

International Journal of Palliative Nursing

Team approaches in Palliative Care – a review of the literature

--Manuscript Draft--

Manuscript Number:	ijpn.2019.0007
Full Title:	Team approaches in Palliative Care – a review of the literature
Short Title:	Palliative Care Teams
Article Type:	Review
Keywords:	Palliative care; institutional management teams; patient care team; nursing; interdisciplinary communication
Corresponding Author:	GVM Chamath Fernando, MBBS, DFM, DipPallMed, MRCGP University of Sri Jayewardenepura Nugegoda, Western Province SRI LANKA
Corresponding Author Secondary Information:	
Corresponding Author's Institution:	University of Sri Jayewardenepura
Corresponding Author's Secondary Institution:	
First Author:	GVM Chamath Fernando, MBBS, DFM, DipPallMed, MRCGP
First Author Secondary Information:	
Order of Authors:	GVM Chamath Fernando, MBBS, DFM, DipPallMed, MRCGP Sean Hughes, MA PhD
Order of Authors Secondary Information:	
Abstract:	Inter-disciplinary team involvement is commonplace in many palliative care settings across the world. Teamwork is perceived by many experts as an indispensable functionality of palliative care teams. Significantly different structural and functional attributes of these teams between regional and organizational contexts could potentially act both as strengths and weaknesses towards their overall effectiveness. The sustainability and resilience of the team also has an indirect bearing on the team functioning. This article aims to describe – with reference to extant literature – the international evidence on dynamic palliative care teams with a focus on how and when they function efficiently or not. Emphasis is also placed on studies that suggest means to mitigate the conflicts and limitations of team-work in palliative care and related health care settings.
Suggested Reviewers:	Ghuri Aggarwal, MD Head/ Professor of Palliative Medicine, Concord Repatriation General Hospital Ghuri.Aggarwal@health.nsw.gov.au An elite clinician and academician in the field of Palliative Care Julia Downing, PhD Professor of Palliative Care, King's College London School of Medical Education julia.downing792@btinternet.com A world renowned researcher and academic with a wealth of experience to critique the paper.
Additional Information:	
Question	Response
Please enter the word count of your manuscript	3104

Team approach in Palliative Care – a review of the literature

Fernando GVMC¹, Hughes Sean²

¹National Centre for Primary Care and Allergy Research, University of Sri Jayewardenepura,
Sri Lanka

²International Observatory on End of Life Care, Lancaster University, United Kingdom

Corresponding/ Principle author

Dr GVMC Fernando

Qualifications: MBBS, PgD-FM (Sri Lanka), DipPallMed (UK), MRCP [INT]

PhD Student (Palliative Care) at Lancaster University, United Kingdom

Affiliation: Palliative Care Lead, National Centre for Primary Care and Allergy Research,
University of Sri Jayewardenepura, Sri Lanka.

Address: Lecturer/Family Physician, Department of Family Medicine, Faculty of Medical
Sciences, University of Sri Jayewardenepura, Sri Lanka

Email: chemetf@sjp.ac.lk

Telephone: +94 76 660 9192

Co-author

Dr Sean Hughes

Qualifications: RMN, RGN, Adv.Dip Couns, MA, PhD

Affiliations: Lecturer in Palliative Care, Division of Health Research, Lancaster University,
United Kingdom.

Senior Research Associate, International Observatory on End of Life Care, Lancaster
University, United Kingdom.

Email: sean.hughes@lancaster.ac.uk

Telephone: +44 1524 593722

Abstract

Inter-disciplinary team involvement is commonplace in many palliative care settings across the world. Teamwork is perceived by many experts as an indispensable functionality of palliative care teams. Significantly different structural and functional attributes of these teams between regional and organizational contexts could potentially act both as strengths and weaknesses towards their overall productivity. The sustainability and resilience of the team also has an indirect bearing on the team functioning. This article aims to describe international evidence on dynamic palliative care teams with a notion of how and when they function efficiently or adversely. Emphasis is also placed on studies that suggest means to mitigate the conflicts and limitations of team-work in palliative care and related health care settings.

Acknowledgements: This article is a modification of an assignment submitted by the principle author as part of his PhD in Palliative Care at Lancaster University, United Kingdom.

Conflicts of interest: The authors declare no conflicts on interest.

[Click here to view linked References](#)

Team approaches in Palliative Care – a review of the literature

Abstract

Inter-disciplinary team involvement is commonplace in many palliative care settings across the world. Teamwork is perceived by many experts as an indispensable functionality of palliative care teams. Significantly different structural and functional attributes of these teams between regional and organizational contexts could potentially act both as strengths and weaknesses towards their overall effectiveness. The sustainability and resilience of the team also has an indirect bearing on the team functioning. This article aims to describe – with reference to extant literature – the international evidence on dynamic palliative care teams with a focus on how and when they function efficiently or not. Emphasis is also placed on studies that suggest means to mitigate the conflicts and limitations of team-work in palliative care and related health care settings.

