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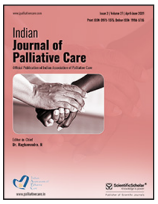

Review Article

Using Social Constructivist Learning Theory to Unpack General Practitioners' Learning Preferences of End-of-Life Care: A Systematically Constructed Narrative Review

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ABSTRACT

General practitioners play a vital role in providing community-based palliative care to patients reaching end of life. In order for GPs to upgrade their skills at end-of-life care delivery, it is imperative that training programs be aligned to their learning needs and preferences. A narrative review was conducted using the electronic databases PubMed, CINAHL, PsycINFO, EMBASE, Scopus, Web of Science, and Cochrane from 01/01/1990 to 31/05/2021. 23 articles (of 10037 searched) were included for the review. Following themes were generated: Value attributed to end-of-life care learning, experience and reflection as a departure point for learning, learning as embedded in the clinical context; autonomy to decide upon their learning needs and learning preferences, learning as a transformative process; and learning as embedded in social interaction and interpretation. Training programs that are aligned to the preferences of GPs will encourage a larger clientele of GPs to access them.

Keywords: End-of-life care, General practitioners, Learning preferences, Social constructivism learning theory

INTRODUCTION

Worldwide, countries are experiencing an epidemiological transition with a rise in morbidity and mortality from both non-communicable and communicable diseases.[1] With the rising technological innovations in medicine, there is an exponential increase in the population of patients with chronic life-threatening illnesses living longer.[1] The prolonged survival is further compounded by the intercurrent high symptom burden, requiring active engagement by palliative care.[2] However, the demand for palliative care outweighs the availability of palliative care specialists.[3] The imbalance in demand and supply can be addressed by empowering and engaging general practitioners (GPs) in the community to provide primary palliative care.[3]

GPs play a critical role in providing end-of-life care and ensuring that patient's wishes to be cared for at home are honoured.[4] In addition, GPs' coordinate care with the multidisciplinary team and prevent unnecessary hospital admissions.[5] Despite being critical players in end-of-life care provision, GPs feel anxious and lack confidence in care provision.[6] They prefer training in end-of-life care in their routine practice to address their deficiencies in the knowledge and skills of end-of-life care.[7]

GPs' preference for a particular learning style depends on the content and context of learning and the value that they attribute to their learning.[4] A recent study showed that educational intervention that used flexible learning modules and a combination of case-based discussions and small group interactive workshops with regular follow-up post-intervention brought a significant improvement in GP's knowledge, skills, and confidence in delivering palliative care.[8] These interventions also enabled GPs to alleviate patients' physical and psychological symptom burden, fulfill the patient's desire to die at home at the end of life, and mitigate carer anxiety and distress.[8] Therefore, training programs that are empowering, engaging, and reinforcing will attract GPs and ensure the sustenance of learning in end-of-life care.

Social constructivist learning theory is built on three premises: Cognitive processing of knowledge, self-directed

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learning, and social construction of knowledge.[9] The theory provided a theoretical framework to explore GPs' insights on end-of-life care learning and the processes they adopted to acquire and construct knowledge in a social context.[9] In addition, the theory also aided in the exploration of facilitating and impeding factors in accessing training programs in end-of-life care.

METHODS

The review question was

1. How do GPs construct knowledge in end-of-life care?
2. What factors influence the construction of knowledge by GPs in end-of-life care?

REVIEW METHODOLOGY

A narrative review served the purpose of this review as it helped identify literature on a broad research question on the learning preferences of GPs in end-of-life care.[10] It facilitated a conceptual and thematic synthesis of the literature.[10] Although narrative reviews have been relegated to an unsystematic approach,[10] the methodological rigour of the current review has been enhanced by being explicit about the search terms, databases accessed, and bibliographies reviewed. Moreover, the review had a selection criterion for the studies included [Table 1] and study findings were synthesised and interpreted,[11] hence attempting to strike a balance between the flexibility of narrative review and the rigour of systematic review.[12] The review included studies that explored GPs' learning preferences in end-of-life care and those conducted in the community or home care setting. Studies that looked at practitioners other than GPs or those conducted in the hospital/hospice setting were excluded from the study.

