

Patient Dignity Inventory in Cancer Patients: A Narrative Review

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ABSTRACT

Background: Human dignity must be respected and preserved in all interactions between healthcare professionals and patients. The Patient Dignity Inventory (PDI) is a questionnaire designed to identify problems associated with the loss of dignity at the end of life.

Aim: This narrative review of the literature aims to investigate the use of the PDI tool in the context of the oncology pathway and to understand its implications for managing these patients.

Method: Multiple searches were performed in electronic databases: Medline (via PubMed), Web of Science, and Scopus. Keywords linked to Boolean operators were used to identify studies conducted in adults in oncology and palliative care, published in Italian or English from 01/01/2019.

Result: A total of 96 articles were found. Eight studies were included in the narrative review at the end of the selection process. All the studies in the selection were on the characteristics of the concept of dignity through the use of the PDI. The main factors investigated that influence patients' perceived dignity, are preservation of autonomy and hope, quality of communication, and time left for patients.

Conclusion: In the oncology pathway, the use of the Patient Dignity Inventory in clinical practice has the potential to benefit both patients and the care team, and to improve the quality of care.

Keywords: Oncology service hospital; Dignity Therapy; Terminal care; Patients right; Palliative care

INTRODUCTION

Human dignity is a universal concept that indicates the value of the human person and therefore, implies the recognition and respect for the fundamental rights of every individual such as freedom, equality, autonomy, and personal integrity [1]. In the health care context, an inpatient's personal dignity refers to the respect and value that is Annal Cas Rep Clin Stud (ACRCS) 2025 | Volume 4 | Issue 2

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attributed to his or her person at all stages of their health care experience [2]. This complex and multidimensional aspect is referred to by the World Health Organization (WHO) as a fundamental factor in the quality of health care, deeply embedded in the person-centered approach to care, which must be respected and preserved in all interactions between health care providers and patients [3]. In fact, the perceived sense of dignity is conditioned by the context of care relationships and preserved through care staff's affirmation of the patient's value [4]. For a patient, the value placed on their person takes the shape of being treated with respect, kindness, and compassion by health care personnel, respect for privacy and confidentiality of information, consideration of personal preferences and values, autonomy in making decisions about one's own health, and support offered to maintain people physical, emotional, and spiritual integrity [5]. The experience of illness can wound a person's identity by questioning their role in everyday life, or increase their vulnerability, due to loss of autonomy or the prospect of death [6]. People with cancer illnesses are among the most fragile individuals facing these difficulties. In the next twenty years, these patients are expected to increase in striking numbers and in younger and younger age groups [7]. In Italy, for example, in the period 2020-2023, new oncology diagnoses are estimated to increase by 5%, and for the next two decades this trend is expected to worsen [8]. The more health care providers are made aware of the types of distress related to loss of dignity in these patients, the more likely they are to be able to respond to them [9]. The Patient Dignity Inventory (PDI) is an instrument developed by Harvey Max Chochinov, a Canadian physician and researcher, to better understand the psychosocial and spiritual needs of terminally ill patients and to identify possible problems related to loss of dignity. It was constructed based on a model of the meaning of dignity consisting of three main dimensions (illness-related concerns, dignity-preserving repertoire, and social dignity inventory) and their subitems. The PDI consists of a questionnaire consisting of 25 questions scored on a five-point scale ranging from "Not a problem" equivalent to a score of 1, to "An overwhelming problem" associated with the maximum score of 5 [10,11]. Following the respondent's cues, a brief individualized psychotherapy can be performed: Dignity Therapy (DT). Following a protocol, trained staff facilitate the patient's expression of thoughts, feelings, and memories, which are then put into a narrative document that the patient can share with a friend or person. DT is one of the most popular psychotherapies in palliative care settings. Countries such as Brazil [12], Korea [13], China [14], Mexico [15], Turkey [16] and Greece [17] have recently joined the nations that, like Italy [11], have already performed PDI translation and validation. In recent years, there has been increased interest around the preservation of dignity as a value of care, as well as on the differences in its perception that exist between patient, family member and health care provider [18].

