REVIEW

Editorial Process: Submission:11/26/2025 Acceptance:06/18/2026 Published:06/22/2026

Rapid Psychosocial Screening Instruments for Cancer Patients: A Scoping Review of Measurement Tools and Psychometric Evidence

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Abstract

Purpose: This study aimed to map and synthesize available screening instruments for detecting psychosocial problems in cancer patients. **Methods:** A scoping review was conducted following Arksey and O'Malley's framework. Literature searches were performed in PubMed, Scopus, and ScienceDirect using predefined keywords, focusing on English-language, full-text, and quantitative studies. Data extraction included study characteristics (title, author, year, objectives, design, sample) and key findings on the validation and application of screening tools. A thematic analysis was performed by two independent reviewers, with discrepancies resolved through discussion, to compare psychometric properties, clinical feasibility, and the scope of detection across instruments. **Results:** Of 18,225 records identified 11 studies met the inclusion criteria. Fourteen screening instruments were identified, including the DT, HADS, PHQ-2, PHQ-9, GAD-7, ESAS, PROMIS Depression Short Form, MAX-PC, DADDS, STAI-S, PHQ-ADS, MADRS-S, e-VAS, and DART. The analysis generated three major themes: (1) psychometric strength (validity and reliability), (2) clinical feasibility (time efficiency, ease of use, applicability across cancer populations), and (3) scope of detection (range of psychosocial problems identified, such as depression, anxiety, general distress, and death anxiety). **Conclusion:** Several rapid screening instruments demonstrate strong psychometric properties and clinical applicability for detecting psychosocial problems in cancer patients. Future research should focus on integrating the most effective tools into oncology practice and on developing a rapid, comprehensive instrument tailored to clinical needs, thereby enhancing early detection and psychosocial care.

Keywords: cancer patients- instrument- psychosocial problems- rapid assessment

Asian Pac J Cancer Prev, **27 (6)**, 1985-1995

Introduction

Cancer is one of the leading causes of death worldwide. According to the GLOBOCAN 2022 report published by the International Agency for Research on Cancer (IARC), there were approximately 20 million new cancer cases and 9.7 million cancer-related deaths globally in that year [1]. This figure represents a significant increase compared to previous years, indicating that the global burden of cancer continues to rise. In Indonesia, the 2019 Global Burden of Disease (GBD) report indicates that breast, cervical, lung, and colorectal cancers have the highest incidence rates. This rise is influenced by various factors, including changes in diet, insufficient physical activity, increased life expectancy, and delays in early detection [1].

A cancer diagnosis affects not only the patient's physical condition but also imposes significant psychosocial stress. Studies indicate that approximately 35–40% of cancer patients experience mental health disorders such as anxiety and depression [2]. In addition, patients often face social and spiritual challenges, including isolation, changes in family relationships, stigma, and existential crises concerning the meaning of life and death. Cultural factors also play a role in shaping how patients respond to illness and seek psychosocial support [3]. The most common psychosocial problems experienced by cancer patients include anxiety, depression, social isolation, uncertainty about the future, and an increased burden on the family. A recent meta-analysis reported that the prevalence of depression among cancer patients was 32.5%, anxiety 31.3%, and fear of recurrence 67.4% [4]. Furthermore, young cancer survivors are at greater risk of social isolation and long-term impairment in social relationships, which may further compromise their emotional well-being [5].

If these psychosocial problems are not adequately

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addressed, the consequences for cancer patients can be severe and long-lasting. Untreated anxiety, depression, and social isolation can significantly reduce the patient's quality of life and may even interfere with their ability to adhere to cancer treatments, leading to worse clinical outcomes [6, 7]. Moreover, the lack of psychosocial support can exacerbate feelings of hopelessness and despair, particularly in patients facing advanced stages of the disease [5]. The emotional distress associated with cancer can lead to increased psychological suffering, weakened family relationships, and a greater financial burden due to the inability to work or engage in daily activities [8]. In extreme cases, unresolved psychosocial distress may lead to suicidal ideation or self-harm, particularly among those who feel overwhelmed by the emotional toll of their illness [9]. Addressing these psychosocial needs is therefore essential, not only for improving the patient's mental and emotional well-being but also for enhancing their overall health outcomes and quality of life [10].

Although the need for early detection of psychosocial problems has been widely recognized, many healthcare facilities still lack rapid and accurate screening tools. Existing instruments are often too lengthy, require specialized training, and are difficult to integrate into routine clinical practice [11, 12]. In addition, healthcare providers frequently face time constraints and limited resources to conduct comprehensive psychosocial assessments. As a result, many psychosocial issues in patients go unidentified in a timely manner, leading to delays in intervention [13].

To address these challenges, there is a need for a psychosocial screening tool that is rapid, concise, and easy for healthcare providers to use, yet maintains high validity and reliability. In this context, "rapid" refers to screening tools that can be administered quickly, with minimal items and without requiring extensive training [14]. Rapid screening enables healthcare providers to detect psychosocial problems at the earliest possible stage, allowing interventions to be implemented before the condition progresses to a more severe state. In the long term, this approach not only improves the quality of life of cancer patients but also enhances the overall efficiency of healthcare services [15].

