
Female	34	4.09	1.03	Mann-Whitney U: $U = 625.0$	.253

3.9. Distress and Stress by Demographic and Clinical Characteristics

Kruskal–Wallis tests were used to compare the frequency of distress and overall stress by participant characteristics, including age group, education level, cancer stage, treatment status, and cancer type (the latter two were collapsed into broad categories as listed above; see Section 2.4). There were no significant differences between the ten comparisons (all $p > .10$), and effect sizes were generally small (ε^2 varied from −.04 to .05; Table 8). There was descriptively higher stress for patients not sure of their stage and Stage I patients compared to Stage II and III patients, though this was not significant and there was the largest variation by cancer stage, $H(4) = 7.77$, $p = .100$, $\varepsilon^2 = .05$. The patients with recurrence had the highest mean stress score (M = 4.43, SD = 0.53), but this was not statistically significant, $H(2) = 0.99$, $p = .609$.

Table 7. Distress and Stress by Demographic and Clinical Characteristics (N = 77)

Variable / Category	n	Distress M (SD)	Stress M (SD)
Age group			
Below 18	7	3.14 (1.46)	4.29 (1.25)
18–30	21	3.33 (0.66)	3.52 (1.25)
31–45	14	3.57 (0.85)	4.07 (1.14)
46–60	19	3.21 (0.98)	4.05 (1.22)
Above 60	16	3.50 (0.63)	3.69 (1.30)
Education			
No formal education	12	3.67 (0.49)	4.00 (1.28)
Primary school	10	3.50 (0.97)	3.70 (1.06)
Secondary school	30	3.10 (1.03)	3.63 (1.38)
Undergraduate degree	20	3.40 (0.68)	4.20 (1.15)
Postgraduate or higher	5	3.80 (0.45)	3.80 (0.84)
Cancer stage			
Not sure / not told	25	3.40 (0.91)	4.28 (1.06)
Stage I	17	3.47 (0.80)	4.00 (1.32)
Stage II	14	3.21 (0.89)	3.43 (1.28)
Stage III	16	3.31 (0.87)	3.44 (1.21)
Stage IV	5	3.40 (0.89)	3.80 (1.30)
Treatment status			

Undergoing treatment	58	3.34 (0.83)	3.79 (1.27)
Remission / completed	12	3.25 (1.14)	3.83 (1.34)
Recurrence	7	3.71 (0.49)	4.43 (0.53)
Cancer type			
Blood-related	30	3.20 (1.06)	4.00 (1.26)
Stomach-related	18	3.56 (0.78)	3.44 (1.29)
Head and neck	11	3.36 (0.81)	4.00 (1.34)
Breast	6	3.17 (0.41)	3.83 (0.98)
Other	12	3.58 (0.51)	4.00 (1.13)

Given the small size of several subgroups (for example, n = 5 for Stage IV and postgraduate education), these comparisons are likely underpowered to detect small-to-moderate effects; they are interpreted further in Sections 4 and 5.

4. Discussion

The findings of this study revealed that about 54.5% (n = 42) of respondents experienced emotional distress very often after diagnosis, and 33.8% (n = 26) reported feeling emotionally distressed sometimes. The mean emotional distress score was 3.36 with a standard deviation of 0.86. This finding is consistent with other psycho-oncology literature, where research estimates that nearly 70% of cancer survivors undergo emotional distress to a level that affects day-to-day activities, and that up to 25% deal with clinical depression, while 35-40% deal with significant levels of anxiety. In neuropsychology, this pattern is best understood through Lazarus and Folkman's (1984) transactional model of stress and coping, where a cancer diagnosis becomes a prototypical threat appraisal that activates the HPA axis and leads to cortisol release that amplifies emotional reactivity. This indicates that the psychological impact of cancer in Indian patients is similar to that reported in Western samples, and is substantial and poorly addressed.