Key words: palliative care, institutional management teams, patient care team, nursing, interdisciplinary communication

Background

The founder of modern palliative care and hospice movement, Dame Cicely Mary Saunders developed the concept of ‘total pain’ in 1964 (Saunders 2001). This concept encompassed not only the physical but also the psychosocial and spiritual sources of distress experienced by a person diagnosed with a life threatening illness. The discipline of ‘palliative care’ aims at addressing each aspect of total pain among patients faced with life threatening illnesses inclusive

of their loved ones. The spectrum of domains across which palliative care is organized makes the fact obvious that a team of professionals from a range of expertise backgrounds must be involved with the care of such a patient. The World Health Organization (WHO) in its extended definition of palliative care, emphasizes the necessity of a ‘team approach’ to address the complex needs of the patient spanning from the point of diagnosis to the stage of provision of bereavement care to the loved ones following the death of the patient (WHO 2017).

The International Association for Hospice & Palliative Care (IAHPC) is currently in the process of obtaining stakeholder endorsements for its consensus based definition of palliative care (Palliative Care Definition - International Association for Hospice & Palliative Care 2018.). It reiterated the salience of contributions of multi-disciplinary teams (MDT) in palliative care from personnel with basic palliative care training through to those with specialist training.

Universities, academia and teaching hospitals are encouraged by the IAHPC to integrate research and multi-professional training related to palliative care at basic, intermediate and advanced levels.

Certain attributes of a palliative care team determine its effectiveness. Particular characteristics of a team may have beneficial effects, detrimental consequences or both on the quality of care, overall team performance and just utilization of scarce resources especially in resource poor settings. The features of a team will be discussed under following domains.

1. Structural attributes

- a. *Models* for teamwork

- b. *'Designated roles'* in the multi-disciplinary team
 - c. Sequelae of *'having many eyes and many hands'*
 - d. Teamwork across different *'care settings'*
2. Functional attributes
- a. *'Teamwork'* (itself)
 - b. *Phases of team development*
 - c. *Leadership*
 - d. *Communication*
 - e. *Multimodal therapeutic options*
 - f. *Overlap between roles*
 - g. *Dealing with 'burnout' and 'compassion fatigue'*
3. Economic imperatives of palliative care teams
4. Means of sustaining satisfactory care

1. Structural attributes

- (a) *'Models'* for teamwork

Team structure and interactions between members vary in relation to the model of teamwork.

Three models of healthcare teams have been outlined by Crawford and Price (2003) in an Australian context; multidisciplinary, interdisciplinary and transdisciplinary. A hypothetical purely multidisciplinary team has clearly defined responsibilities assigned to individuals. Instead of interacting with other members of the team, each professional provides care in isolation. This approach is perceived to have practical limitations principally due to fragmentation of care. On the other extreme is the transdisciplinary approach where the responsibilities are overlapping to a

greater extent between the members. Each member attends to the same set of duties during their shift. There can be specific care needs unattended to, which make this model unsuitable in general for healthcare teams. In an interdisciplinary team, the members interact with each other and work interdependently resulting in augmentation of overall patient care which is a model suited to palliative care provision (Image 1). Hereon, the more commonly used term ‘multi-disciplinary team’ (MDT) will be used to denote ‘teamwork’ in general in this essay.

(b) *‘Designated roles’* in the multi-disciplinary team

Healthcare professionals involved with palliative care include doctors, nurses and allied health professionals (AHP). The physicians of a care team include general practitioners, palliative physicians, anaesthetists, psychiatrists, oncologists and other disease specific specialists (example: nephrologists) (National Hospice and Palliative Care Organization 2017). Nurse practitioners and community nurses play a major role as do allied health professionals (Kirby et al. 2014). AHP also constitutes physiotherapists, occupational therapists, speech & language therapists, dietetics and a range of other therapists; as described in worldwide studies (Bowen 2014; Fleissig et al. 2006; Ramanayake et al. 2016; Ramirez et al. 1998). Psychologists, counsellors, social workers and community volunteers assist patients with their psychosocial wellbeing while religious priests, pastoral care givers and chaplains provide spiritual guidance to the patients (El Nawawi et al. 2012; Hanson et al. 2008; Puchalski 2002).

The team members whose services are essential on a routine basis constitute permanent members of a team; the ‘core team’. Others who offer support on an ‘as required basis’, form the

‘extended team’ (Øvretveit 1996). Extended team players for instance, may include solicitors who assist patients in advanced care planning, appointing lasting power-of-attorneys for welfare/ financial affairs which also compose indispensable aspects of care (Mullick et al. 2013). A review of the literature made suggest that family members and caregivers who play a significant role in care provision also form part of the team (Morris et al. 2012). Such evidence emerges from countries such as UK and Australia where palliative care is well established. The members included in teams can vary significantly across countries and regions based on the loco-regional needs, policies and resources (Crawford and Price 2003). Volunteers have long been a part of the hospice workforce in the UK (Morris et al 2012) but are deployed in more extensive community based roles in other places where the palliative care infrastructure is less well-resourced with paid workers such as Kerala, India (Kumar 2007).

(c) Sequelae of *‘having many eyes and many hands’*

Integrating the spectrum of expertise of different individuals into the palliative care plan increases the likelihood that the patients are managed in a ‘holistic’ manner. As the number of persons observing the patient: ‘many eyes’, increases, the vigilance over the patient’s welfare improves and the probability of the patient’s concerns being overlooked diminishes (Rome et al. 2011)(Barry Quinn, 2016). Other proven benefits include expansion of the sources of support, satisfactory symptom control, better opportunities to express concerns, better preservation of autonomy, improved satisfaction and quality of life as reported by care recipients (Hearn and Higginson 1998). Literature also suggests that involvement of care teams lessens the rates of hospitalization of palliative care patients and allows them to spend more time at home (Gade et

al. 2008; Higginson et al. 2002). This honours patients' predominant preference to be cared for at home (De Roo et al. 2014).