SEARCH STRATEGY

An electronic database search was conducted using PubMed, EMBASE, CINAHL, PsycINFO, SCOPUS, Web of Sciences, and Google Scholar to access citations concerning the review question. The search terms that included 'attitudes of health personnel' OR motivations OR emotions OR perceptions OR behaviour AND 'general practitioners' OR 'family physicians' OR 'primary care physicians' AND 'continuing medical education' OR 'continuing professional development' OR 'continuing education' AND 'end-of-life care' OR 'terminal care' OR 'palliative care' OR 'palliative medicine' OR 'hospice care' were screened for in the titles, abstracts and full-text articles. The articles accessed were in English and ranged from 1993 to 2021. It showed a trend in the learning preferences of GPs in end-of-life care over the years. Furthermore, a bibliographic search using PubMed outside the search criteria and textbooks was conducted to include articles on social constructivist learning theory.

Table 1: Selection Criteria of the Studies included in the review

Inclusion criteria	Exclusion criteria
1. Studies published in English from 01/01/1990 onwards 2. Studies that explored views of general practitioner or similar healthcare provider on end- of-life care learning preferences 3. Community/Home care setting	1. Learning preferences other than end-of-life care 2. Medical practitioners other than general practitioners or family physicians 3. Studies conducted in a hospital or hospice setting

THEME GENERATION

Screening and data extraction were conducted independently by two reviewers. The third reviewer helped resolve the conflicts. Data were summarised across studies and patterns were identified from the data and the reviewers explored the relationships within and between studies to generate meaningful categories and themes.[13]

RESULTS

Of the 10,037 citations identified, 23 studies were included in the review. Eleven studies were qualitative, 11 were surveys and one was a mixed-method study. Fifteen studies were from Europe (eight from the United Kingdom, two from Belgium, one from Denmark, the Netherlands, Austria, Germany, and Ireland), six from Australia and two from Canada. The qualitative studies were from a single centre and the quantitative studies were a combination of single and multicentric studies.

The narrative review yielded the following themes: The value GPs attributed to end-of-life care learning; past experience and reflection on clinical practice as a departure point for learning; relevance of context of learning to clinical practice; learning as self-directed; learning as a process of self- and professional-identity transformation and learning as embedded in social interaction and interpretation.

THE VALUE ATTRIBUTED TO LEARNING

At an individual level, value refers to education's fundamental role in achieving one's goals.[14] Education assists in achieving moral values such as self-awareness, self-efficacy, and self-actualisation.[14]

GPs develop a strong therapeutic bond with their patients over a prolonged period of care.[15-19] It uniquely positions them to address patients' physical and situational challenges at the end of life which, in turn, motivates them to keep abreast with the growing body of knowledge in end-of-life care.[20] However, the diversity and complexity of end-of-life clinical scenarios instil a sense of incompetence or fear of failing their patients, for which GPs need recourse.[19,21] GPs are motivated to learn if the new knowledge aligns with their area of clinical practice and would add value to their current practice. Furthermore, it should affirm their belief

in mastering a skill and the education program should be equipped in terms of learning efforts and benefits.[16,22,23]

Although individuals are intrinsically motivated to learn, their learning can be influenced by extrinsic environmental factors such as rewards, societal values, power dynamics, critical assessments, and penalties.[23-25] GPs are central to care coordination and are the trusted key people who guide patients through the disease.[18,19,26] It makes them accountable for the care they provide.[7,19] A competency-based trust is the trustor's belief in the trustee's ability to complete a task.[27] The assured mutual support and acknowledgement of the specialists and trust in their capability by their patients motivate GPs to invest in learning and the contrary could be demoralising.[22,28] Distrust could undermine one's self-esteem by questioning one's capability,[29] fracturing interpersonal collaboration[27] and demoralising the individual from task performance and accessing learning.[29] The extent to which these extrinsic factors have been internalised and integrated by the individual will determine the motivation to sustain and remain committed to learning.[24]

PAST EXPERIENCE AND LEARNING

Adult learners have a wealth of experience that influences their learning.[9] Their backgrounds include various individual and collective historical experiences, past beliefs and practices, contradictions, the ambivalence of daily routine, learning materials, and agencies involved in the learning process.[9] Individuals, therefore, enter the learning environment with this experience as it grants viability to their learning process.[30]