This narrative review of the literature aims to investigate the use of the PDI tool in various oncology settings, and to understand its possible implications in the care pathway of these patients.

The research question of this narrative review of the literature is, "Does the use of the Patient Dignity Inventory bring benefits for the maintenance of dignity in patients and for the quality of care delivered throughout the oncology pathway?



METHOD

This is a review, developed in the following phases: identification of the topic and elaboration of the guiding question, definition of the inclusion and exclusion criteria, critical analysis of the selected studies, and the discussion of the main results and synthesis of the presentation of knowledge. The P.I.C.O. methodology was used for the search strategy, summarized in Table 1. Having identified the keywords these were combined with each other using Boolean operators, constructing search strings for each database (Table 2). The search of bibliographic sources was carried out by browsing Medine databases (*via* PubMed), Web of Science and Scopus in March 2024.

Table 1: P.I.C.O. Strategy.

ELEMENTS	KEY CONCEPTS	SEARCH WORDS
Population (P)	Adult cancer patients	" Cancer patients"; "End of Life"
Intervention (I)	Dignity assessment using PDI	"Patient Dignity Inventory"
Comparison (C)	No structured assessment approach	
Outcome (O)	Maintenance of personal dignity	"Dignity"

Table 2: Search strings.

DATABASE	SEARCH STRING		
	"Patient dignity inventory" AND "cancer patients" AND "Dignity"		
PUBMED	Limit: PUBYEAR from 2019 to 2024		
	"Patient dignity inventory" AND "cancer patients" AND "Dignity"		
WEB OF SCIENCE	Limit: "TOPICS", PUBYEAR from 2019 to 2024		
	"Patient" AND "Dignity" AND "Inventory" AND "Cancer" AND "End of life"		
SCOPUS	Limit: TITLE-ABS-KEY; PUBYEAR from 2019 to 2024		

RESULT

From multiple searches, 96 citations published from 01/01/2019 in English and Italian were identified. After removal of duplicates, 59 citations were screened for relevance by title and abstract. Twenty articles were found to be potentially eligible and, after obtaining the full text, were evaluated for inclusion and exclusion criteria (Table 3). The study search and selection process are summarized in Figure 1 [19]. At the end of the process 8 studies were included in this narrative review (Table 4).

Table 3: Inclusion and exclusion criteria of studies in the narrative review.

INCLUSION CRITERIA	EXCLUSION CRITERIA	
Oncology patients admitted to the wards of: oncology, oncology day	Patients with non-oncological conditions,	
hospital, palliative care 18 years old	children or adolescents	
Studies concerning the application of dignity assessment instruments	Studies that did not apply dignity	
with Patient Dignity Inventory	assessment instruments	
Published studies from 2019 to 2024	Studies beyond 2019	
Studies in English or Italian	Other languages than Italian and English	

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 Table 4: Characteristic of included studies.