An interesting result was that 67.5% (n = 52) of the respondents were told about the diagnosis through their immediate family first, and 36.4% (n = 28) reported that the family was informed first and subsequently relayed the diagnosis to them. In India, oncologists are very common in the practice of “family comes first”, where they inform the family members of the prognosis from the beginning and ask them for permission before telling the patient the truth, particularly if the patient is a woman. In West Bengal, the study revealed that 85.60% of the terminal cancer patients preferred complete disclosure, whereas only 22.03% of the patients were informed, and family members' preference for beneficence and non-maleficence was the main reason. This neuropsychological implication is important because the individual's ability to interpret his or her own information is impaired, which leads to greater uncertainty-related anxiety and less adaptive coping (Lazarus & Folkman, 1984). Despite this pattern, the 44.2% (n = 34) who reported understanding their diagnosis “very well” may reflect retrospective sense-making and not necessarily actual understanding at the time of diagnosis.

Acceptance (n = 35, 45.5%), prayer/meditation (n = 31, 40.3%), and talking to others (n = 20, 26.0%) were the most common coping strategies. Acceptance of cancer is theorised as an active choice to be present with cancer-related realities while relinquishing judgments and control over cancer-related appraisals and feelings, which is an action congruent with deeply held values. This is probably because it is a cultural value of equanimity that has taken precedence in Indian philosophical traditions. The high concurrent use of prayer and meditation is similar to that observed in the Indian psycho-oncology literature, which identified the Indian emphasis on spirituality in daily life, along with the interventions of yoga, prayer and meditation, as making psychosocial care relatively easy to incorporate into the cancer context. Acceptance and spiritual practice can act as complementary regulatory mechanisms, buffering the neuroendocrine stress response by diminishing threat appraisal and maintaining meaning, when used together. In contrast, the least endorsed coping strategies in this sample (n = 6, 7.8%) were avoidance or denial, and this is consistent with international coping literature, which has shown that avoidance coping to lessen an overwhelming appraisal is associated with poorer long-term psychological adjustment (Lazarus & Folkman, 1984).

Most respondents indicated that family members were the main source of support, and 74.0% (n = 57) always felt emotionally supported by their friends and family (mean = 4.44, SD = 1.15). In India, family is a key component of informal care and represents an important field of research and intervention, as opposed to the relatively individualistic societies in the West. Perceived social support directly modulates the neuroendocrine cascade underlying distress at a neural level by dampening the threat response of the amygdala and decreasing activation of the HPA axis. Family support showed a small, negative but non-significant correlation with overall perceived stress, $r = -.20$, $p = .088$, and a negligible, non-significant correlation with day-to-day emotional distress frequency, $r = -.02$, $p = .875$; a distinct anxiety measure was not collected in this study. Theoretically significant: In this sample, a high score on the support subscale (4.44) was found to co-occur with a high score on the distress subscale (3.36), indicating that while family support is important, it is not enough to prevent significant emotional distress and that other professional interventions are needed. This is consistent with a recent systematic review finding that social support and coping work in two directions: in the absence of any direct effect of social support on momentary distress, family support can influence the coping style employed by the patient (e.g.,

social support for coping in terms of acceptance versus social support for coping in terms of avoiding distress), which in turn impacts psychological adjustment and quality of life throughout the cancer survivorship journey (Bottaro, Craparo, & Faraci, 2023).

Almost half of the sample (48.1%, n = 37) avoided their social circle after diagnosis, while 15.6% (n = 12) reported that they had more social interaction. It also has potential plausible neuroendocrine and immune implications, since elsewhere, long-term isolation has been associated with increased cortisol and changes in immune function. This is a clinically relevant effect, particularly in the context of cancer, since immune function is already compromised by cancer. In the current sample, social avoidance could also be a result of stigma-related dynamics, as patients might avoid social contact before they are rejected. That 23.4% (n = 18) reported that social interactions made things more difficult to cope with also undercuts the idea that the social environment is only a buffer.