An American group of investigators suggested that the number of members in an ideal core palliative care team ranges between 5-10. It is also reported that the efficiency of a team may decline should the number of professionals in a team exceed twenty. This study found that contradictory views and opinions which are inevitable by-products of a functioning enthusiastic team, were better tolerated among members of relatively a larger team (Katzenbach and Smith 1993a).

(d) Teamwork across different '*care settings*'

The principle settings of palliative care delivery comprise of community/home, hospice and hospital (Wiencek and Coyne 2014). The composition and the dynamics within these teams vary depending on the availability of resources and expertise in the relevant care-setting. The general practitioner (GP) who practices in the community has considerable understanding of the resources available around the household, neighbourhood and the society in which the patient resides. Therefore, GPs are well equipped to provide generalist palliative care while coordinating care in community settings. Similarly, the palliative care specialist usually delivers care in a hospice or a hospital based setting (as well as in the community) whilst solving complex health related issues (Brumley et al. 2003; Higginson et al. 2002). The same patient may need access to palliative care in different settings owing to constantly reshaping circumstances through the disease trajectory. Therefore, efficient collaboration between the generalist and specialist care

settings and the professionals involved is beneficial to ensure continuity of comprehensive care (Quill and Abernethy 2013).

The models of palliative care provision and professional compositions of teams keep evolving over time. A study that retrospectively evaluated pooled data on community based specialist palliative care teams concluded that such teams evidently reduced rates of utilization of acute care and of institutionalized deaths at end-of-life (Seow et al. 2014). Macmillan specialist nurses who care for palliative patients in the community are examples.

Higginson and Evans (2010), reviewed the literature assessing the effect of specialist palliative care teams on patients with advanced cancer receiving care at home, hospital and designated in-patient care units. Compared to disease-oriented care models, a superior relief in pain related symptoms and anxiety was apparent with these teams with a reported reduction in the hospital admission rates.

Another systematic review looked at the GP's contribution to palliative care. The patients and relatives expressed mixed perspectives in this regard. They appreciated the accessibility, time dedication and efforts made by their GPs to ease symptoms while they believed bereavement care was comparatively better provided in other settings. Furthermore, GPs themselves felt less competent to provide palliative care. It was objectively established that they can miss complex and rare symptoms which may lead to delays in diagnosis and the provision of appropriate care. Eventual recommendations encouraged palliative specialists to refer patients to the GPs for

palliative care provision which was expected to stimulate the GPs to develop their competencies (Mitchell 2002).

2. Functional attributes

(a) 'Team work' (itself)

Healthcare teams have been demonstrated to provide better care in qualitative and quantitative terms than practitioners operating in solitude. The care receiver satisfaction with regards to a team was influenced favourably by collaboration, conflict resolution and functioning in cohesion (Lemieux-Charles and McGuire 2006). The combined skills and decision making abilities demonstrated by successful teams comprising of diverse experts (Crawford and Price 2003) have shown to improve patient outcomes as well as organizational effectiveness (Lemieux-Charles and McGuire 2006). A group of Norwegian experts suggested that the key objectives expected of an optimally functioning health care team are prompt and comprehensive patient assessment combined with appropriate care provision in constructive collaboration with the patients, their loved ones, fellow team members, external individuals and organizations involved. Evaluating practice on a regular basis to audit practice standards in with the light of current evidence informed the development of service provision (Cherny et al. 2015).

(b) Phases of team development

The development of a team progresses through sequential stages along which the members gain experience and mature (Katzenbach and Smith 1993b; Rickards and Moger 2002). In the 'forming' stage, inexperienced members attempt to define their roles with the guidance of a formal leader. During the 'storming' stage, conflicts arise as a result of contradicting opinions

between different subgroups and in a competition for power. The 'norming' phase is characterised by members coming to terms with their roles and responsibilities. They openly discuss their concerns with fellow members with whom they have a sense of belonging. In the final stage of 'performing', team members support each other to function synergistically and develop in-built algorithms for conflict resolution (Twomey et al. 2014). The notion of a 'phases model' suggests that a team would not function efficiently right from its inception but will do so through growing together as a functioning group.

(c) Leadership

Among the philosophies of team work; (directive, integrative, elective) the integrative model is seen to work best with palliative care MDTs (Marnie Freeman 2000). In this model the value of each professional is weighted equally since their individual expertise together enables the broad spectrum of patient welfare. Frequent discussions among them are also vital to the functioning of the group. A more 'directive' leadership approach exists in order to identify the skillsets of team players, assign suitable tasks, motivate, collaborate with external resources, deal with obstacles and steer the overall performance of the team towards the achievement of set goals (Katzenbach and Smith 1993a). When the roles and responsibilities of team players are well coordinated under a directive leadership the patients, practitioners and care givers are both likely to benefit.

