

Best Practices in Research Methods

Palliative Care Research in Practice

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Introduction

From an initial focus on the care of people in the last weeks or days of life, the principles and practice of palliative care have been increasingly recognized as beneficial for people earlier in their disease trajectory, from the point of diagnosis (Ahmedzai & Walsh, 2000; World Health Organization, 2005). Yet the reality is that the majority of patients receiving care from hospice and specialist palliative services are in the last months, weeks, or days of life (Eve, Smith, & Tebbit, 1997; Lamont & Christakis, 2002). In addition, although the relevance of palliative care to people who die from conditions other than cancer is increasingly recognized (Addington-Hall & Higginson, 2001), the majority of patients currently receiving care in most settings have cancer, with most of the remainder having AIDS or neurological conditions such as motor neurone disease. This article focuses on the challenges of working as a researcher with people with advanced, progressive disease who are coming to the end of their lives.

Our empathy with and compassion for our fellow human beings facing the end of their lives can cause us to find the idea of palliative care research rather unsettling, and to even question whether it is an appropriate pursuit. To address this satisfactorily we need, I think, a clear sense of the potential benefits of research in this area, the risks of not doing such research, and the ethical dimensions of such research.

Benefits of Palliative Care Research

One of the factors that differentiated the initial modern hospice services from the homes for the dying that had preceded them was their emphasis on research — ensuring that interventions were based on science rather than just on practice and tradition. Rapid improvements were made in pain control, for example, because hospice pioneers built on emerging scientific knowledge about pain mechanisms and opiate drugs. Medical and nursing research into the etiology, mechanisms, and treatment of symptoms such as pain, nausea and vomiting, dyspnea, and con-

stipitation have played a vital role in the progress in palliative care we have seen over the past four decades. There is still much to be done in order to address problems and to ensure that practice is evidence-based (Higginson, 2004).

Given the particular sensitivities (indeed, difficulties) entailed in conducting research in this area, it might be tempting to argue that the usual standards of evidence-based practice should be lowered, that the costs of collecting randomized controlled trial (RCT) evidence outweigh the benefits that will accrue from that evidence. As elsewhere in health care, this stance runs the risk of denying patients access to interventions shown by RCTs to be beneficial — including nursing interventions that might have been ignored or rejected without that evidence (Moore et al., 2002) — and of offering care that is ineffective (Todd, Rees, Gwilliam, & Davies, 2002). In the area of evidence-based practice, palliative care patients as a group may have more to lose by being excluded from research than they have to gain by being included.

Clinical research is not, of course, the only research being conducted in palliative care. Much of my research comes under the heading of health-services research: studies that seek to understand people's health-care needs, to determine whether and how these needs are being addressed, and to evaluate the appropriateness and effectiveness of service interventions. Some may dismiss the need for health-services research in the field of palliative care, arguing that such care is self-evidently "good" and therefore does not require empirical validation. This is an attractive argument in the United Kingdom, where hospices have largely developed outside of the National Health Service in response to local need and funded by local people rather than out of taxation: a clear demonstration of support for and, it can be supposed, the quality of hospice services. Health technology assessment is receiving increasing attention in the health-care systems of industrialized countries, however, creating the need for hospice and palliative services to show that they too are effective and efficient — in short, that they offer value for money. These services usually score high for user satisfaction, but that alone is not enough for them to score well in more formal health-care evaluations. Conducting high-quality service evaluations in palliative care is a challenging task. Such evaluations do not always come to the expected conclusions, sometimes leading to debate about whether the findings are "true" or whether the evaluation has misrepresented the services due to poor methods and/or the choice of inappropriate outcomes. Nevertheless, if we do not engage in health-services research we risk the future funding of palliative care and its integration within health and insurance systems.