Of those who consulted a mental health professional (57.1%, n = 44), 16.9% (n = 13) cited financial reasons among the reasons for non-consultation, and 10.4% (n = 8) cited lack of energy to consult another health care provider. These barriers are a result of identified structural weaknesses. There are no national societies or standard guidelines for psychosocial care, and the stigma of psychosocial care is a huge obstacle to accessing mental health care in India, especially when combined with the stigma of cancer. Stigma, cultural attitudes, financial and logistical constraints are important barriers, and about 30% of cancer patients have psychological disorders related to their cancer, such as anxiety, depression and post-traumatic stress. The fact that 9 out of 13 respondents who did not feel the need for psychological support nonetheless reported feeling emotionally distressed sometimes or very often on the separate distress item indicates that there is a normalisation of distress as a part of the cancer experience, which is a critical point of intervention for integrated psycho-oncology services at tertiary care centres like AIIMS.

Family support was the most common factor that was reported to help them accept their diagnosis initially (n = 50, 64.9%), followed by the doctor's reassurance (n = 30, 39.0%) and faith/spirituality (n = 18, 23.4%). Emotional support, caring and the presence of a supportive environment can significantly help cancer patients deal with anxiety, enhance quality of life and build their psychological resilience. It is argued that in the Indian context, this process is not individually driven but is socially and culturally embedded as the three scaffolds of acceptance are triangulated. In India, cultural factors influencing communication about cancer include beliefs about health and illness, societal values, integration of spiritual care, family roles, and expectations for disclosure, which influence communication between the patient, family, and provider. This is because the psycho-oncological interventions that aim to improve acceptance of diagnosis in Indian patients need to involve the family members and consider the spiritual aspects of the disease, not simply patient-centred counselling approaches developed in a Western individualistic context.

Exploratory comparisons of distress and stress across age, education, cancer stage, treatment status, and cancer type (Section 3.9) did not reveal statistically significant subgroup differences in this sample, in contrast to a much larger South Indian cohort (N = 2,019) in which distress was significantly associated with demographic and clinical factors such as age, sex, and cancer type (Veeraiah, Kayser, & Sudhakar, 2022). This discrepancy most plausibly reflects the present study's small and unevenly distributed subgroups rather than a genuine absence of such associations in the broader Indian cancer population, and it reinforces the need for the larger, multi-site samples discussed in Section 6.

5. Limitations

There are several limitations of this study that warrant consideration when interpreting the results of this study. First, the data collection using convenience sampling in a single government hospital (NCI, AIIMS Badsa) may not be representative of the data obtained from private-sector hospitals, rural community and other parts of India with varying cultural and socioeconomic profiles. Second, the cross-sectional design only permits conclusions regarding psychosocial experience at a single time in the cancer trajectory, and the nature of coping is theorized as a dynamic process that occurs throughout this trajectory (Lazarus & Folkman, 1984). Third, no questionnaire was used, and it was not independently validated and was completely based on self-report, meaning that recall bias and social desirability bias could have occurred. Similarly, a family member read the questionnaire to some of the participants who had literacy challenges, which could have affected their accuracy in answering questions about family-mediated disclosure and/or collusion. Fourth, the study failed to include a validated anxiety or depression scale, which further constrained the ability to make more definitive conclusions about clinical-level psychological distress beyond the single-item distress and stress scales used.

Last, the correlational study design prevents causal inferences from family support and psychological outcomes, and the small sample size (N = 77) restricts the statistical power to detect smaller relationships among family support and psychological outcomes, such as the non-significant relationships found between distress/stress and family support. The smaller sample sizes and lack of correction for multiple testing in the demographic and clinical subgroup comparisons in Section 3.9 should be interpreted with the understanding that they are hypothesis-generating and not confirmatory.