In the absence of supportive leadership, teamwork can be frustrating. Poor definition of leadership and conflicts over authority can also impair team functioning. Teams can on occasions face problems related to unduly dominant members (Larson DG 1993). The Gold Standards Framework has been instrumental in associating communication with high quality generalist

palliative care delivery where well-functioning teams have used a mixture of formal and informal meetings (Barry Quinn 2016). The meetings were meant to be held in relatively a non-hierarchical working style without much emphasis on leadership specifically, although the hierarchy was apparent in doctor-nurse relationship.

(d) Communication

Communication, whether inter-professional or between the professional and a patient, was described in a Swedish qualitative study as key to both execution of palliative care and optimal team functioning (Klarare et al. 2013). Satisfactory inter-professional communication is deemed instrumental in arriving at management decisions, conflict resolution, building trust, fulfilling administrative tasks, advocacy, sharing of knowledge and experiences and thereby enhancing individual and collective competencies (Klarare et al. 2013). A Swiss study shows that lack of formal channels of communication between professionals in different care settings has led to disharmony; for instance between primary and tertiary care levels (Liebig and Piccini 2017).

Communication challenges faced by healthcare professionals dealing with patients diagnosed with life threatening diseases include breaking bad news, dealing with collusion, difficult questions, uncertainty and responding to overt emotional reactions (Faulkner 1998). Individual patient's staff member of preference may vary from one patient to another within the team. A study based in Libya found that the patient's preferred staff member within the broader team was considered to be better positioned to undertake sensitive information exchange than others (Kurer et al. 2008). With this notion, having staff with varying personality characteristics within the team can be perceived a strength.

Certain team members who are better conversant in leadership, communication skills, development of trust and team building are well equipped to serve as resourceful intermediaries in dissonance management while offering valuable feedback and support to the fellow members (Green 2017; Oliver and Peck 2006).

(e) Multimodal therapeutic options

The range of members forming the traditional palliative care team keeps evolving over time with new additions. Examples from a Taiwanese context include music therapists and art therapists who render their services that entail symptomatic relief and enhancement of quality of life of patients (Huang et al. 2010; Lin et al. 2012). Fear of adverse effects of drug therapy (example: opiophobia) can contribute to the reluctance of patients accepting pharmacotherapy. Patients receiving care in resourceful settings which may include access to a range of therapeutic approaches , provide opportunities to trial the benefit of complementary therapies such as art therapy.

Owing to the inherent discrepancies in the training, exposure and perspectives of the diverse professionals involved, contradictory views of the best suited therapeutic modality given the prevalent status of a patient may exist. A study based on middle-eastern background demonstrated that this could lead to inter-professional conflict (Silbermann et al. 2013). MDT discussions allow space for the team members to weigh each option and arrive at consensus on

the overall plan of management of the patients targeting their net-benefit. Good palliative care teams respect patient-centred approach while arriving at care decisions (Gillon 1994).

(f) Overlap between roles

The designations of these distinct personnel imply their primary role in the team. Nevertheless, a considerable overlap exists between the roles that are practically played by them. For instance, the multi-faith hospice chaplains possess expertise in offering spiritual guidance regardless of the patients' religious backgrounds or spiritual beliefs. Dutch experts suggest that the fellow members of the team who are not principally concerned with spiritual care provision must also have a basic training in assessing spiritual distress and an overview of the nature of care a pastoral care giver provides (Baldacchino et al. 2015; Joep Van De Geer et al. 2016). This understanding ensures that spiritual distress will be less overlooked by healthcare professionals and measures including appropriate referrals will be undertaken to alleviate such distress.

Where there is arbitrariness in the specific roles of individual professionals, emergence of dissonance is not uncommon. Disputes can arise between two different professionals who claim their sole responsibility over a particular facet of care concerning a particular patient. There could also be instances where professionals neglect certain aspects of care assuming that another colleague may deal with the same (Green 2017). Timely communication between team members can prevent such occurrences.

(g) Dealing with 'burnout' and 'compassion fatigue'

Emotionally and sometimes physically overwhelming tasks handled by palliative care providers while dealing with dying, suffering and uncertainty render them vulnerable to compassion fatigue and burnout (Kamal et al. 2016). Burnout may have mental, emotional and physical elements of fatigue which can undermine the professional's interest and capacity. The proportion of clinicians who suffer burnout mostly due to emotional exhaustion can be as high as 62% in hospice and palliative care settings. Recent research found that conflicts within a team can also serve as a source of stress. However, working in a team can positively influence individual members through reinforcing interpersonal relationships, providing opportunities for professional appraisal and sharing of experiences, responsibilities and worries (Kamal et al. 2016; Martins Pereira et al. 2011; Penson et al. 2000).

3. Economic imperatives of palliative care teams

The labour intensive nature of team approaches may raise concerns about the costs involved. When community-based multidisciplinary palliative care team members work in collaboration aimed at the best interests of their patients, the need for hospital based care declines. Hence, the team approach in fact decreases the overall costs of care (Hearn and Higginson 1998). The cost effectiveness of palliative care teams was consistently found to be impressive in contrast to comparator groups in fellow disciplines. The community based model developed in Kerala, India where the administrators of care are mostly trained volunteers, is an exemplary cost-effective method of care provision that has been of proven efficacy and hence advocated among fellow developing countries (Smith et al. 2014).