GPs have a wealth of experience built over years of clinical practice and their relationships with their patients.[7] It will continue to grow into the future.[9,30] Individual and collective historical experiences gained from the contradictions and ambiguity of daily clinical practice.[7,21,30] These are embedded in the complex interaction with patients and their families, colleagues, and mentors.[15,31,32] They reflect on their idiosyncratic experiences and generate questions, summaries, and analogies as a mechanism to solve clinical dilemmas.[15,31,32]

LEARNING IS CONTEXTUAL

Learning is perceived as inherently problematic.[33] It is situated in the context of the individual's physical and social experience,[34] practice[25] and cultural context.[35] End-of-life care is more likely to be provided by GPs who have a larger clientele of sicker patients or who have a long-term patient follow-up.[15,18,36] However, their perceived incompetence in alleviating patients' physical and psychosocial sufferings, further compounded by the evolving advancements in end-of-life and palliative care, demands constant knowledge and skill enhancement.[22,28]

Learning is situated in the learning environment or community of practice.[25] GPs navigate multiple communities of practice, such as experiential learning, reflective learning, simulation, self-learning, or didactic learning.[7,22,37] Navigation across communities is contingent on the resources available and the content and context of learning.[17,18,21,37] Although individuals ascribe meanings to their experiences in their minds, meanings are deeply rooted in culture.[35] Most GPs learn from their GP colleagues or specialists in multidisciplinary meetings or case discussions,[7,17] which gives a legitimate endorsement to their practice.[7,21,25] Therefore, learning is always situated in a cultural setting and utilises cultural resources for development.[30,33,35] Power relations influence the acquisition and sustainability of learning.[25] General practitioners prefer a learning environment that is empowering and engaging where the mentors acknowledge their past clinical experience, and allow a healthy and safe dialectical exchange of ideas and perspectives.[7,25,37]

LEARNING IS SELF-DIRECTED

In self-directed learning, adult learners advance their learning by diagnosing their felt needs, formulating learning goals, choosing and implementing appropriate learning strategies, and identifying human and material resources to facilitate learning.[38] Learners invest their cognitive and affective components in learning to develop and preserve their self-identity, self-conception, and self-actualisation.[25,34] They have the locus of control and acquire knowledge according to their choice and satisfaction.[34] Self-directed learning entails learners' motivation to learn, autonomy in inquiry, self-regulation, and individuality in learning tasks.[34]

GPs cater to the variable spectra of disease conditions and varying intensities of physical and psychosocial problems in patients reaching the end of life and provide support to their patients by alleviating their symptom burden and enhancing their quality of life.[7,16,19,26,37,39-41] These demands broaden their perspective from the usual framework of cure to a more holistic approach.[7] To achieve this, they formulate a learning plan with the help of their GP colleagues or specialists and choose their learning resources based on the content and context of their learning, such as seminars or self-study materials and appropriate knowledge and skills in alignment with their needs.[19,28,36,39-42] Therefore, self-directed learning must be apportioned to the learning needs of the GPs to enhance their performance and improve patient outcomes.[43]

LEARNING THROUGH A TRANSFORMATIVE LENS

Individuals prefer to preserve their self-esteem, uphold their role identity, and have consistency in their thoughts, beliefs, attitudes, values, and actions.[44,45] Their progressive experiences are sometimes inconsistent with their values or beliefs, leading to a state of dissonance in their cognitive structure.[45] In medical practice, many situations can cause

cognitive dissonance. Conflict may arise when the treatment path chosen based on the available evidence is contradictory to what the physicians favour based on their current clinical practice.[45] Cognitive dissonance results in psychological discomfort, which triggers actions to reduce this aversive feeling and restore consonance.[45] In the process, physicians reappraise the situation and change their behaviour and, eventually, their attitude.[45] They reappraise the situation depending on the perceived importance of the dissonant cognition in a variety of ways and also take cognisance of the impact on clinical practice.[45] They may either dismiss the dissonant cognition as trivial and continue with their current practice, or they may deal with it by remodelling the cognitive structure to accommodate the contradictory knowledge.[44,46,47] Certain extrinsic factors may influence the individuals' dissonance reduction strategies, such as personal goals, specific situations under which they have arisen, the influence of significant others and inter-individual variations.[44] Dissonance reduction strategies will differ among individuals depending on the repertoire of reduction strategies, social context, and feedback on the efficacy of the strategies chosen.[44]