Although several systematic reviews have evaluated psychosocial instruments in cancer patients, most of these studies have a limited focus, for example, examining only specific instruments [16] or limited to specific cancer types, such as breast cancer [17]. Recent brief reviews have also highlighted the development of distress screening instruments, but they do not comprehensively map the various existing instruments or the challenges of their implementation in clinical practice [15]. This scoping review seeks to fill this gap by providing a comprehensive overview of existing psychosocial screening instruments for cancer patients, including their psychometric properties, feasibility, and applicability across different clinical settings. The main research question for this review is: What are the existing psychosocial screening instruments for cancer patients, and how do they vary in terms of psychometric properties, feasibility, and applicability across different clinical settings? This review aims to offer valuable insights for healthcare providers, guiding the development of more effective, practical, and accessible tools for the early detection of psychosocial issues in cancer patients.

Materials and Methods

Design

This research used a scoping review methodology, based on the framework developed by Arksey and O'Malley and later strengthened by [18] and [19]. The primary goal of this scoping review was to map the existing literature on rapid psychosocial screening tools used in cancer patients, summarize previous research findings, and identify gaps that needed further exploration. The review followed five stages: identifying the research question, conducting the literature search, selecting studies, extracting data, and synthesizing the findings [20].

Literature Search Sources

The literature search was conducted in three major international databases: PubMed, Scopus, and ScienceDirect. These databases were chosen due to their wide coverage in the fields of oncology, nursing, and mental health, and their access to peer-reviewed, full-text articles of high quality.

Search Strategy and Keywords

The search strategy was developed using the PCC framework to ensure that the review comprehensively captured relevant studies. The full search string used for this review included the following:

• Population: "Cancer patients" OR "Oncology patients"

• Concept: "Psychosocial distress" OR "Anxiety" OR "Stress" OR "Depression"

• Context: "Hospital" OR "Cancer Center" OR "Screening" OR "Assessment" OR "Instrument" OR "Psychometric" OR "Questionnaire"

The inclusion of keywords like "Screening," "Assessment," "Instrument," and "Psychometric" was specifically intended to broaden the search scope, ensuring that the review captured studies related to the development, validation, and application of psychosocial screening tools, including those conducted in outpatient or community settings, not just hospitals or cancer centers.

An example of the search strategy used is as follows:

("Cancer patients" OR "Oncology patients") AND ("Psychosocial distress" OR "Anxiety" OR "Stress" OR "Depression") AND ("Hospital" OR "Cancer Center" OR "Screening" OR "Assessment" OR "Instrument" OR "Psychometric" OR "Questionnaire")

Research Question

This scoping review was guided by the following research question, formulated according to the PCC (Population, Concept, Context) framework [21]: What rapid psychosocial screening tools are used in cancer patients to assess psychosocial distress, and how do these tools vary in terms of psychometric properties and clinical

applicability across different healthcare settings?

This question aimed to evaluate the range of psychosocial screening tools used, their effectiveness, and their applicability in various clinical environments.

Inclusion and Exclusion Criteria

The eligibility criteria for selecting studies were clearly defined. Inclusion criteria specified that articles published in English were eligible. Only original research studies focusing on rapid psychosocial screening tools used to assess psychosocial distress, anxiety, depression, or other psychosocial problems in cancer patients were included. Additionally, only studies available in full-text format were considered, ensuring that complete details of each study were accessible for analysis.

Exclusion criteria were applied to studies that did not focus on cancer patients or psychosocial distress. Articles that did not discuss psychosocial screening tools or were non-original research articles, such as reviews, commentaries, or conference abstracts, were excluded. Studies that were not available in full-text format were also excluded.

he selection process followed the PRISMA guidelines. A total of 18,255 records were identified from the selected databases, with no records identified from registers. Before screening, 2,145 records were removed, including 1,497 duplicate records and 648 records removed for other reasons. As a result, 16,110 records were screened based on titles and abstracts, of which 15,924 were excluded. Subsequently, 186 reports were sought for retrieval, and all 186 reports were successfully retrieved and assessed for eligibility. Following full-text assessment, 175 reports were excluded because they did not involve cancer patients (n = 98) or did not discuss rapid psychosocial assessment (n = 77). Finally, 11 studies were included in the review and synthesized in the final analysis. This selection process is summarized in Figure 1 (PRISMA Flowchart).

Selection Process

The literature search was conducted in July 2025. The selection process was carried out by two independent reviewers. Any disagreements between the reviewers were resolved through discussion, and when consensus could not be reached, a third reviewer was consulted. This approach ensured inter-rater reliability and minimized the potential for bias during the study selection process.

Data Extraction

Data from the 11 included studies were extracted and organized according to key characteristics. These included study information (e.g., title, authors, year of publication, country of origin), study design (e.g., cohort study, randomized controlled trial, observational study), and sample characteristics (e.g., cancer type, sample size, participant demographics).

The psychosocial problems measured in each study (e.g., depression, anxiety, distress, death anxiety) and the screening instruments used (e.g., PHQ-9, HADS, DT, ESAS, MAX-PC, PROMIS) were also recorded.