4. Means of sustaining satisfactory care

Regular audit of practice is central to the sustenance of the quality of care provision, fair staff contributions and stability within teams. An audit is generally aimed at evaluating the discrepancy between current and best practice recommendations in keeping with the most recent evidence. Organizational structure, processes for service delivery and care outcomes must be audited by palliative care teams on a regular basis. These must be interspersed with necessary revisions and training in order to upgrade and maintain standards and consistency of care (Hunt et al. 2004; Fulmer et al. 2005).

Sufficient room must be provided for each individual in the team to develop and update skills and knowledge. Case discussions, ward rounds and clinical meetings held by the MDT members on occasions with external resource persons are some examples as to means for team development and functioning.

Conclusions

Evidence aligns strongly with the notion that palliative care is optimally delivered through MDT approaches. The inherent attributes of teamwork provide strengths to the quality and extent of care provided to the patients and their loved ones, albeit with minimal yet noteworthy limitations. The dynamics within the team can influence individual members and the team as a whole favourably and on occasions adversely. The net effect of the supportive and maladaptive environments created within healthcare teams largely determines the overall team performance towards achieving the common goal of holistic patient care. The majority of perhaps inevitable drawbacks in an MDT approach are best mitigated through communication, leadership skills and

mutual respect. Research, clinical audits and ample opportunities for the team members for continuous professional development are central to the maintenance of the ideal standards of care provided by a multi-disciplinary palliative care team.

List of abbreviations

AHP	Allied Health Professional
IAHPC	International Association for Hospice Palliative Care
MDT	Multi-disciplinary team
WHO	World Health Organization

References

- A Suitable Model for Breaking Bad News: Review of Recommendations. (n.d.). Retrieved February 14, 2019, from <https://ibimapublishing.com/articles/JMED/2014/776618/>
- Baldacchino, D., Baldacchino, & Donia. (2015). Spiritual Care Education of Health Care Professionals. *Religions, 6*(2), 594–613. <https://doi.org/10.3390/rel6020594>
- Beck, S. L. (1991). The therapeutic use of music for cancer-related pain. *Oncology Nursing Forum, 18*(8), 1327–1337.
- Bennett, D. S., & Carr, D. B. (2002). Opiophobia as a barrier to the treatment of pain. *Journal of Pain & Palliative Care Pharmacotherapy, 16*(1), 105–109.
- Bowen, L. (2014). The multidisciplinary team in palliative care: a case reflection. *Indian Journal of Palliative Care, 20*(2), 142–145. <https://doi.org/10.4103/0973-1075.132637>
- Brumley, R. D., Enguidanos, S., & Cherin, D. A. (2003). Effectiveness of a Home-Based

Palliative Care Program for End-of-Life. *Journal of Palliative Medicine*, 6(5), 715–724.

<https://doi.org/10.1089/109662103322515220>

Callin, S., & Bennett, M. I. (2008). Diagnosis and management of neuropathic pain in palliative care. *International Journal of Palliative Nursing*, 14(1), 16–21.

<https://doi.org/10.12968/ijpn.2008.14.1.28149>

Cherny, N. I., Fallon, M., Kaasa, S., Portenoy, R. K., & Currow, D. C. (2015). *Oxford Textbook of Palliative Medicine*. Oxford University Press.

Crawford, G. B., & Price, S. D. (2003). Team working: palliative care as a model of interdisciplinary practice. *The Medical Journal of Australia*, 179(6 Suppl), S32-4.

De Roo, M. L., Miccinesi, G., Onwuteaka-Philipsen, B. D., Van Den Noortgate, N., Van den Block, L., Bonacchi, A., ... Francke, A. L. (2014). Actual and Preferred Place of Death of Home-Dwelling Patients in Four European Countries: Making Sense of Quality Indicators. *PLoS ONE*, 9(4). <https://doi.org/10.1371/journal.pone.0093762>

Dobre, C., Duceac, L., Grierosu, C., Mihai, D., Zaharia, A., Stafie, L., ... Phd, P. (n.d).

EFFICIENT MEASURES FOR BURNOUT PREVENTION IN PALLIATIVE CARE. International Journal of Medical Dentistry.

Dunlop, R. (1998). Teamwork and Palliative Care (pp. 111–120). Springer, London.

https://doi.org/10.1007/978-1-4471-3069-7_8

El Nawawi, N. M., Balboni, M. J., & Balboni, T. A. (2012). Palliative care and spiritual care. *Current Opinion in Supportive and Palliative Care*, 6(2), 269–274.

<https://doi.org/10.1097/SPC.0b013e3283530d13>

Faulkner, A. (1998). ABC of palliative care: Communication with patients, families, and other professionals. *BMJ*, 316(7125), 130–132. <https://doi.org/10.1136/bmj.316.7125.130>

Fleissig, A., Jenkins, V., Catt, S., & Fallowfield, L. (2006). Multidisciplinary teams in cancer care: are they effective in the UK? *The Lancet Oncology*, 7(11), 935–943.