Individuals' efforts at reducing dissonance result in a change in the knowledge schema.[48] Learners strive to preserve their knowledge schema[49] and shape the new experience to conform to this schema.[48,50] To reduce the uncomfortable feelings of dissonance, they will engineer ways to remove the dissonant cognition[48] by reconfiguring the knowledge structure to accommodate the new knowledge.[50]

GPs prefer to reflect on their discordant thoughts in a forum of palliative care specialists and GP colleagues.[17,22,28,42] They acquire multiple perspectives through interaction with mentors and peers in the learning environment or at work, critically reflect on these perspectives, amend their practice, and reflect and consolidate them.[7,26,34,37,41,50] Although traditional didactic learning styles are presumed to be prescriptive in nature, when the learning occurs in a small group interactive session, it helps to bring an attitudinal shift, integrate multiple thoughts, and lead to better understanding.[18,26,31] Similarly, online or e-learning in the current era has cut across geographical barriers.[19,22,36,40-42,51] With either the information on web pages or through online training, learners have the opportunity to construct meaning through active participation and self-directed inquiry.[18,21,31,36,37,51]

THE SOCIAL CONSTRUCTION OF KNOWLEDGE

Individuals and society are intricately interwoven.[34] Individuals extract information from one another in the group without any cognitive or affective disposition or consent of those involved in the interchange.[52] Learning is an interpretive, iterative, and non-linear process in which learners actively engage with their physical and social world,[49,52] exchange personally relevant and viable meanings,[33] ascribe value to their interactivities[52], and draw on legitimate practice.[33,52] GPs believe in the culture of openness and shared commitment between their colleagues and specialists, as this instils flexibility and cohesion within practice and improves their intrapersonal and interpersonal competences.[17,28,33,41,52] They prefer to learn by interacting with peers and specialists in the clinical or learning environment, as this allows legitimate integration of research evidence into clinical practice.[26,39,41,50]

BARRIERS TO LEARNING

The learner's decision to participate in a training program can be constrained by factors that could be dispositional, situational, institutional, or academic in nature.[53] Dispositional barriers may include diffidence in providing palliative care,[18,54] fear of treading into the patient's or family's private spiritual space,[54] perceived lack of competence or a sense of hopelessness,[54] emotional burden of care[19] and fear of medicolegal recrimination.[28,42] Situational barriers may include personal and family commitment,[36] resource constraints such as having to self-fund their training,[18,31] providing compensation for organising locum GPs, especially for those working in remote areas and having a solo practice.[31] Institutional barriers may include job-related challenges such as excess work pressure with the resultant lack of time,[18,31] poor remuneration,[22,36] and the temporary nature of the job,[19] disempowerment of GPs,[19] conflict in care provision between specialists,[7,21] and GPs and lack of clear delineation of roles and responsibilities[7,21] and non-acceptance of palliative care by patients and reluctance of specialists to refer to primary palliative care.[7] The other barrier to palliative care education is related to the misconception of palliative care as end-of-life care, which is often perceived as a threat to clinical practice and future referrals.[55] Academic barriers include constraints related to training opportunities. Most end-of-life care training programs focus on oncology, providing fewer opportunities for them to learn non-malignant end-of-life care skills, which account for a significant portion of their practice.[41] Training occurs mostly during office hours in the hospital setting[16,31,42] and skills gained may not be replicable in the community due to differences in the infrastructure in both settings.[7] Some of these factors may be barriers, but others may provide benefits if they are addressed appropriately in the course of learning.[53]