Data Synthesis

The data were analyzed using a narrative synthesis approach. Studies were grouped according to the psychosocial problems they assessed (e.g., depression, anxiety, generalized distress) and the screening tools used (e.g., PHQ-9, HADS, DT). Each tool was compared in terms of validity, reliability, feasibility, and clinical applicability across different cancer types (e.g., breast, prostate, colorectal) and clinical settings (e.g., inpatient, outpatient, community-based).

The synthesis also considered the feasibility of each tool, evaluating how easily it could be implemented in routine clinical practice, including the time required for administration and the training needed for healthcare providers. This allowed for a detailed comparison of tools in terms of their overall applicability and effectiveness.

Table 1 (Characteristics of Included Studies) provides a summary of each study's authors, year of publication, country, study design, sample size (N, cancer type), and screening tools used. This table is essential for assessing the heterogeneity of the studies and comparing the psychometric properties and applicability of the different tools.

Results

This scoping review analyzed 11 research articles that investigated the use of rapid assessment tools for detecting psychosocial problems in cancer patients. The studies were conducted in various countries, including the United States, United Kingdom, Canada, Belgium, Japan, and Sweden. The research was conducted in general hospitals, oncology centers, palliative units, and specialized psycho-oncology services (Table 1).

The populations examined in these studies included cancer patients with various diagnoses, such as breast cancer, cervical cancer, prostate cancer, colorectal cancer, head and neck cancer, advanced-stage cancer, and childhood or adolescent cancer. Some studies also involved cancer survivors who had completed active treatment, as well as patients with a genetic predisposition to cancer. The patients' clinical conditions varied, ranging from those receiving routine outpatient care, to palliative care patients, and individuals undergoing surgical procedures

The psychosocial issues identified across the analyzed articles encompassed a range of dimensions, including depressive symptoms, anxiety, emotional distress, fatigue, sleep disturbances, body image changes, fear of death, and the need for social and emotional support. Several studies also highlighted factors that exacerbate the psychological burden on patients, such as having dependent children, being diagnosed at a young age, and lacking access to psycho-oncology services. In older adults, cognitive impairment and reduced quality of life were primary concerns, whereas in children and adolescents with cancer, anxiety and depression were identified through screenings that involved their families.

Each study included in this scoping review utilized at least one instrument for rapid and practical screening of psychosocial disorders. The most frequently used

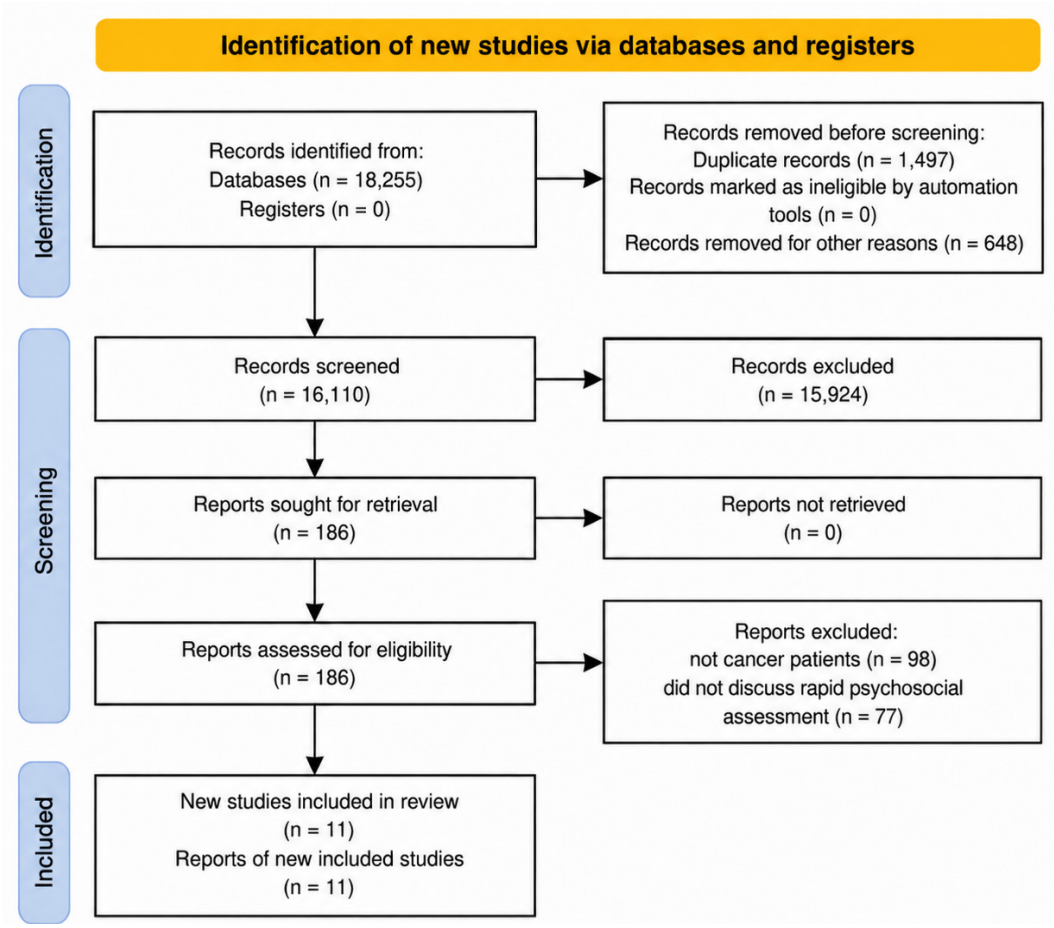

Figure 1. PRISMA Flow Diagram

tools were the Hospital Anxiety and Depression Scale (HADS), Distress Thermometer (DT), and Patient Health Questionnaire version 2 and 9 (PHQ-2 dan PHQ-9). Other instruments used include the Generalized Anxiety Disorder-7 (GAD-7), Edmonton Symptom Assessment Scale (ESAS), PROMIS Depression Short Form, Memorial Anxiety Scale for Prostate Cancer (MAX-PC), and Death and Dying Distress Scale (DADDS). Several studies also developed or adapted new screening tools.