6. Future perspectives

It is hoped that future studies will be able to replicate these results with validated and standardised instruments, such as validated anxiety and depression scales, to enable more direct comparisons with international psycho-oncology literature. Longitudinal methods following patients from diagnosis into treatment and into survivorship would help to shed light on the pattern of disclosure, coping and distress throughout the cancer journey, not just at one point in time. Multi-site data collection, in a wider range of settings such as private sector hospitals, rural or community health centres, would enhance the generalisability of results across India's varied health system and socio-economic settings. More comprehensive analyses would also be possible in the present study, with larger numbers, including sub-group analyses such as between cancer type, stage and treatment status. With family involvement being a key component of this sample, future research could include qualitative interviews of both patient and family members to gain insight into the lived experience of collusion and family-mediated disclosure. Lastly, intervention research on the implementation of the family-inclusive, spiritually integrated psycho-oncology programme at government hospitals would help bring these descriptive findings to life in the form of testable models of care.

7. Conclusion

This study found high levels of emotional distress in cancer patients, which reflects concerns that have been documented in global psycho-oncology literature and suggests that this burden extends beyond Western contexts. The findings from this study highlight the underlying "family comes first" approach to cancer disclosure in the Indian context, which is a finding that is consistent with existing literature, such as Mondal (2023) and Chaturvedi et al. (2009). The dominant coping mechanisms that were found were prayer/meditation and family support, which are consistent with the collectivist and spiritually connected coping patterns that are generally observed across Indian contexts. However, despite high reported levels of family support, patients continued to experience high levels of distress, which suggests that family support is necessary but cannot be used as a replacement for formal mental health support. The study identified financial constraints, stigmas, and the normalisation of distress as key barriers preventing patients from seeking professional mental health support. Some patients reported experiencing substantial levels of distress but also reported that they did not perceive a need to seek formal mental health support, thus highlighting a gap between psychological need and help-seeking behaviour. Overall, these findings demonstrate the need for greater integration of psychosocial and mental health support within oncology settings, while recognising the important role of family and spirituality.

This study has implications for clinical practice, disclosure protocols, intervention design, and policy. The findings of this study support the requirement for routine psychological screening to be integrated with oncology care at government hospitals and not just private tertiary centres. Family support is essential, but interventions do not substitute for family support in producing the absence of distress; therefore, there is a need for family involvement, such as professional psycho-oncology support that also involves family. Such findings demonstrate the need for a systemic investment in infrastructure beyond the level of the hospital and the absence of national guidelines/standardised psychosocial care, as discussed by Daruvala et al. (2024). Besides, patient-centred counselling approaches found in the Western world cannot be immediately translated to the Indian context, as there are internalised stigmas and avoidance of talking about 'difficult situations' that prevent their effective implementation, and if such interventions are to be effective, they must be family inclusive and even spiritually integrated in view of the collectivist values espoused. The study was conducted in one setting (i.e., government hospitals), and this may not apply to other settings, such as community-based or private hospital settings. Also, due to the cross-sectional study design, the observation of distress does not represent the course of the cancer journey but only one point in time.

References

[1] Cristiane Bergerot et al., "Global Unmet Psychosocial Needs in Cancer Care: Health Policy," *eClinicalMedicine*, vol. 78, pp. 1-9, 2024. [CrossRef] [Google Scholar] [Publisher Link]

[2] Santosh K. Chaturvedi, "Psychiatric Oncology: Cancer in Mind," *Indian Journal of Psychiatry*, vol. 54, no. 2, pp. 111-118, 2012. [CrossRef] [Google Scholar] [Publisher Link]

[3] Santosh K. Chaturvedi, Carmen G. Loiselle, and Prabha S. Chandra, "Communication with Relatives and Collusion in Palliative Care: A Cross-Cultural Perspective," *Indian Journal of Palliative Care*, vol. 15, no. 1, pp. 2-9, 2009. [Google Scholar]

[4] Mahati Chittem, Sravannthi Maya, and Shweta Chawak, "Nondisclosure of a Cancer Diagnosis and Prognosis: Recommendations for Future Research and Practice," *Indian Journal of Cancer*, vol. 58, no. 2, pp. 158-164, 2021. [CrossRef] [Google Scholar] [Publisher Link]