DISCUSSION

Learning is an internal cognitive progressive process that is embedded in the social and cultural context.[56] Social constructivist learning theory enables us to theorise about how individuals attribute value to their learning within a social, emotional, temporal, and cultural context.[35] GPs feel

accountable for the care that they provide to their patients because of the prolonged period of care from birth to the end of life.[15,17-19] Changing clinical scenarios, complex end-of-life care needs, and evolving evidence-based practice in end-of-life care instil a feeling of dissonance for which GPs seek recourse.[7,21,30] However, the transformation of knowledge will only occur if the past clinical experience is honoured and its future is appreciated[50] or if the GPs perceive this transformation as adding valuable information to address the gap in their knowledge.[50]

GPs prefer to autonomously decide on their learning needs and learning styles[56] and seek a learning environment that provides ample space for them to democratically express their intellectual and emotional content.[35,56] Language mediates this expression and helps learners interact with others in the learning environment, probe each other's thoughts, and understand the way each individual interprets reality.[57] Learners then negotiate, defend their positions, and create meaning on their own terms.[35] GPs value reflective practice under the guidance of specialist palliative care teams or experienced GPs as this gives them the opportunity to amend their practice.[7,37] The mentor in the learning environment acts as a scaffolding agent, facilitates the interchange within the group, and gives an apportioned degree of emphasis on the contents.[56,57] Therefore, GPs constantly acquire and apply knowledge under the guise of autonomously developing, maturing, and enhancing themselves[56] and preserving their professional and self-identity.[57]

LIMITATIONS OF THE REVIEW

The search strategies were limited to studies published in English. Although the studies included in the review were dated from 1993 to 2019, most of them were published in the last 10 years. Studies explored were from the United Kingdom, Europe, Australia, and Canada. The healthcare system provides universal coverage of health insurance and mandates gatekeeping by GPs in order for patients to access insurance facilities. In some countries, such as Canada, specialists receive less payment for non-GP referred patients. This could perhaps justify the reason for these countries to have studies on end-of-life care provision by GPs.[58,59] Since we were aiming at exploring multiple perspectives of the GPs, the heterogeneity of the articles, the combination of quantitative and qualitative methods employed, and data obtained from across the continents, increased the depth of our understanding, allowing it to be replicated in different settings.

IMPLICATIONS FOR POLICY AND PRACTICE

Patient-related suffering and how empowered GPs feel in addressing them determine their learning preferences in end-of-life care. Thus, identifying the challenges that GPs face in caring for a patient at the end of life will add relevance to the training program. There is a need for a paradigm shift in training programs from traditional didactic training to more experiential and reflective learning under the guidance of a mentor. The learning environment must ensure that GPs have the democracy to bring their unique clinical and emotional experiences to the learning arena. This will also facilitate more sustainable training programs in the future by having a transformative effect on the GPs.

IMPLICATIONS FOR FUTURE RESEARCH

The relevance and context of learning in end-of-life care predetermine access to training. Future interventions must focus on knowledge translation that will transpire knowledge into practice in alignment with the GP's preference for end-of-life care training. Learning is a dynamic process where there is a continuous evolution of knowledge that influences practice. This must, therefore, be reflected in the evaluation process during training. Learning could be constrained by barriers at various levels, such as dispositional, situational, institutional, and academic. There is thus a need for research to understand how these barriers affect learning and to check the feasibility of interventions that align with the GPs' requirements.

CONCLUSION

Social constructivist learning theory explicates that learning is a dynamic social process where learners collaborate to create a meaningful learning experience. GPs' life and clinical practice experiences contribute to their learning and act as a starting point of learning. GPs act as important fulcrums in the community by delivering primary palliative care. Considering the vast expanse of medical knowledge and evolving evidence in end-of-life care practice, GPs continue their learning to keep themselves abreast of the growing body of knowledge. Thus, the focus of control on learning shifts from the mentor to the GP learners, who autonomously decide on the method that they would like to adopt contingent on the content and context of learning. Furthermore, only if the learning can transform their self- and professional identity will it be sustained. Therefore, training programs must be designed in alignment with GP learning preferences as this may have an impact on access to future training programs and end-of-life care practice among GPs.

Declaration of patient consent

Patient's consent not required as there are no patients in this study.

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Conflicts of interest

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Use of artificial intelligence (AI)-assisted technology for manuscript preparation

The author(s) confirms that there was no use of artificial intelligence (AI)-assisted technology for assisting in the writing or editing of the manuscript and no images were manipulated using AI.