Most studies indicated that the screening instruments used were concise, could be self-administered by patients, and demonstrated high validity and reliability in identifying psychosocial disorders. Beyond research applications, these tools have also been implemented in clinical practice for the early detection of psychological problems in cancer patients during the diagnosis, treatment, and survivorship phases. Detailed findings regarding study locations, cancer types, psychosocial disorders assessed, and screening tools used in each article are presented in Table 1.

This scoping review was conducted to synthesize findings from previous studies on rapid screening assessments of psychosocial problems in cancer patients. The analysis of 11 research articles showed progress in developing instruments that are practical, valid, and applicable to various cancer populations. Most of the screening tools reviewed demonstrated high validity and reliability. Screening tools such as PHQ-9, PHQ-2, PHQ-ADS, HADS, PROMIS Depression Short Form, and DT showed strong ability to identify psychological problems, including depression, anxiety, and distress in cancer patients.

This study synthesizes various psychosocial screening instruments used in cancer patients, focusing on their effectiveness and implementation in clinical settings. The analysis shows that these instruments have diverse characteristics but complement one another in detecting patients' psychological burden.

Psychometric Strength

The psychometric strength of the reviewed instruments generally demonstrates very high levels of reliability and validity. The PROMIS instruments for depression and anxiety show excellent internal consistency, with alpha coefficients above 0.95 in patients with cervical cancer [21]. Similarly, the PHQ-ADS, which combines the PHQ-8 and GAD-7, shows Omega coefficients ranging from 0.91 to 0.96, confirming a strong unidimensional structure for measuring general distress in breast cancer survivors [22]. Disease-specific instruments such as the Death and Dying Distress Scale (DADDS) and the Memorial Anxiety Scale for Prostate Cancer (MAX-PC) also demonstrate strong reliability, with coefficients of 0.95 and 0.89, respectively [23, 24].

In terms of diagnostic accuracy, short-form instruments often outperform longer instruments in certain populations. For example, among older cancer patients, the PHQ-2 achieved an Area Under the Receiver Operating