[https://doi.org/10.1016/S1470-2045\(06\)70940-8](https://doi.org/10.1016/S1470-2045(06)70940-8)

Gade, G., Venohr, I., Conner, D., McGrady, K., Beane, J., Richardson, R. H., ... Penna, R. Della. (2008). Impact of an Inpatient Palliative Care Team: A Randomized Controlled Trial. *Journal of Palliative Medicine*, 11(2), 180–190. <https://doi.org/10.1089/jpm.2007.0055>

Green, S. (2017). *Making it Right in the End: Conflict on the Hospice Interdisciplinary Team*.

Hanson, L. C., Dobbs, D., Usher, B. M., Williams, S., Rawlings, J., & Daaleman, T. P. (2008). Providers and types of spiritual care during serious illness. *Journal of Palliative Medicine*, 11(6), 907–914. <https://doi.org/10.1089/jpm.2008.0008>

Hearn, J., & Higginson, I. J. (1998). Do specialist palliative care teams improve outcomes for cancer patients? A systematic literature review. *Palliative Medicine*, 12(5), 317–332.

<https://doi.org/10.1191/026921698676226729>

Higginson, I. J., & Evans, C. J. (2010). What Is the Evidence That Palliative Care Teams Improve Outcomes for Cancer Patients and Their Families? *The Cancer Journal*, 16(5), 423–435. <https://doi.org/10.1097/PPO.0b013e3181f684e5>

Higginson, I. J., Finlay, I. G., Goodwin, D. M., Hood, K., Edwards, A. G. ., Cook, A., ...

Normand, C. E. (2003). Is There Evidence That Palliative Care Teams Alter End-of-Life Experiences of Patients and Their Caregivers? *Journal of Pain and Symptom Management*, 25(2), 150–168. [https://doi.org/10.1016/S0885-3924\(02\)00599-7](https://doi.org/10.1016/S0885-3924(02)00599-7)

Higginson, I. J., Finlay, I., Goodwin, D. M., Cook, A. M., Hood, K., Edwards, A. G. K., ...

Norman, C. E. (2002). Do Hospital-Based Palliative Teams Improve Care for Patients or Families at the End of Life? *Journal of Pain and Symptom Management*, 23(2), 96–106.

[https://doi.org/10.1016/S0885-3924\(01\)00406-7](https://doi.org/10.1016/S0885-3924(01)00406-7)

Hunt, J., Keeley, V., Cobb, M., & Ahmedzai, S. (2004). A new quality assurance package for hospital palliative care teams: The Trent Hospice Audit Group model. *British Journal of Cancer*, *91*, 248–253. <https://doi.org/10.1038/sj.bjc.6601945>

Interdisciplinary Team. (2017, March 11). *National Hospice and Palliative Care Organization*.

Joep Van De Geer, R., Zock, H., Leget, C., Veeger, N., Prins, J., Groot, M., & Vissers, K.

(2016). *Training Spiritual Care in Palliative Care in Teaching Hospitals in the Netherlands: A Multicentre Trial*.

Kaasa, S., & Dale, O. (2005). *Building up Research in Palliative Care: An Historical*

Perspective and A Case for the Future (Vol. 21). <https://doi.org/10.1016/j.cger.2004.08.009>

Kamal, A. H., Bull, J. H., Wolf, S. P., Swetz, K. M., Shanafelt, T. D., Ast, K., ... Abernethy, A. P. (2016). Prevalence and Predictors of Burnout Among Hospice and Palliative Care Clinicians in the U.S. *Journal of Pain and Symptom Management*, *51*(4), 690–696.

<https://doi.org/10.1016/j.jpainsymman.2015.10.020>

Katzenbach, J. R., & Smith, D. K. (1993a). *The wisdom of teams : creating the high-performance organization*. Harvard Business School Press.

Katzenbach, J. R., & Smith, D. K. (1993b). *The wisdom of teams : creating the high-*

performance organization. Harvard Business School Press. Retrieved from

https://books.google.lk/books/about/The_Wisdom_of_Teams.html?id=FMJn4RmmiAkC&redir_esc=y

Keidel, G. C. (2016). Burnout and compassion fatigue among hospice caregivers: *American Journal of Hospice and Palliative Medicine*®. <https://doi.org/10.1177/104990910201900312>

Kirby, E., Broom, A., & Good, P. (2014). The role and significance of nurses in managing

transitions to palliative care: a qualitative study. *BMJ Open*, 4(9), e006026.

<https://doi.org/10.1136/bmjopen-2014-006026>

Klarare, A., Lundh Hagelin, C., Johan Förlst, C., & Fossum, M. (2013). Team Interactions in Specialized Palliative Care Teams: A Qualitative Study. *Journal of Palliative Medicine*. <https://doi.org/10.1089/jpm.2012.0622>

<https://doi.org/10.1089/jpm.2012.0622>

Kumar, S. K. (2007) Kerala, India: A Regional Community-Based Palliative Care Model.

Palliative Medicine. 33 (5), 623-626

Kurer, M. A., & Zekrim, J. M. (2008). Breaking Bad News: Can We Get It Right? *The Libyan Journal of Medicine*, 3(4), 200–203. <https://doi.org/10.4176/080825>

Learning Guide Working collaboratively. (2017).

Lemieux-Charles, L., & McGuire, W. L. (2006). What Do We Know about Health Care Team Effectiveness? A Review of the Literature. *Medical Care Research and Review*, 63(3), 263–300.