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ho	a	r	in		Objective of	
r	r	У	g	Methods	study	Summary of Resuts
			0		investigate	
					Dignity-	
					Related Loss	
					of Personal	
				Study of 207 cancer patients whose	Autonomy	
В				variables were assessed through the	(DR-LPA)	
ov			Cr	following rating scales: Patient Dignity	intended as	
					loss of	
er		Ļ	os	Inventory - Demoralization Scale -		
О		I	S-	Functional Assessment of Cancer	relational	The study shows that functional, social,
et	2	t	se	Therapy Scale -Functional Assessment of	independence	emotional, spiritual well-being,
al.	0	a	cti	Chronic Illness Therapy -Spiritual well-	causing	discouragement, as well as age and gender,
[2	2	1	on	being, Brief Coping Orientation and	dignity-related	emerged as significant predictors of dignity-
	3			Herth's Hope Index.	distress	related loss of personal autonomy.
0]	3	У	al	neruis nope ilidex.	distress	related loss of personal autonomy.
R						
an						
ta			Cr			
ne			os			
n			S-	Multicenter study of 331 elderly cancer	understanding	The study shows that improving the
	2				of existential	
et	2		se .	patients undergoing palliative care.		understanding of existential quality of life in
al.	0	U	cti	Examining demographic, religious,	quality of life	elderly cancer patients receiving palliative
[2	2	S	on	medical factors with the PatientDignity	at the end of	care, including important clinical and religious
1]	2	Α	al	Inventory (PDI).	life	factors, improves quality of life.
A				, ,		The study shows the importance of a treatment
						pathway that integrates the constructs of
nd				64 1 - 6107 1 1 1		
re				Study of 107 cancer patients administered		Dignity and Temporal Perspective.
is		I	D	two self-report questionnaires: the		
et	2	t	es	PatientDignity Inventory (PDI-IT) for		
al.	0	a	cri	measuring perceived level of dignity, and		
[2	2	1	pti	the Italian version of the Zimbardo Time		Dignity and temporal perspective play a central
2]	3		_	Perspective Inventory scale (ZTPI)		role as indicators of quality of care.
	3	У	ve	reispective inventory scale (ZTF1)		Tole as indicators of quanty of care.
В						
uo						
na						
cc						The study shows three significant themes:
or			R			Meanings concerning present life and illness,
		т	_			
so	_	Ι	etr	G. 1 COT		including the experience of suffering;
et	2	t	os	Study of 37 patients undergoing dignity		Thoughts and actions toward self, including
al.	0	a	pe	therapy sessions. In which responses to		ways in which patients felt alive; Thoughts and
[2	2	1	cti	two dignity therapy questions were		actions toward others, mainly about love for
3]	1	y	ve	thematically analyzed.		self and others.
2]	-	,	D	memmenty unuijzed.		Seri and Others.
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an te et al.	0	t a 1	ea si	PatientDignity Inventory and the Dignity		of PDI and nurse-led Dignity Theraphy in
an te et al.	0	t a	ea si bil			



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ve	0	r	es	the PatientDignity Inventory and the	relationship score is significantly correlated
st	1	a	cri	Nurse Quality of Communication with	with the patient dignity score.
an	9	n	pti	PatientQuestionnaire.	
et			ve	`	
et					
al.					
[2					
5]					
				Study of 306 participants, divided into	The study shows that caregivers and nurses
				four groups according to their	assigned higher scores to the PDI-IT subscales
В				professional profile: 44 nursing assistants,	"Psychological distress," "Existential distress"
ov				141 nurses, 89 physicians (oncologists,	and "Loss of purpose and meaning" than
er				internists and palliative specialists).	physicians. Psychologists assigned higher
oe				attending physicians) and 32	scores in the PDI-IT subscale "Existential
t		I		psychologists. Subjected to assessment	distress" than physicians and lower scores in
et	2	t		with the Patient Dignity Inventory-Italian	the PDI-IT subscale "Psychological distress"
al.	0	a	Su	Version (PDI-IT) adapted for health care	than caregivers and nurses. Nurses scored
[2	2	1	rv	professionals and an ad hoc written	higher in the PDI-IT subscale "Social support"
6]	0	y	ey	interview.	than physicians.
В					
ov				Study of 350 cancer patients subjected to	
er			Cr	the Patient Dignity Inventory (PDI),	
oe			os	Demoralization Scale (DS), Hospital	
t		I	s-	Anxiety and Depression Scale (HADS),	The study shows that hope is a basic need and
et	2	t	se	Functional Assessment of Chronic Illness	tool for patients coping with their disease, it is
al.	0	a	cti	Therapy (FACIT-Sp), and Visual	essential to implement realistic and stage-
[2	2	1	on	Analogue Scale for Pain (VAS) and	specific interventions that facilitate hope and
7]	1	y	al	Herth Hope Index (HHI).	support patients in their search for meaning.