My third argument in favour of palliative care research may be the most important one. In our desire to avoid causing patients any additional distress or burden, we risk acting in a paternalistic manner — doing what we think patients want or what we would want in their position. This is a paradox in palliative care, which has always strived to treat patients as individuals; indeed it sought to provide “patient-centred care” before the term was even invented. Research can be a powerful means of putting patients in a position to make their views known. In quantitative research, for example, patients’ accounts of pain in a drug trial influence judgements about the effectiveness of a new analgesic (in contrast with a sole reliance on the views of health-care providers), while qualitative research methods seek to understand the participant’s experience from his or her own perspective. Such research can produce findings that challenge accepted wisdom (Stajduhar & Davies, 2005) and serve to demonstrate that, however well intentioned and well informed, health professionals do not necessarily have the same views as users. Research that explores users’ perspectives and investigates their experiences of care is a requisite for any patient-centred health-care system. The field of palliative care is no exception. In addition, there is evidence that palliative care patients who choose to participate in research interviews are positive about their experiences (Emanuel, Fairclough, Wolfe, & Emanuel, 2004). Therefore, the advantages of palliative care research for society and for palliative care patients do not seem to come at a cost to the research participants — provided, of course, that their decision to participate is fully informed. It is to the ethics of palliative care research that we now turn.

Ethics of Palliative Care Research

It has been suggested that research in palliative care may be unethical because participants, given their limited life expectancy, cannot benefit from any changes resulting from the study (Janssens & Gordijn, 2000). Whilst an inability to benefit directly is particularly clear in palliative care, it is not restricted to this field. Other patients also participate in research knowing that any resultant changes are unlikely to benefit them (because, for example, they do not expect to have another knee replacement). Thus while palliative care is perhaps an extreme in this respect, it is not unique. It has also been argued that it is unethical to take up the limited time of palliative care patients with research matters. While patients clearly should be free to use their remaining time how they wish, non-palliative patients also have demands on their time. In both cases, patients need to weigh the advantages and disadvantages of allocating time to research and make an informed decision. Finally, some object

to enrolling palliative care patients in studies because they are a “captive audience” (Raudonis, 1992), dependent on various professionals for their care; the argument is that they may be reluctant to give honest evaluations or may feel coerced into participating. Again, this issue is not unique to palliative care.

Palliative care is therefore not a special case in terms of research ethics. The usual safeguards established to protect research participants and to ensure that they are making autonomous, informed decisions to participate therefore apply (Casarett & Karlawish, 2000). It can be difficult, however, to persuade ethical review boards that this is the case. Indeed, investigators are frequently uneasy about asking people to participate in research at the end of their lives, and it would be surprising if members of ethical review boards did not share this uneasiness. Given the inherent sensitivity of palliative care research, it is neither unexpected nor inappropriate for palliative care investigators to be asked repeatedly to revisit the ethical basis of their research.

The application of the principles of ethically sound research can present challenges in palliative care. The desire of health professionals to protect patients from unnecessary demands can conflict with the patient’s right to make an informed autonomous decision about research participation. Even very sick patients may wish to participate for altruistic reasons, to give something back to society, or even to make some sense of their situation. At the same time, these patients can be very vulnerable, particularly as they become sicker and more dependent on others for care, effective symptom control, and support. This can make it difficult for them to decline participation. Relationships between clinical staff and researchers around the ethics of palliative care research can be strained. Whilst clinical staff may feel strongly that “their” patients should not be burdened by taking part in a study, researchers may view this as gate-keeping behaviour — as denying the patients their autonomy and threatening the viability of the study.

Such issues are not easily addressed. Involvement of clinical staff and, where possible, the users themselves at an early stage in the research design will help to ensure that the type of participation expected is appropriate and that clinical staff understand the importance of the research. Partnership between investigators, clinicians, and users is an important step in ensuring an ethically sound, appropriate, and acceptable research design.