Table 1. Extraction Data

Authors & Year	Country	Study Design	Sample Characteristics	Psychosocial Problems Measured	Screening Instruments Used	Psychometric Data Extraction
(Wilford et al.[21])	USA	Secondary analysis of a biobehavioral randomized clinical trial	Cancer Type: Cervical (Stages I-IVA) Sample Size: 204Demographics: All female; mean age 44.7 years	Depression and Anxiety	PROMIS Depression (Short Form 8a), PROMIS Anxiety (Short Form 7a), FACT-Cx, BSI-18, IES, PSS, MOS-SS	Reliability: Internal consistency coefficients ≥ 0.95 for both scales. Validity: Depression T-scores correlated with legacy measures (0.44–0.76); Anxiety correlated (0.45–0.78).
(Ibrahimi et al. [22])	UK	Longitudinal observational questionnaire design	Cancer Type: Breast (Stage I-III) Sample Size: 280Demographics: All female; average age 58.0 years	Psychological distress, depression, and anxiety	PHQ-ADS (composite of PHQ-8 and GAD-7), Distress Thermometer (DT), FCR-7	Reliability: Omega coefficients: Depression (0.91), Anxiety (0.95), General factor (0.96). Validity: Strong convergent validity with DT (r = 0.70).
(Krause et al.[23])	Canada	Phase 2b pilot trial (Brief Methodological Report)	Cancer Type: Advanced/Metastatic (various)Sample Size: 60Demographics: 70% female; mean age 56 years	Death anxiety, depression, and generalized anxiety	DADDS, PHQ-9, GAD-7, SCID, QUAL-EC	Reliability: Cronbach's alpha = 0.95. Validity: Death anxiety correlated with GAD-7 (r = 0.63) and PHQ-9 (r = 0.50).
(Roth et al.[24])	USA	Scale validation study (Multi-site)	Cancer Type: ProstateSample Size: 385Demographics: All male; average age 71.05 years	Prostate cancer anxiety, PSA anxiety, and fear of recurrence	MAX-PC, HADS, DT, FACT-P	Reliability: Internal consistency (Total MAX-PC): α=0.89; Test-retest reliability: 0.89. Validity: Correlated with HADS Anxiety (r = 0.57).
(Hegel et al.[28])	USA	Clinical screening/ Observational study	Cancer Type: Newly diagnosed Breast (Stage I-III) Sample Size: 236Demographics: All female; mean age 57.4 years	Distress, depression, anxiety (Panic, GAD), and PTSD	Distress Thermometer (DT), PHQ-9, GAD, PC-PTSD	Validity: DT > 5 identified 96% of depressed patients. PC-PTSD showed high specificity and sensitivity in other primary care settings.
(Valentine et al.[27])	USA	Retrospective chart review	Cancer Type: Various (Breast, Heme, etc.)Sample Size: 1221Demographics: 67% female; mean age 53.3 years	Depression and Anxiety	ESAS (ESAS-A, ESAS-D), PHQ-9, GAD-7	Validity: ESAS-D sensitivity 0.84 (cutoff ≥3); ESAS-A sensitivity 0.85 (cutoff ≥5). AUC: Depression (0.81), Anxiety (0.86).
(Gascon et al.[31])	Canada	Retrospective observational cohort study	Cancer Type: Head and Neck (HNC)Sample Size: 347 (Aim 1a) Demographics: 76.7% male; mean age 60.7 years	Emotional distress, depression, and anxiety	PHQ-9, GAD-7, ESAS-r, MDASI-HN	Validity: Multivariable analysis (IPTW) associated moderate/ severe depression with higher risk of cancer-related death (HR 1.66).
(Tack et al.[25])	Belgium	Prospective, open-cohort pilot study	Cancer Type: Various solid and hemeSample Size: 50Demographics: 68% male; median age 76 years	Depressive symptoms	GDS-15, GDS-4, PHQ-9, PHQ-2, SCID-5-S (Gold Standard)	Validity: AUROC: PHQ-2 (90.1%), PHQ-9 (87.0%), GDS-4 (71.7%), GDS-15 (62.5%). PHQ-2 sensitivity 88.9% (cutoff 2).
(Mattsson et al.[26])	Sweden	Comparative Web-based study	Cancer Type: Breast, Prostate, Colorectal Sample Size: 558 Demographics: 55.7% female; mean age 61 years	Anxiety and Depression	eVAS (Anxiety/ Depression), HADS, MADRS-S, STAI-S	Reliability: Internal consistency (Cronbach's alpha) $\geq$ 0.85 for all. Validity: AUC 0.88–0.94 compared to references.
(Nelson et al.[30])	USA	Secondary analysis of merged cross-sectional datasets	Cancer Type: ProstateSample Size: 736Demographics: All male; mean age 68 years	Distress, anxiety, and depression	Distress Thermometer (DT), HADS, FACT-P	Validity: Aging correlated with reduced distress (r = -0.14) and anxiety (r = -0.22), but greater depression (r = 0.18).
(Ganz et al.[29])	USA	Baseline enrollment analysis from randomized trial	Cancer Type: Breast (Stage 0-III) Sample Size: 231Demographics: All female; mean age 45.2 years	Depression, anxiety, and cancer-related distress	PHQ-9, PHQ-2, GAD-7, ISI, FSI, IES	Validity: PHQ-9 severity strongly associated with anxiety (GAD-7), fatigue (FSI), and insomnia (ISI) (all P < 0.001).

Characteristic (AUROC) value of 90.1%, substantially higher than the GDS-15, which reached only 62.5% [25]. Additionally, web-based instruments such as eVAS demonstrate outstanding discriminative ability, with AUC values ranging from 0.88 to 0.94 when compared with clinical gold standards [26]. The psychometric strength

of ESAS has also been validated, with sensitivity above 0.84 for detecting depression and anxiety using specific cutoff points [27].

Clinical Feasibility

The clinical feasibility of instruments is strongly influenced by the number of items and administration time, particularly in busy oncology care settings. Ultra-short instruments such as the Distress Thermometer (DT) and PHQ-2 are considered the most clinically feasible because they require only one to two items and can be completed in less than one minute [28] [25]. ESAS also shows high feasibility, as it can simultaneously monitor ten physical and psychological symptoms with minimal patient burden [27].

Technological advances have further improved clinical feasibility through web-based administration. Electronic versions of HADS and eVAS have proven to be efficient and can be integrated into automated symptom management systems without compromising data quality [26]. However, longer instruments such as MAX-PC (18 items) or PHQ-9 still have an important role in clinical practice for more in-depth assessment, although they require approximately 5 to 10 minutes to complete [23, 24]. Flexibility in administration mode, whether paper-based or digital, is a key factor in the successful implementation of routine screening [21].

Scope of Detection

The scope of psychosocial problem detection in the reviewed literature covers a broad spectrum, ranging from general distress to specific disorders. Depression and anxiety are the most frequently measured domains using standard instruments such as the PHQ-9, GAD-7, and HADS [27, 29]. An interesting finding shows that symptom manifestation may change with age, where anxiety tends to decrease while depressive symptoms increase in older prostate cancer patients [30].

Beyond general domains, several instruments are designed to capture more specific issues. The DADDS specifically detects fear related to the dying process in patients with advanced cancer, a dimension that is often not captured by routine depression screening [23]. The MAX-PC provides unique coverage of PSA-related anxiety and fear of recurrence among men with prostate cancer [24]. Additionally, the scope of detection extends to Post-Traumatic Stress Disorder (PTSD) using the PC-PTSD instrument in newly diagnosed patients [28]. Overall, the use of multidimensional instruments such as MDASI-HN and ESAS-r allows clinicians to view the relationship between physical symptom burden and its psychosocial impact in a holistic manner [31].