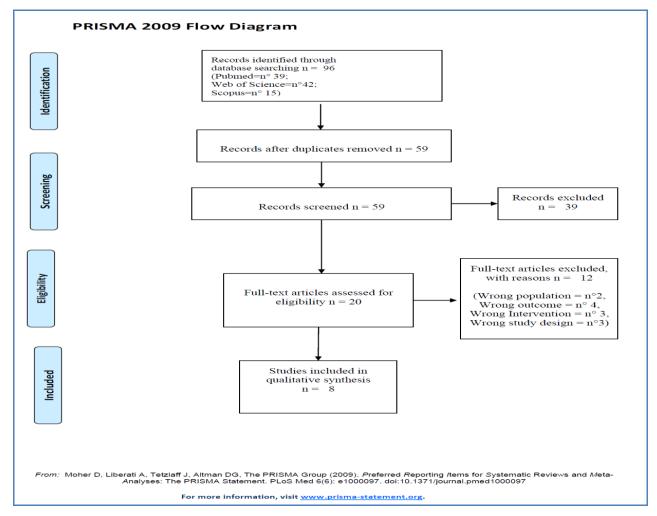


Figure 1: Research and selection process included studies.

DISCUSSION

Although its importance is well known, it can prove very challenging to establish an effective communication process for all parties involved. Indeed, communication with cancer patients, and their family members, is seriously affected by uncertainty about the future, high levels of stress, anxiety, depression, fear of death or physical or mental disability. These obstacles can limit open communication and, consequently, the understanding of patients' needs and expectations by their caregivers [25]. In the study by Bovero et al. [20], it is highlighted how the Patient Dignity Inventory offers patients the opportunity to express their concerns, wishes and preferences regarding care and quality of life. By completing the questionnaire, patients are encouraged to be actively involved in the planning and management of their care, enabling them to maintain autonomy in making choices during their illness and enhancing their sense of autonomy and self-determination. The specific areas of concern or discomfort that emerge allow health care professionals to tailor care in a way that respects the patient's preferences [20]. In agreement with work that identifies autonomy as a determinant of perceived dignity [6], Rantanen et al. [21] considering it a central

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element in palliative care and its loss, correlates with physical, psychological or existential distress. Existential distress describes a form of psychological suffering related to existence itself. It is characterized by feelings of distress, upset or deep concern that arise when a person is confronted with questions regarding the meaning of life, death, freedom or about the sense of worthlessness. This type of distress becomes particularly relevant in crisis situations, such as in receiving a diagnosis of a cancer disease, or while coping with role losses and emotional challenges during the course of illness [21]. Andreis et al. [22] point out that existential crisis includes confrontation with time, death, uncertainty, loss of control, and loss of meaning when given profound changes in personal goals and roles. The avenue of communication offered by PDI supports health professionals in helping patients explore and cope with their distress, and in offering personalized interventions for support and better symptom management. In the psychological sphere of cancer patients, the temporal and dignity perspectives are strongly intertwined. Delineating the temporal profile in cancer patients provides an important indicator to guide supportive therapeutic work. Primarily to attempt to diminish the sense of distress and increase the sense of hope where there is an imbalance toward general pessimism [22]. Perceived hope wanes where fear of one's future, demoralization, anxiety and depression, fatigue and disabling symptoms prevail. But it increases when associated with spiritual well-being, thinking about life spent and recalling happy memories, and setting goals. Feeling that one has resources within oneself, that one is able to care for others and be cared for by them is directly proportional to the increase in hope [27]. For this reason, it is relevant to investigate what variables promote or hinder hope during the phases of a patient's illness and, with Dignity Therapy, offer the person a pathway for the maintenance of hope, as its understood to be the ability to perceive the continuity of meaning and purpose in one's life. Indeed, among the goals of Dignity Therapy is the promotion of generativity: a process through which patients invest in those they will leave behind. The generative document represents something that survives beyond their lifetime and leaves a memory for those left behind. This aspect, greatly felt by patients, becomes essential when facing an inauspicious prognosis or a prognosis of shortening their lives or reducing their activities. Indeed, knowing that their thoughts and words can be considered valuable by someone helps them realize that they are still perceived as people with values [23]. Over time, the Dignity Therapy protocol has been conducted by psychiatrists, psychologists, psychotherapists, social workers and nursing staff, after proper training and preparation. Nunziante et al. [24] investigated nurse-led intervention in hospital settings in Italy. This has been widely accepted and appreciated by patients, and it has also enriched professionals in terms of both personal and professional growth [24]. PDI also allows us to highlight perspectives on the dignity that doctors, nurses, and care support workers have. In agreement with the results of previous work [28,29], Bovero et al. [26] found that physical suffering, related to pain and other disabling symptoms, was indicated by all professional groups as the aspect with the greatest influence on patients' dignity, in the end-of-life phase. In addition, this work performed in various departments of a hospital setting showed that all health care professionals perceived a lack of information about patients' lives, but that this need could decrease for professions that, it is thought, establish relationships with patients characterized by closeness, intimacy and spending time together [26]. The use of PDI in clinical practice could also have a constructive impact in improving