[5] Mahati Chittem, Paul Norman, and Peter R. Harris, "Relationships between Perceived Diagnostic Disclosure, Patient Characteristics, Psychological Distress and Illness Perceptions in Indian Cancer Patients," *Psycho-Oncology*, vol. 22, no. 6, pp. 1375-1381, 2013. [CrossRef] [Google Scholar] [Publisher Link]

[6] Mahati Chittem, Paul Norman, and Peter Harris, "Primary Family Caregivers' Reasons for Disclosing Versus Not Disclosing a Cancer Diagnosis in India," *Cancer Nursing*, vol. 43, no. 2, pp. 126-133, 2020. [CrossRef] [Google Scholar] [Publisher Link]

[7] Rhea Daruvala et al., "Delivering Psychological and Social Support to Children with Cancer in India and their Families: A Position Statement from the Social and Psychological Taskforce of the Indian Childhood Cancer Initiative," *Ecancer Medical Science*, vol. 18, pp. 1-5, 2024. [CrossRef] [Google Scholar] [Publisher Link]

[8] Rajesh Dikshit et al., "Cancer Mortality in India: A Nationally Representative Survey," *The Lancet*, vol. 379, no. 9828, pp. 1807-1816, 2012. [CrossRef] [Google Scholar] [Publisher Link]

[9] Arunangshu Ghoshal et al., "To Tell or Not to Tell: Exploring the Preferences and Attitudes of Patients and Family Caregivers on Disclosure of a Cancer-Related Diagnosis and Prognosis," *JCO Global Oncology*, vol. 5, pp. 1-12, 2019. [CrossRef] [Google Scholar] [Publisher Link]

[10] Jimmie C. Holland, and J. Gooen-Piels, *Psycho-Oncology*, 6th ed., Cancer Medicine, BC Decker, 2009. [Google Scholar]

[11] Elisabeth Kübler-Ross, Stanford Wessler, and Louis V. Avioli, "On Death and Dying," *JAMA*, vol. 221, no. 2, pp. 174-179, 1969. [CrossRef] [Google Scholar] [Publisher Link]

[12] Richard S. Lazarus, and Susan Folkman, *Stress, Appraisal, and Coping*, Springer Publishing Company, 1984. [Google Scholar]

[13] Mohandas K. Mallath et al., "The Growing Burden of Cancer in India: Epidemiology and Social Context," *The Lancet Oncology*, vol. 15, no. 6, pp. e205-e212, 2014. [CrossRef] [Google Scholar] [Publisher Link]

[14] Bincy Mathew et al., "Integrating Psycho-Oncology Services in Cancer Care in India," *Indian Journal of Cancer*, vol. 58, no. 2, pp. 290-293, 2021. [CrossRef] [Google Scholar] [Publisher Link]

[15] Sravannthi Maya et al., "Oncologists' Experience with Discussing Cancer Prognosis with Patients and Families: Perspectives from India," *Translational Behavioral Medicine*, vol. 11, no. 10, pp. 1896-1904, 2021. [CrossRef] [Google Scholar] [Publisher Link]

[16] Seema Mehrotra, "Psycho-Oncology Research in India: Current Status and Future Directions," *Journal of the Indian Academy of Applied Psychology*, vol. 34, no. 1, pp. 7-18, 2008. [Google Scholar] [Publisher Link]

[17] Alex J. Mitchell et al., "Prevalence of Depression, Anxiety, and Adjustment Disorder in Oncological, Haematological, and Palliative-Care Settings: A Meta-Analysis of 94 Interview-Based Studies," *The Lancet Oncology*, vol. 12, no. 2, pp. 160-174, 2011. [CrossRef] [Google Scholar] [Publisher Link]

[18] Souvik Mondal, Truth-Telling to Terminal Stage Cancer Patients in India: A Study of the General Denial to Disclosure," *OMEGA – Journal of Death and Dying*, vol. 87, no. 3, pp. 941-961, 2023. [CrossRef] [Google Scholar] [Publisher Link]