<https://doi.org/10.1177/1077558706287003>

Liebig, B., & Piccini, C. (2017). Inter-professional communication in palliative care: general practitioners and specialists in Switzerland. *Clinical Case Reports and Reviews*, 3(2).

<https://doi.org/10.15761/CCRR.1000311>

Lin, M.-H., Moh, S.-L., Kuo, Y.-C., Wu, P.-Y., Lin, C.-L., Tsai, M.-H., ... Hwang, S.-J. (2012a).

Art therapy for terminal cancer patients in a hospice palliative care unit in Taiwan. *Palliative and Supportive Care*, 10(1), 51–57. <https://doi.org/10.1017/S1478951511000587>

Mandel, S. E. (1993). The role of the music therapist on the hospice/palliative care team. *Journal of Palliative Care*, 9(4), 37–39.

Marks, R. M. (1973). Undertreatment of Medical Inpatients with Narcotic Analgesics. *Annals of Internal Medicine*, 78(2), 173. <https://doi.org/10.7326/0003-4819-78-2-173>

Martins Pereira, S., Fonseca, A. M., & Sofia Carvalho, A. (2011). Burnout in palliative care: A systematic review. *Nursing Ethics*, 18(3), 317–326. <https://doi.org/10.1177/0969733011398092>

Mitchell, G. K. (2002). How well do general practitioners deliver palliative care? A systematic review. *Palliative Medicine*, 16(6), 457–464. <https://doi.org/10.1191/0269216302pm573oa>

Moore, P. M., Rivera Mercado, S., Grez Artigues, M., & Lawrie, T. A. (2013). Communication skills training for healthcare professionals working with people who have cancer. *The Cochrane Database of Systematic Reviews*, (3), CD003751. <https://doi.org/10.1002/14651858.CD003751.pub3>

Morris, S., Wilmot, A., Hill, M., Ockenden, N., & Payne, S. (2012). A narrative literature review of the contribution of volunteers in end-of-life care services: *Palliative Medicine*. <https://doi.org/10.1177/0269216312453608>

Mullick, A., Martin, J., & Sallnow, L. (2013). An introduction to advance care planning in practice. *BMJ (Clinical Research Ed.)*, 347, f6064–f6064. <https://doi.org/10.1136/bmj.f6064>

O’Callaghan, C. C. (1996). Pain, music creativity and music therapy in palliative care. *American Journal of Hospice and Palliative Medicine*®, 13(2), 43–49. <https://doi.org/10.1177/104990919601300211>

Oliver, D. P., & Peck, M. (2006). Inside the Interdisciplinary Team Experiences of Hospice Social Workers. *Journal of Social Work in End-Of-Life & Palliative Care*, 2(3), 7–21. https://doi.org/10.1300/J457v02n03_03

Overview of spirituality in palliative care - UpToDate. (n.d.). Retrieved December 19, 2018, from <https://www.uptodate.com/contents/overview-of-spirituality-in-palliative-care>

Øvretveit, J. (1996). Five ways to describe a multidisciplinary team. *Journal of Interprofessional Care*, 10(2), 163–171. <https://doi.org/10.3109/13561829609034099>

Palliative Care Definition - International Association for Hospice & Palliative Care. (n.d.). Retrieved December 19, 2018, from <https://hospicecare.com/what-we-do/projects/consensus-based-definition-of-palliative-care/definition/?fbclid=IwAR0kcRQWWw6pkfUDub8EwwcyiLNB1U8POxrHHD2ot3nvOIrqH4s4fUnXVSI>

(PDF) The Geriatric Interdisciplinary Team Training (GITT) Program. (n.d.). Retrieved December 24, 2018, from https://www.researchgate.net/publication/7866500_The_Geriatric_Interdisciplinary_Team_Training_GITT_Program

Penson, R. T., Dignan, F. L., Canellos, G. P., Picard, C. L., & Lynch, T. J. (2000). Burnout: caring for the caregivers. *The Oncologist*, *5*(5), 425–434.

Puchalski, C. M. (2002). Spirituality and End-of-Life Care: A Time for Listening and Caring. *Journal of Palliative Medicine*, *5*(2), 289–294. <https://doi.org/10.1089/109662102753641287>

Quill, T. E., & Abernethy, A. P. (2013). Generalist plus Specialist Palliative Care — Creating a More Sustainable Model. *New England Journal of Medicine*, *368*(13), 1173–1175. <https://doi.org/10.1056/NEJMp1215620>

Ramanayake, R. P. J. C., Dilanka, G. V. A., & Premasiri, L. W. S. S. (2016). Palliative care; role of family physicians. *Journal of Family Medicine and Primary Care*, *5*(2), 234–237. <https://doi.org/10.4103/2249-4863.192356>

Ramirez, A., Addington-Hall, J., & Richards, M. (1998). ABC of palliative care. The carers. *BMJ (Clinical Research Ed.)*, *316*(7126), 208–211.

Rickards, T., & Moger, S. (2002). Creative Leadership Processes in Project Team Development: An Alternative to Tuckman’s Stage Model. *British Journal of Management*, *11*, 273–283.

<https://doi.org/10.1111/1467-8551.00173>

Safrai, M. B. (2013). Art Therapy in Hospice: A Catalyst for Insight and Healing. *Art Therapy, 30*(3), 122–129. <https://doi.org/10.1080/07421656.2013.819283>

Saunders, C. (2001). The evolution of palliative care. *Journal of the Royal Society of Medicine, 94*(9), 430–432.