Psychosocial Problems: Depression

Studies by [28, 29] showed that, the PHQ-9 proved to be effective for breast cancer survivors in detecting the presence of depressive symptoms thus providing an opportunity for precision intervention. This instrument consists of 9 main question items, each representing one of the nine criteria for major depression diagnosis in the Diagnostic and Statistical Manual Of Mental Disorder, fourth edition (DSM-IV) with a scale of 0-3 per item. Another study conducted by [21] showed that the PROMIS Depression 8a screening tool has sensitivity to change after counseling interventions that use a scale of 1 to 5 ("never" to "almost always"). In elderly cancer patients who tend to experience cognitive impairment, it will be difficult to use instruments that are too complex, so a tool is needed to detect these problems. PHQ-2 displays the best diagnostic accuracy for depression detection in elderly cancer patients, among the four depression screening tools tested (GDS-15, GDS-4, PHQ-9, PHQ-2) consisting of the first 2 question items from PHQ-9 with AUROC reaching 90.1% and a cut off of 2 recommended as the optimal threshold for depression detection [25]. The study of [26] which showed that eVAS (Digital Visual Analog Scale) and brief HADS have excellent accuracy (AUC between 0.88-0.94) which is equivalent or even higher compared to MADRS-S and STAI-S in detecting psychosocial symptoms. The HADS is a self- report rating scale consisting of 14 items on 4 Likert scales (0-3). The scale is designed to measure anxiety and depression (7 items for each subscale). The total score is the sum of the 14 items, and for each subscale, the score is the sum of each of the seven items (0-21).

Psychosocial Problems: Anxiety

The MAX-PC instrument is an instrument to measure anxiety in men with prostate cancer who are undergoing treatment, according to a study by [24] MAX-PC has 18 statement items which are divided into 3 subscales, namely general anxiety, PSA anxiety, and fear of recurrence. The GAD-7 is a tool to measure a person's anxiety level. In the research findings, the GAD-7 instrument was combined with other instruments to measure not only anxiety problems but other psychosocial problems. In a study conducted by [22] there is PHQ-ADS which is a combined measurement tool from GAD-7 and PHQ-8 to measure anxiety and depression. Furthermore, the HADS instrument with 7 items for the anxiety subscale can be used more effectively with a shorter time to screen compared to the State-Trait Anxiety Inventory (STAI-S) questionnaire which consists of 20 self-report assessment items [26].

Psychosocial Problems: Generalized Distress

Research by Cutillo et al. [32] found that the highest levels of distress are experienced by cancer patients in the first weeks after diagnosis. This underscores the importance of rapid and systematic psychosocial screening. Instruments such as the Distress Thermometer (DT) have been proven effective in identifying patients with high distress in a short period of time [22]. Another important finding shows that early identification of emotional distress is associated with clinical outcomes in cancer patients. In the study by [31], emotional distress detected at the time of diagnosis was associated with lower survival rates in patients with head and neck cancer. Interventions based on screening results, such as the DART system an integrated system that includes PHQ-9, GAD-7, ESAS-r, and MDASI-HN have been shown to improve survival rates, reaffirming that screening

serves not only as an evaluation tool but also as a crucial preventive and predictive instrument.

Psychosocial Issues: Death Anxiety

When knowing that they are diagnosed with a very deadly disease such as cancer, theywill feel that death is just around the corner and feel feel despair despair, sadness and feel fear [32]. These feelings are important for us to detect using appropriate screening tools. The study by [23] revealed that the DADDS questionnaire scale consisting of

15 items can assess anxious thoughts and feelings related to death and the dying process which proved to be valid in measuring death- related which is one of the important psychological aspects.

Multiple Psychosocial Problems

Cancer patients sometimes experience more than one psychosocial problem, such as depression, anxiety, and generalized distress, there is a need for a screening tool that can detect a combination of these psychosocial problems. The ESAS web-based rapid screening tool can be used for efficient early detection in cancer survivors in the clinic, in addition to the eVAS and HADS. ESAS has subscales for anxiety and depression with cut offs of ≥3 and ≥5 that are rated on a 0-10 numerical scale for each symptom and thus has good sensitivity in detecting anxiety and depression in cancer patients [31]. Meanwhile, the PHQ-ADS is a combination of PHQ-8 and GAD-7 that can detect symptoms of depression and anxiety with a total of 15 question items, proving an efficient combined screening tool for breast cancer survivors by showing a bifactor model that explains up to 82% of the variance in psychosocial distress [22].

Although screening tools have shown high effectiveness, many healthcare facilities still experience barriers to their implementation. Previous studies have reported that many oncology clinics lack the time, training, and resources to conduct routine psychosocial assessments [14]. Tools that are too lengthy, impractical, or not integrated into clinical workflows are often ignored by healthcare providers. Furthermore, the absence of a global consensus or national guidelines mandating psychosocial screening as part of the standard diagnostic and therapeutic procedures for cancer slows the widespread adoption of these tools. Among the instruments currently available, none include domains addressing social, cultural, and spiritual issues, indicating the need for the development of tools that incorporate these aspects.