A related issue is whether it is necessary for researchers who collect data from palliative patients to have a clinical background. Those who do have a clinical background are more likely to be aware of the patient’s clinical condition and limitations, to be alert to signs of fatigue and distress, to seek consent appropriately, and to refrain from engaging in

excessively burdensome data-collection protocols. They are also more likely to be familiar with the physical manifestations of advanced disease. As a young social scientist with no clinical background, I often worried when interviewing dying patients that I would reveal my negative reactions to the sights and smells that result from very advanced cancer and thus distress the person. During discussions with my clinical colleagues, it became clear that they were no longer aware of these aspects of dying. However, clinicians do not have a monopoly on good empathic skills or research expertise. They can also experience tension between their role as carer — wishing to intervene on the patient's behalf — and that as researcher. While it may not be necessary for researchers working with palliative care patients to have a clinical background, those who supervise the investigators have a responsibility to provide good induction programs and continuing supervision so that the researcher behaves in a way that causes minimal harm to the patient and the researcher (Clark, Ingleton, & Seymour, 2000).

An under-recognized issue in palliative care research is that of capacity — the ability to understand the issues and give informed consent. This clearly lies at the heart of research ethics. Although reduced capacity has been the subject of much debate in the literature on research in dementia, it has received less attention in palliative care despite the growing evidence of high levels of cognitive impairment in palliative care populations (Jenkins, Taube, Turner, Hanson, & Bruera, 1998). This is an area that requires further research. In the meantime, palliative care researchers need to be alert to the possibility that a patient may lack the capacity to give consent (Casarett, 2003). Those conducting longitudinal studies should be aware that the patient's capacity may diminish as the disease progresses; in any case, the patient's changing condition may make it good practice to renegotiate consent at each contact in any palliative care study that follows patients over time.

In summary, palliative care is not a special case. The usual principles of research ethics apply. However, it is an area that requires particular care in the application of those principles (Jubb, 2002). Partnerships between researchers, clinicians, and users can be helpful, as can advice from experts in research ethics. Issues around patient recruitment and retention in palliative care research will now be examined.

Patient Recruitment and Retention

The most challenging aspect of palliative care research is the fact that the patients are very sick and then die. This has implications for participant recruitment and retention. As discussed above, although the average life expectancy of patients referred to palliative services varies among services

and settings, it is measured usually in weeks, sometimes in months, and rarely in years. By the time patients are referred they are likely to have a number of troublesome problems, which indeed may have been the trigger for referral (Walsh, Donnelly, & Rybicki, 2000). The proportion of patients who are well enough to be approached by an interviewer, are not too fatigued to absorb all the necessary information, and have sufficient mental capacity to give informed consent will vary between settings, but is not likely to be high, even at first contact with palliative services. This has particular implications for survey researchers seeking representative samples in order to draw inferences about the whole population. It may also limit the widespread applicability of trial data, and, if not carefully documented and described, the transferability of data from qualitative studies, where appropriate (Crowley & Casarett, 2003). It can also require patience, tenacity, and forbearance on the part of the researcher and generosity on the part of the funding agency, which in the ideal world (but all too often, alas, not in the real world) recognizes the specific recruitment challenges in palliative care and their implications for the time and funding needed.

As the disease progresses, the patient will become more fatigued and more functionally impaired. This has particular implications for longitudinal studies, including RCTs, where the researcher must follow patients over time in order to measure outcomes. Although a sufficient number of patients may have been recruited at baseline (usually after considerable effort), the number who are still alive and well enough to participate at time two will be significantly reduced, even with a short interval such as 2 weeks — and the situation will of course worsen as the study progresses. This is clearly beyond the researcher's control (as I would rather have liked to point out to the author of a systematic review of RCTs of palliative care services who marked her own trial down for quality because "too few" took part in follow-ups [Rinck et al., 1997]).