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communication among the practitioners involved, stimulating them to exchange knowledge and perspectives on patients, and increasing awareness of the complexity of dignity in the care team.

Dignity is a complex and multidimensional concept, and one of the elements that influences it is the quality of communication between patients and health care personnel.

CONCLUSION

From the included articles, it is clear that the use of PDI in clinical practice can positively influence cancer patients' maintenance of dignity, enabling them to maintain meaningful control over their illness experience. PDI is shown to be useful in enhancing the quality of time by allowing patients to focus on priority areas, and on promoting generativity, which has a significant impact on maintaining dignity. For the quality of care provided, it orients healthcare professionals toward the patient's "perspective," thus helping to create an environment that respects and supports individual needs. In summary, the integration of evaluative tools such as PDI and the consideration of time profiles can improve the overall care and well-being of cancer patients, respecting their dignity and supporting their hope during the disease journey.

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Ethical consideration

The literature review was guided by ethical conduct respecting authorship and referencing sources.

REFERENCES

- 1. Universal Declaration of Human Rights states. All human beings are born free and equal in dignity and rights. UN General Assembly. 1948.
- 2. Integrating palliative care and symptom relief into primary health care: a WHO guide for planners, implementers and managers. World Health Organization; 2018.
- 3. World Health Organization. Policy brief on integrating rehabilitation into palliative care services. 2023.
- 4. Luna-Meza A, Godoy-Casasbuenas N, Calvache JA, Díaz-Amado E, Gempeler Rueda FE, Morales O, et al. Decision making in the end-of-life care of patients who are terminally ill with cancer - a qualitative descriptive study with a phenomenological approach from the experience of healthcare workers. BMC Palliat Care. 2021;20(1):76.
- 5. Guo Q, Jacelon CS. An integrative review of dignity in end-of-life care. Palliat Med. 2014;28(7):931-40.
- 6. Rodríguez-Prat A, Monforte-Royo C, Porta-Sales J, Escribano X, Balaguer A. Patient perspectives of dignity, autonomy and control at the end of life: systematic review and meta-ethnography. PLoS One. 2016:11(3):e0151435.