Discussion

The results of this scoping review indicate that nearly all psychosocial screening instruments analyzed have high validity and reliability, making them suitable for use in various clinical contexts, from the diagnosis phase through active treatment, survivorship, and palliative care. Rapid screening tools such as the PHQ-9, HADS, DT, ESAS, and PHQ-2 facilitate the rapid and practical detection of symptoms of depression, anxiety, and emotional distress for healthcare professionals. Early detection through these tools has proven crucial, enabling more timely psychological interventions, improving patients' quality of life, and potentially influencing clinical outcomes such as therapy adherence and survival rates. However, it should be emphasized that these outcomes are often based on observational data or multi-component interventions, and more rigorous studies are needed to confirm causal relationships between screening and survival. Therefore, psychosocial screening should be viewed not merely as an additional procedure but as an integral component of comprehensive cancer management.

Several studies have shown that depression is one of the most common psychosocial problems experienced by cancer patients, necessitating effective and practical screening instruments [29, 30]. The PHQ-9 is effective in detecting depressive symptoms in young breast cancer patients, while a study found that the PHQ-2 is superior in older patients with cognitive impairment due to its simplicity yet high accuracy [34]. Compared with more complex instruments such as PROMIS Depression or GDS-15, brief instruments such as the PHQ-2 and PHQ-9 are easier to implement in daily clinical practice without compromising reliability. This highlights a trade-off between brief and comprehensive instruments, where shorter instruments are preferred for routine use despite their limited depth. Therefore, simplicity and speed of administration are critical factors in determining the success of routine depression screening in oncology services.

Anxiety in cancer patients can be measured with a variety of instruments, both specific and general. The MAX-PC has been shown to be valid and reliable for men with prostate cancer, aligning with previous literature emphasizing the importance of disease-based instruments to increase sensitivity [35]. In contrast to general anxiety tools, cancer-specific instruments such as the MAX-PC are more likely to detect nuances in disease-related anxiety, highlighting the value of both general and cancer-specific tools depending on the clinical context [36]. For general anxiety, the GAD-7 and HADS demonstrate strong psychometric performance, while the PHQ-ADS effectively measures depression and anxiety simultaneously [14]. Brief instruments such as the HADS-Anxiety and eVAS are considered more practical than longer instruments such as the STAI-S, which have previously been criticized for their high administrative burden [37]. Thus, these findings are consistent with previous literature and underscore the trend toward the use of brief instruments that are easier to integrate into oncology clinical practice.

Psychosocial distress is one of the most common aspects of cancer patients and has been shown to impact quality of life and clinical outcomes. Simple instruments such as the Distress Thermometer (DT) and the Edmonton Symptom Assessment Scale (ESAS) have demonstrated effectiveness as rapid screening tools with adequate sensitivity for detecting high-risk patients [27]. While these tools are effective in screening for distress, they are limited in their ability to capture the broader spectrum of psychosocial well-being, including the social, cultural, and spiritual dimensions [23]. Distress identified early in the diagnosis is correlated with lower survival rates in

head and neck cancer patients [31], suggesting that early detection has significant prognostic implications [38]. The highest levels of distress were experienced in the first weeks post-diagnosis, emphasizing the importance of systematic screening interventions early in the disease course [39]. Additionally, integrative systems like the Distress Assessment and Response Tool (DART), which combine several instruments (PHQ-9, GAD-7, ESAS-r, and MDASI-HN), have been shown to increase detection effectiveness and contribute to improved survival rates, supporting the notion that multi-instrument approaches are more effective than using a single tool [40].

Death anxiety is a psychological aspect that frequently occurs in patients with advanced cancer, yet it rarely receives attention in clinical practice. The Death and Dying Distress Scale (DADDS) has been shown to have high reliability and validity in assessing anxiety related to the dying process [41]. Detecting this aspect is crucial, especially in palliative care, as it helps healthcare providers understand patients' existential fears, which can impact quality of life and acceptance of care [42]. Previous literature also emphasizes that although death anxiety has a significant impact on patients' psychological well-being, this aspect remains underexplored in routine screening [43]. Therefore, the use of the DADDS not only complements common screening instruments such as the HADS or PHQ-9 but also opens up the opportunity for more holistic psychosocial interventions in oncology and palliative care.

Multidimensional instruments such as the PHQ-ADS and ESAS offer the advantage of quickly and efficiently detecting symptoms of depression, anxiety, and distress simultaneously. The PHQ-ADS, a combination of the PHQ-9 and the GAD-7, has been shown to have high reliability and validity in measuring two key psychological dimensions simultaneously [22], while the ESAS, with its 0–10 scale, assesses a wide range of emotional and physical symptoms, making it sensitive to clinical changes [27]. The main advantages of these two instruments are their efficiency, high sensitivity, and multifunctionality, allowing for their rapid use, meeting the needs of often resource-constrained oncology services. However, limitations remain, such as the dominant focus on psychological and physical dimensions, neglecting social, cultural, and spiritual aspects that also influence the well-being of cancer patients [44]. However, these tools focus primarily on psychological and physical dimensions, neglecting social, cultural, and spiritual aspects of well-being. Previous literature has highlighted the need to develop more holistic screening instruments that address these aspects to support a truly comprehensive care approach in oncology settings [45].