REFERENCES

1. Available from: https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases [Last accessed on 2021 Apr 21].
2. Moens K, Higginson IJ, Harding R, Euro Impact. Are there Differences in the Prevalence of Palliative Care-related Problems in People Living with Advanced Cancer and Eight Non-cancer Conditions? A Systematic Review. J Pain Symptom Manage 2014;48:660-77.
3. Justino ET, Kasper M, Santos KD, Quaglio RC, Fortuna CM. Palliative Care in Primary Health Care: Scoping Review. Rev Lat Am Enfermagem 2020;28:e3324.
4. Atreya S, Datta SS, Salins N. Views of General Practitioners on End-of-life Care Learning Preferences: A Systematic Review. BMC Palliat Care 2022;21:162.
5. Quill TE, Abernethy AP. Generalist Plus Specialist Palliative Care -- Creating a more Sustainable Model. N Engl J Med 2013;368:1173-5.
6. Gott M, Seymour J, Ingleton C, Gardiner C, Bellamy G. That's Part of Everybody's Job: The Perspectives of Health Care Staff in England and New Zealand on the Meaning and Remit of Palliative Care. Palliat Med 2012;26:232-41.
7. Pype P, Peersman W, Wens J, Stes A, Van den Eynden B, Deveugele M. What, how and from whom do Health Care Professionals Learn during Collaboration in Palliative Home Care: A Cross-sectional Study in Primary Palliative Care. BMC Health Serv Res 2014;14:501.
8. Selman LE, Brighton LJ, Robinson V, George R, Khan SA, Burman R, *et al.* Primary Care Physicians' Educational Needs and Learning Preferences in End of Life Care: A Focus Group Study in the UK. BMC Palliat Care 2017;16:17.
9. Illeris K. A Comprehensive Understanding of Human Learning. In: Contemporary Theories of Learning. 2nd ed. England: Routledge; 2009. p. 7-20.
10. Green BN, Johnson CD, Adams A. Writing Narrative Literature Reviews for Peer-reviewed Journals: Secrets of the Trade. J Chiropr Med 2006;5:101-17.
11. Cronin P, Ryan F, Coughlan M. Undertaking a Literature Review: A Step-by-step Approach. Br J Nurs 2008;17:38-43.
12. Collins JA, Fauser BC. Balancing the Strengths of Systematic and Narrative Reviews. Hum Reprod Update 2005;11:103-4.
13. Gasparyan AY, Ayvazyan L, Blackmore H, Kitas GD. Writing a Narrative Biomedical Review: Considerations for Authors, Peer Reviewers, and Editors. Rheumatol Int 2011;31:1409-17.
14. Itai I. Self-actualisation: For Individualistic Cultures Only? Int J Humanist Ideol 2008;1:113-39.
15. Barclay S, Wyatt P, Shore S, Finlay I, Grande G, Todd C. Caring for the Dying: How Well Prepared are General Practitioners? A Questionnaire Study in Wales. Palliat Med 2003;17:27-39.
16. Shipman C, Addington-Hall J, Barclay S, Briggs J, Cox I, Daniels L, *et al.* Educational Opportunities in Palliative Care: What do General Practitioners Want? Palliat Med 2001;15:191-6.
17. Rhee JJ, Teo PC, Mitchell GK, Senior HE, Tan AJ, Clayton JM. General Practitioners (GPs) and End-of-life Care: A Qualitative Study of Australian GPs and Specialist Palliative Care Clinicians. BMJ Support Palliat Care 2018. doi: 10.1136/bmjspcare-2018-001531
18. Jünger S, Vedder AE, Milde S, Fischbach T, Zernikow B, Radbruch L. Paediatric Palliative Home Care by General Paediatricians: A Multimethod Study on Perceived Barriers and Incentives. BMC Palliat Care 2010;9:11.
19. O'Connor M, Lee-Steere R. General Practitioners' Attitudes to Palliative Care: A Western Australian Rural Perspective. J Palliat Med 2006;9:1271-81.
20. Aita V, McIlvain H, Backer E, McVea K, Crabtree B. Patient-centered Care and Communication in Primary Care Practice: What is Involved? Patient Educ Couns 2005;58:296-304.
21. O'Connor M, Breen LJ. General Practitioners' Experiences of Bereavement Care and their Educational Support Needs: A Qualitative Study. BMC Med Educ 2014;14:59.
22. Herrmann A, Carey ML, Zucca AC, Boyd LA, Roberts BJ. Australian GPs' Perceptions of Barriers and Enablers to Best Practice Palliative Care: A Qualitative Study. BMC Palliat Care 2019;18:90.