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- Bray F, Laversanne M, Sung H, Ferlay J, Siegel RL, Soerjomataram I, et al. Global cancer statistics 2022: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. CA Cancer J Clin. 2024;74(3):229-63.
- 8. Italian association of cancer registries cancer numbers in Italy 2023. Intermedia Publisher. 2023.
- 9. Chochinov HM, Hassard T, McClement S, Hack T, Kristjanson LJ, Harlos M, et al. The patient dignity inventory: a novel way of measuring dignity-related distress in palliative care. J Pain Symptom Manage. 2008;36(6):559-71.
- 10. Chochinov HM, McClement SE, Hack TF, McKeen NA, Rach AM, Gagnon P, et al. The patient dignity inventory: applications in the oncology setting. J Palliat Med. 2012;15(9):998-1005.
- 11. <u>Ripamonti CI, Buonaccorso L, Maruelli A, Bandieri E, Pessi MA, Boldini S, et al. Patient dignity inventory (PDI) questionnaire: the validation study in Italian patients with solid and hematological cancers on active oncological treatments. Tumori. 2012;98(4):491-500.</u>
- 12. <u>Donato SCT, Chiba T, Carvalho RT, Salvetti MG. Validity and reliability of the Brazilian version of the Patient Dignity Inventory (PDI Br). Rev Lat Am Enfermagem. 2021;29:e3371.</u>
- 13. Oh SN, Yun YH, Keam B, Kim YS, Koh SJ, Kim YJ, et al. Korean version of the patient dignity inventory: translation and validation in patients with advanced cancer. J Pain Symptom Manage. 2021;62(2):416-24.e2.
- 14. Li YC, Wang HH, Ho CH. Validity and reliability of the Mandarin version of Patient Dignity Inventory (PDI-MV) in cancer patients. PLoS One. 2018;13(9):e0203111.
- 15. Rodríguez-Mayoral O, Galindo-Vázquez O, Allende-Pérez S, Arzate-Mireles C, Peña-Nieves A, Cantú-Quintanilla G, et al. Validation of the patient dignity inventory in mexican cancer patients. J Palliat Med. 2021;24(11):1626-33.
- 16. Eskigülek Y, Kav S. Validity and reliability of the Turkish version of the patient dignity inventory. Palliat Support Care. 2022;20(3):389-96.
- 17. Parpa E, Kostopoulou S, Tsilika E, Galanos A, Katsaragakis S, Mystakidou K. Psychometric properties of the greek version of the patient dignity inventory in advanced cancer patients. J Pain Symptom Manage. 2017;54(3):376-82.
- 18. Chochinov HM. Dignity and the eye of the beholder. J Clin Oncol. 2004;22(7):1336-40.
- 19. Moher D, Liberati A, Tetzlaff J, Altman DG. Preferred reporting items for systematic reviews and metaanalyses: the PRISMA statement. PLoS Med. 2009;6(7):e1000097.
- 20. Bovero A, Botto R, Mellano E, Gottardo F, Berchialla P, Carletto S, et al. Loss of personal autonomy and dignity-related distress in end-of-life cancer patients. Am J Hosp Palliat Care. 2024;41(2):179-86.
- 21. Rantanen P, Chochinov HM, Emanuel LL, Handzo G, Wilkie DJ, Yao Y, et al. Existential quality of life and associated factors in cancer patients receiving palliative care. J Pain Symptom Manage. 2022;63(1):61-70.

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- 22. Andreis F, Mirandola M, Wedenissow AC, Runcan M, Malighetti C, Meriggi F, et al. Dignity and time perspective: A pilot explorative study in cancer patients. Palliat Support Care. 2023;21(1):43-8.
- 23. <u>Buonaccorso L, Tanzi S, De Panfilis L, Ghirotto L, Autelitano C, Chochinov HM, et al. Meanings emerging from dignity therapy among cancer patients.</u> J Pain Symptom Manage. 2021;62(4):730-7.
- 24. Nunziante F, Tanzi S, Alquati S, Autelitano C, Bedeschi E, Bertocchi E, et al. Providing dignity therapy to patients with advancedcancer: a feasibility study within the setting of a hospital palliative care unit. BMC Palliat Care. 2021;20(1):129.
- 25. Avestan Z, Pakpour V, Rahmani A, Mohammadian R, Soheili A. The correlation between respecting the dignity of cancer patients and the quality of nurse-patient communication. Indian J Palliat Care. 2019;25(2):190-6.
- 26. Bovero A, Tosi C, Botto R, Cito A, Malerba V, Molfetta V, et al. The health care providers' perspectives on end-of-life patients' sense of dignity. A comparison among four different professionals' categories. J Cancer Educ. 2020;35(6):1184-92.
- 27. Bovero A, Opezzo M, Botto R, Gottardo F, Torta R. Hope in end-of-life cancer patients: A cross-sectional analysis. Palliat Support Care. 2021;19(5):563-9.
- 28. <u>Oosterveld-Vlug MG</u>, Pasman HR, van Gennip IE, Willems DL, Onwuteaka-Philipsen BD. Nursing home staff's views on residents' dignity: a qualitative interview study. BMC Health Serv Res. 2013;13:353.
- 29. Albers G, de Vet HC, Pasman HR, Deliens L, Onwuteaka-Philipsen BD. Personal dignity in the terminally ill from the perspective of caregivers: a survey among trained volunteers and physicians. J Palliat Med. 2013;16(9):1108-14.