The challenges of clinical implementation in the use of psychosocial screening instruments are significant, particularly related to limited time, resources, and staff training in oncology clinics. Many healthcare facilities report difficulties integrating routine screening due to high workloads and a lack of trained human resources [14]. Furthermore, the absence of national or international guidelines explicitly mandating psychosocial screening as standard of care means this practice remains optional and inconsistent across institutions [46]. Instruments that are too lengthy or not integrated into clinical workflows risk underutilization [47]. These barriers emphasize that despite the proven effectiveness of instruments, successful implementation in the field is largely determined by systemic factors, including policy, technology integration, and the availability of training for healthcare workers.

Research Gaps

There are still significant research gaps in the field of psychosocial screening for cancer patients. Most existing studies have been conducted in developed countries, underrepresenting the cultural context and healthcare systems of developing countries. This underrepresentation is problematic because social and cultural factors influence how psychological symptoms are perceived and expressed [48, 49]. Moreover, while most instruments focus on psychological dimensions such as depression, anxiety, and distress, social, spiritual, and cultural aspects of psychosocial well-being have not been adequately addressed [14]. Another limitation is the lack of longitudinal studies evaluating the long-term impact of psychosocial screening on quality of life and survival rates. Although some preliminary studies have demonstrated a significant association between distress and prognosis, more comprehensive research is needed to assess the effectiveness of psychosocial screening in improving outcomes over time [50].

The applicability of psychosocial screening tools in diverse clinical settings must consider the social and cultural context in which they are applied. In many low- and middle-income countries (LMICs), psychosocial distress in cancer patients is often influenced by cultural stigma, limited access to healthcare, and varying perceptions of mental health. Current screening tools that focus predominantly on psychological dimensions, such as depression and anxiety, may not fully address the social, cultural, and spiritual factors that contribute to distress in these regions. For example, patients in these settings may experience distress not only from their illness but also from social isolation or spiritual concerns, which are often underrepresented in conventional screening instruments. Therefore, adapting existing tools or developing new ones that incorporate these contextual factors could improve the detection of psychosocial distress and ensure that interventions are culturally appropriate and more effective in diverse populations.

Implications

These findings suggest the need for clinically appropriate selection of screening instruments based on cancer type, patient age, and the phase of care. For routine use in oncology services with limited time, brief instruments such as the PHQ-2, HADS, and ESAS are recommended due to their proven efficiency and sensitivity in detecting depression, anxiety, and distress [51], [52]. For specific populations with particular psychosocial needs, instruments such as the MAX-PC for men with prostate cancer and the DADDS for advanced cancer patients can be used. Oncology clinics should also consider integrating screening results directly into clinical

decision-making, enabling more timely and targeted psychosocial interventions. This approach aligns with recommendations in the literature on psycho-oncology care integration [53].

Limitations

This scoping review has several limitations. First, it was restricted to articles published in English, and the search was limited to three databases, which may have led to the omission of relevant studies. The included studies also showed heterogeneity in design, sample size, cancer type, and clinical setting, which limits direct comparisons and generalizability, especially to low- and middle-income countries. Additionally, no formal quality appraisal of the included studies was performed, and the review focused only on mapping existing psychosocial screening instruments without assessing their effectiveness in routine clinical implementation.

In conclusion, this review shows that various rapid screening instruments, such as the DT, HADS, PHQ-2, PHQ-9, GAD-7, ESAS, PROMIS Depression Short Form, MAX-PC, DADDS, STAI-S, PHQ-ADS, MADRS-S, eVAS, and the DART, have been developed and widely applied to identify psychosocial problems in cancer patients. These instruments reported acceptable psychometric performance in detecting anxiety, depression, general distress, and death-related anxiety across diverse cancer populations. Their practicality and simplicity make them valuable tools for use in clinical oncology services, supporting the early identification and targeted psychosocial interventions for cancer patients.

However, despite the effectiveness of these instruments, their routine implementation in oncology services faces several challenges. Limited resources, lack of standardized training for health professionals, and insufficient integration into daily clinical practice remain significant obstacles. Addressing these barriers is crucial to ensure that psychosocial screening becomes an integral component of comprehensive cancer care.

Future research should focus on developing screening instruments that capture a broader range of psychosocial aspects, including social, cultural, and spiritual dimensions, which are currently underrepresented in existing tools. Additionally, studies should evaluate the long-term impact of psychosocial screening on patient outcomes, such as quality of life, treatment adherence, and survival. The use of digital and web-based platforms for rapid screening should also be explored to facilitate wider implementation in routine oncology practice. Finally, collaborative multicenter research is needed to establish an international consensus and develop standardized guidelines for psychosocial screening in cancer patients.

Author Contribution Statement

Made substantial contributions to conception and design, or acquisition of data, or analysis and interpretation of data: IM, RDS, TH, SS, AYM, FAS, NFS, TSA; Involved in drafting the manuscript or revising it critically for important intellectual content: IM, RDS, TH, SS, AYM, FAS, NFS, TSA; Given final approval of the version to be published. Each author should have participated sufficiently in the work to take public responsibility for appropriate portions of the content: IM, RDS, TH, SS; Agreed to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved: IM, RDS, TH, AYM..

Acknowledgements

The authors thank to Universitas Padjadjaran who has supported us in this study.

Conflict of Interest

The authors declare no competing interests.

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