[19] Dina Keumala Sari, Ratna Dewi, and Wardiah Daulay, "Association between Family Support, Coping Strategies and Anxiety in Cancer Patients Undergoing Chemotherapy at General Hospital in Medan, North Sumatera, Indonesia," *Asian Pacific Journal of Cancer Prevention*, vol. 20, no. 10, pp. 3015-3019, 2019. [CrossRef] [Google Scholar] [Publisher Link]

[20] Aanchal Satija et al., "Patients' Awareness of Advanced Disease Status, Psychological Distress and Quality of Life among Patients with Advanced Cancer: Results from the APPROACH Study, India," *American Journal of Hospice and Palliative Medicine*, vol. 39, no. 7, pp. 772-780, 2022. [CrossRef] [Google Scholar] [Publisher Link]

[21] Rahul Shidhaye, and Michelle Kermode, "Stigma and Discrimination as a Barrier to Mental Health Service Utilization in India," *International Health*, vol. 5, no. 1, pp. 6-8, 2013. [CrossRef] [Google Scholar] [Publisher Link]

[22] Srinagesh Simha, Simon Noble, and Santosh K. Chaturvedi, "Spiritual Concerns in Hindu Cancer Patients Undergoing Palliative Care: A Qualitative Study," *Indian Journal of Palliative Care*, vol. 19, no. 2, pp. 99-105, 2013. [Google Scholar]

[23] Linda Squiers et al., *Perceived, Experienced, and Internalized Cancer Stigma*, RTI Press, 2021. [Google Scholar] [Publisher Link]

[24] Rossella Bottaro, Giuseppe Craparo, and Palmira Faraci et al., "What is the Direction of the Association between Social Support and Coping in Cancer Patients? A Systematic Review," *Journal of Health Psychology*, vol. 28, no. 6, pp. 524-540, 2023. [CrossRef] [Google Scholar] [Publisher Link]

[25] J. Deodhar et al., "Psycho-Oncology in India," *Journal of Cancer Policy*, vol. 46, pp. 1-8, 2025. [CrossRef] [Google Scholar] [Publisher Link]

[26] Surendran Veeraiaha, Karen Kayserb, and Revathy Sudhakara, "Psychosocial Factors Influencing Distress among Cancer Patients in South India," *Journal of Psychosocial Oncology Research and Practice*, vol. 4, no. 1, pp. 1-7, 2022. [CrossRef] [Google Scholar] [Publisher Link]

Supplementary Material

Appendix A reproduces the full self-designed study questionnaire referenced in Section 2.2, including all section headings, item wording, and response options, for readers who wish to evaluate item coverage directly.

Appendix A: Study Questionnaire

Section A: Demographic Information

What is your age?

☐ Below 18 ☐ 18–30 ☐ 31–45 ☐ 46–60 ☐ Above 60

What is your gender?

☐ Female ☐ Male ☐ Non-binary

What is the highest level of education completed?

☐ No formal education ☐ Primary school ☐ Secondary school ☐ Undergraduate degree ☐ Postgraduate degree or higher

What was your employment status at the time of diagnosis?

☐ Student ☐ Employed ☐ Self-employed ☐ Homemaker ☐ Retired ☐ Unemployed

What was your marital status at the time of diagnosis?

☐ Single ☐ Married ☐ Divorced / Separated ☐ Widowed

Section B: Medical Background

What type of cancer were you diagnosed with?

☐ Breast ☐ Lung ☐ Blood-related (leukemia, lymphoma, etc.) ☐ Gastrointestinal ☐ Gynecological ☐ Head and neck ☐ Other: _____

What stage of cancer were you diagnosed with?

☐ Stage I – detected early, limited to one area ☐ Stage II – grown/spread locally but not extensively ☐ Stage III – spread to nearby tissues/lymph nodes ☐ Stage IV – spread to distant parts of the body ☐ Not sure / Was not told

What is your current status?