23. Suwannaphisit S, Anusitviwat C, Hongnaparak T, Bvonpanttarananon J. Expectations on Online Orthopedic Course using Constructivism Theory: A Cross-sectional Study among Medical Students. Ann Med Surg (Lond) 2021;67:102493.
24. Duane BT, Satre ME. Utilizing Constructivism Learning Theory in Collaborative Testing as a Creative Strategy to Promote Essential Nursing Skills. Nurse Educ Today 2014;34:31-4.
25. Lave J, Wenger E. Situated Learning: Legitimate Peripheral Participation. Cambridge: Cambridge University Press; 1991.
26. Lloyd-Williams M, Wilkinson C, Lloyd-Williams F. General Practitioners in North Wales: Current Experiences of Palliative Care. Eur J Cancer Care (Engl) 2000;9:138-43.
27. Lee HJ. The Role of Competence-based Trust and Organizational Identification in Continuous Improvement. J Managerial Psychol 2004;19:623-39.
28. Meijler WJ, Van Heest F, Otter R, Sleijfer DT. Educational Needs of General Practitioners in Palliative Care: Outcome of a Focus Group Study. J Cancer Educ 2005;20:28-33.
29. Rowe AD, Fitness J. Understanding the Role of Negative Emotions in Adult Learning and Achievement: A Social Functional Perspective. Behav Sci (Basel) 2018;8:27.
30. Reich K. From Pragmatism to Interactive Constructivism. In: Pfadenhauer M, Knoblauch H, editors. Social Constructivism as a Paradigm? The Legacy of Social Construction of Reality. London, New York: Routledge; 2019. p. 183-206.
31. Johnston G, Davison D, Reilly P. Educational Needs in Palliative Care: A Survey of GPs and Community Nurses. Eur J Gen Pract 2001;7:99-103.
32. Slort W, Blankenstein AH, Deliens L, van der Horst HE. Facilitators and Barriers for GP-Patient Communication in Palliative Care: A Qualitative Study among GPs, Patients, and End-of-life Consultants. Br J Gen Pract 2011;61:167-72.
33. Wilson SM, Peterson PL. Theories of Learning and Teaching: What do they mean for Educators? Washington, DC: National Education Association; 2006. p. 2.
34. Bélanger P. Theories in Adult Learning and Education. UK: Verlag Barbara Budrich; 2011. p. 106.
35. Bruner J. Culture, Mind, and Education. In: Contemporary Theories of Learning. England: Routledge; 2009. p. 167-76.
36. Rhee JJ, Zwar N, Vagholkar S, Dennis S, Broadbent AM, Mitchell G. Attitudes and Barriers to Involvement in Palliative Care by Australian Urban General Practitioners. J Palliat Med 2008;11:980-5.
37. Pype P, Symons L, Wens J, Van den Eynden B, Stes A, Deveugele M. Health Care Professionals' Perceptions towards Lifelong Learning in Palliative Care for General Practitioners: A Focus Group Study. BMC Fam Pract 2014;15:36.
38. Knowles MS. Self-directed Learning: A Guide for Learners and Teachers. Chicago: Follett Publication; 1975.
39. Becker G, Momm F, Deibert P, Xander C, Gigl A, Wagner B, *et al.* Planning Training Seminars in Palliative Care: A Cross-sectional Survey on the Preferences of General Practitioners and Nurses in Austria. BMC Med Educ 2010;10:43.
40. Straatman L, Miller T. Paediatric Palliative Care: A Survey of Paediatricians and Family Practitioners. BMJ Support Palliat Care 2013;3:366-71.
41. Magee C, Koffman J. Out-of-hours Palliative Care: What are the Educational Needs and Preferences of General Practitioners? BMJ Support Palliat Care 2016;6:362-8.
42. Taubert M, Noble SI, Nelson A. What Challenges Good Palliative Care Provision Out-of-hours? A Qualitative Interview Study of Out-of-hours General Practitioners. BMJ Support Palliat Care 2011;1:13-8.
43. Arditi C, Rège-Walther M, Durieux P, Burnand B. Computer-generated Reminders Delivered on Paper to Healthcare Professionals: Effects on Professional Practice and Healthcare Outcomes. Cochrane Database Syst Rev 2017;7:CD001175.
44. Cancino-Montecinos S, Björklund F, Lindholm T. A General Model of Dissonance Reduction: Unifying Past Accounts via an Emotion Regulation Perspective. Front Psychol 2020;11:540081.
45. Klein J, McColl G. Cognitive Dissonance: How Self-protective Distortions