Seow, H., Brazil, K., Sussman, J., Pereira, J., Marshall, D., Austin, P. C., ... Barbera, L. (2014). Impact of community based, specialist palliative care teams on hospitalisations and emergency department visits late in life and hospital deaths: a pooled analysis. *BMJ (Clinical Research Ed.), 348*, g3496. <https://doi.org/10.1136/bmj.g3496>

Sessions II, W. S., Kow, S. Y., Waldrop, E., Stevenson, K., Olanrewaju, A., & Ii, W. S. (n.d.). *Patient Experience Journal Breaking bad news and the importance of compassionate palliative care of the infant Recommended Citation. Patient Experience Journal (Vol. 5).*

Silbermann, M., Pitsillides, B., Al-Alfi, N., Omran, S., Al-Jabri, K., Elshamy, K., ... El-Shamy, M. (2013). Multidisciplinary care team for cancer patients and its implementation in several Middle Eastern countries. *Annals of Oncology, 24*(suppl 7), vii41-vii47.

<https://doi.org/10.1093/annonc/mdt265>

Sloot, S., Boland, J., Snowden, J. A., Ezaydi, Y., Foster, A., Gethin, A., ... Ahmedzai, S. H. (2015). Side effects of analgesia may significantly reduce quality of life in symptomatic multiple myeloma: a cross-sectional prevalence study. *Supportive Care in Cancer, 23*, 671–678.

<https://doi.org/10.1007/s00520-014-2358-1>

Smith, S., Brick, A., O'Hara, S., & Normand, C. (2014). Evidence on the cost and cost-effectiveness of palliative care: A literature review. *Palliative Medicine, 28*(2), 130–150.

<https://doi.org/10.1177/0269216313493466>

Team working: palliative care as a model of interdisciplinary practice | The Medical Journal of Australia. (n.d.). Retrieved December 19, 2018, from

<https://www.mja.com.au/journal/2003/179/6/team-working-palliative-care-model-interdisciplinary-practice>

The effectiveness of music in relieving pain in cancer patients: a randomized controlled trial. - PubMed - NCBI. (n.d.).

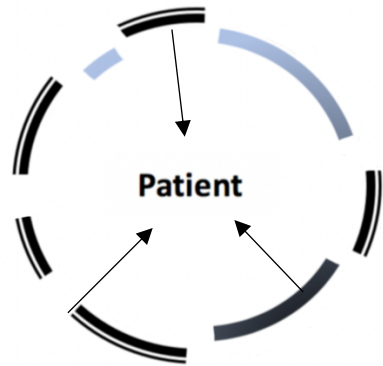
The impact of individual philosophies of teamwork on multi-professional practice and the implications for education: Journal of Interprofessional Care: Vol 14, No 3. (n.d.). Retrieved December 24, 2018, from <https://www.tandfonline.com/doi/abs/10.1080/jic.14.3.237.247>

The Role of Palliative Care at the End of Life. (n.d.). Retrieved February 14, 2019, from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3241069/>

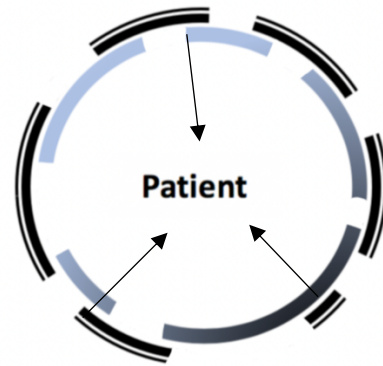
Twomey, C., Byrne, M., & Leahy, T. (2014). Steps towards effective teamworking in Community Mental Health Teams. *Irish Journal of Psychological Medicine, First view article*, 1. <https://doi.org/10.1017/ipm.2013.62>

WHO | Palliative Care. (2017, August 13). *WHO*.

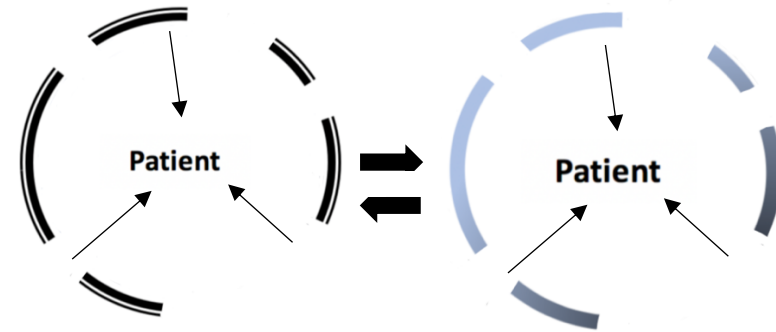
Wiencek, C., & Coyne, P. (2014). Palliative Care Delivery Models. *Seminars in Oncology Nursing*, 30(4), 227–233. <https://doi.org/10.1016/j.soncn.2014.08.004>



B. Multidisciplinary Care



A. Interdisciplinary Care



C. Transdisciplinary Care

Figure 1: Graphical representation of care models for teamwork; A. Multidisciplinary B. Interdisciplinary C. Transdisciplinary in a team with two members.