☐ Undergoing treatment ☐ In remission ☐ Completed treatment ☐ Recurrence

How old were you when diagnosed?

☐ Below 20 ☐ 21–40 ☐ 41–60 ☐ Above 60

What treatments have you / will you receive(d)? (Select all that apply)

☐ Surgery ☐ Chemotherapy ☐ Radiation therapy ☐ Hormonal therapy ☐ Targeted / immunotherapy ☐ Palliative care

Section C: Receiving the Diagnosis

How was your diagnosis first communicated to you?

☐ Directly by the doctor ☐ Doctor explained it with family present ☐ Family was informed first, then me ☐ Gradually over multiple visits ☐ Other: _____

Who was informed first about your diagnosis?

☐ Me ☐ Immediate family ☐ Extended family ☐ Not sure

How well did you understand the information given at the time?

☐ Very well ☐ Somewhat ☐ Very little ☐ Not at all

What emotions did you experience immediately after diagnosis? (Select all that apply)

☐ Shock ☐ Fear ☐ Confusion ☐ Denial ☐ Sadness ☐ Anger ☐ Emotional numbness ☐ Shame

Open-ended: What do you remember most clearly about the moment you were diagnosed, what would you change?

Section D: Coping and Psychological Response

What helped you accept the diagnosis initially? (Select all that apply)

☐ Family support ☐ Friends ☐ Faith / spirituality ☐ Doctor's reassurance ☐ Gaining information about cancer ☐ Time ☐ Peer support from other patients

How often did you feel emotionally distressed after diagnosis?

☐ Very often ☐ Sometimes ☐ Rarely ☐ Not at all

Which coping strategies did you use most often? (Select all that apply)

☐ Talking to others about my feelings ☐ Acceptance ☐ Prayer / meditation ☐ Distraction (work, TV, routine) ☐ Avoidance or denial ☐ Humour ☐ Journaling or writing ☐ Other: _____

Did you consult a psychologist, counselor, or therapist during your cancer journey?

☐ Yes ☐ No ☐ Wanted to, but could not access one

If you did not consult one, what was the main reason? (Select all that apply)

☐ Not suggested by healthcare providers ☐ Stigma around mental health ☐ Financial reasons ☐ Lack of access ☐ Did not feel the need ☐ Thought it would not help ☐ Did not have the energy to consult one more healthcare professional

On a scale of 1–5, how stressful was your cancer journey overall?

☐ 1 – Not stressful ☐ 2 – Slightly stressful ☐ 3 – Moderately stressful ☐ 4 – Very stressful ☐ 5 – Extremely stressful

Open-ended: What was the most emotionally difficult part of your cancer journey? What would you do now – having lived through it – to cope better?

Section E: Support Systems and Social Experience

Who formed your main support system? (Select all that apply)

☐ Immediate family ☐ Friends ☐ Other cancer patients / survivors ☐ Healthcare professionals ☐ Religious or community leaders ☐ I did not feel supported

Did you feel emotionally supported by friends and family overall?

☐ Always ☐ Mostly ☐ Sometimes ☐ Rarely ☐ Not at all

Open-ended: If you did not feel emotionally supported enough by friends and family, what could they have done to improve/better support your journey?

Did any interactions with your social circle make coping more difficult?

☐ Yes ☐ No ☐ Not sure

How was your social life after diagnosis?

☐ Interacted more with social circle ☐ Avoided social circle ☐ Interactions stayed more or less the same

Open-ended: Is there something you wish people around you understood better about your experience with cancer?

Section F: Reflection and Emotional Safety

Did answering this questionnaire feel emotionally distressing or make you relive difficult memories? (Select all that apply)

☐ Felt emotionally distressing ☐ Made me relive difficult memories ☐ None of the above

Open-ended: What advice or message would you like to share with someone newly diagnosed with cancer?