can Undermine Clinical Judgement. Med Educ 2019;53:1178-86.
46. Cancino-Montecinos S, Björklund F, Lindholm T. Dissonance Reduction as Emotion Regulation: Attitude Change is Related to Positive Emotions in the Induced Compliance Paradigm. PLoS One 2018;13:e0209012.
47. Mezirow J. An Overview of Transformative Learning. In: Illeris K, editor. Contemporary Theory of Learning. London, New York: Routledge; 2009. p. 90-105.
48. Zhiqing Z. Assimilation, Accommodation, and Equilibration: A Schema-Based Perspective on Translation as Process and as Product. Int Forum Teach Stud 2015;11:84-9.
49. Fosnot CT. Constructivism: Theory, Perspectives, and Practice. 2nd ed. New York: Teachers College Press, Columbia University; 2005.
50. Kegan R. What "Form" Transforms? A Constructive-developmental Approach to Transformative Learning. In: Illeris K, editor. Contemporary Theory of Learning. London, New York: Routledge; 2009. p. 35-52.
51. Samaroo B. Assessing Palliative Care Educational Needs of Physicians and Nurses: Results of a Survey. Greater Victoria Hospital Society Palliative Care Committee. J Palliat Care 1996;12:20-2.
52. Grundmann M. Social Constructions through Socialisation: The Perspective of a Constructivist Socialisation Research. In: Pfadenhauer M, Knoblauch H, editors. Social Constructivism as a Paradigm? The Legacy of Social Construction of Reality. London, New York: Routledge; 2019. p. 91-104.
53. Baharudin SN, Murad M, Mat NH. Challenges of Adult Learners: A Case study of Full-time Postgraduates Students. Procedia Soc Behav Sci 2013;90:772-81.
54. Assing Hvidt E, Søndergaard J, Ammentorp J, Bjerrum L, Hansen G, Olesen F, *et al.* The Existential Dimension in General Practice: Identifying Understandings and Experiences of General Practitioners in Denmark. Scand J Prim Health Care 2016;34:385-93.
55. Aldridge MD, Hasselaar J, Garralda E, van der Eerden M, Stevenson D, McKendrick K, *et al.* Education, Implementation, and Policy Barriers to Greater Integration of Palliative Care: A Literature Review. Palliat Med 2016;30:224-39.
56. Tjin A Tsoi SL, de Boer A, Croiset G, Koster AS, Kusurkar RA. Unraveling Motivational Profiles of Health Care Professionals for Continuing Education: The Example of Pharmacists in the Netherlands. J Contin Educ Health Prof 2016;36:46-54.
57. Groot MM, Vernooij-Dassen MJ, Crul BJ, Grol RP. General Practitioners (GPs) and Palliative Care: Perceived Tasks and Barriers in Daily Practice. Palliat Med 2005;19:111-8.
58. Braun BL, Fowles JB, Forrest CB, Kind EA, Foldes SS, Weiner JP. Which Enrollees Bypass their Gatekeepers in a Point-of-service Plan? Med Care 2003;41:836-41.
59. Available from: https://www.commonwealthfund.org/sites/default/files/2020-12/international_profiles_of_health_care_systems_dec2020.pdf [Last accessed on 2023 Jan 15].

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