I have argued above that palliative care cannot afford to "opt out" of evidence-based health care and health technology assessment, and thus needs evidence from RCTs and other strong research designs (in addition to good qualitative data where appropriate to the research question). The question now is not whether RCTs are possible in palliative care, but how best to resolve the problems associated with them, at the heart of which lies the recruitment and retention of sufficient numbers. Expert statistical advice on sample size is an important first step, but in order to calculate a meaningful sample size one must make a judgement about what proportion of those recruited are likely to survive to the follow-up interview. The literature now contains enough data from palliative care trials for one to base this judgement on evidence from the real world. These data can also be used to help determine the optimal time between

baseline and follow-up interviews. Partnerships between researchers, clinicians, and users can help ensure that research studies address problems seen as important by clinicians and users, that the methods are not burdensome for patients, thus reducing gatekeeping, and that user advice is sought on recruitment methods. Research networks, such as those currently being established in the United Kingdom, can facilitate multi-centre studies and increase recruitment numbers, thus ensuring that effort is not wasted on studies that are underpowered statistically and therefore cannot answer the research question (and that are consequently ethically suspect). Patient recruitment and retention will remain a challenge in palliative care because of its very nature; good practice exists, however, and no study should be started without realistic plans for meeting the necessary sample size, based on experience in the “real world” and developed in consultation with clinical partners and users.

Conclusion

Despite the growing recognition that the principles and practice of palliative care are relevant from the point of diagnosis in cancer, and indeed throughout the course of other chronic diseases, most recipients of palliative care have cancer that is no longer responsive to treatment. For these people death is certain and not far off. They need the best possible physical, psychological, social, and spiritual care to enable them and their loved ones to live as fully as possible for as long as possible. Palliative care research has played a vital role in providing the evidence base that makes such care possible. There are still many unanswered questions, and we therefore continue to need high-quality palliative care research. The fact that most patients are very sick at the point when they begin to receive palliative care and then become sicker presents challenges related to both the ethics and the practicalities of research. Those who are uncomfortable with the very idea of asking people facing the end of life to participate in research force those of us who work in this field to question the importance of the studies we want to do, the methods we have chosen, and, in particular, the demands we will make on our participants: it is imperative that our work meets the highest possible ethical standards. Part of meeting these ethical standards is ensuring that our work is of the highest possible academic quality: despite the challenges entailed in palliative care research, there can be no excuse for poor research. If palliative care is to fulfil its potential, we will have to find creative, imaginative, and ethical ways of conducting high-quality quantitative and qualitative research into the problems encountered by people at the end of life. Partnerships between researchers, clinicians, and service users will have an important role to play in this process.

References

- Addington-Hall, J. M., & Higginson, I. J. (Eds.). (2001). *Palliative care for non-cancer patients*. Oxford: Oxford University Press.
- Ahmedzai, S. H., & Walsh, T. D. (2000). Palliative medicine and modern cancer care. *Seminars in Oncology*, *27*, 1–6.
- Casarett, D. J. (2003). Assessing decision-making capacity in the setting of palliative care research. *Journal of Pain and Symptom Management*, *25*, S6–13.
- Casarett, D. J., & Karlawish, J. H. T. (2000). Are special ethical guidelines needed for palliative care research? *Journal of Pain and Symptom Management*, *20*, 130–139.
- Clark, D., Ingleton, C., & Seymour, J. (2000). Support and supervision in palliative care research. *Palliative Medicine*, *14*, 441–446.
- Crowley, R., & Casarett, D. (2003). Patients' willingness to participate in symptom-related and disease-modifying research: Results of a research screening initiative in a palliative care clinic. *Cancer*, *97*, 2327–2333.
- Emanuel, E. J., Fairclough, D. L., Wolfe, P., & Emanuel, L. L. (2004). Talking with terminally ill patients and their caregivers about death, dying, and bereavement: Is it stressful? Is it helpful? *Archives of Internal Medicine*, *164*, 1999–2004.
- Eve, A., Smith, A. M., & Tebbitt, P. (1997). Hospice and palliative care in the UK 1994–5, including a summary of trends 1990–5. *Palliative Medicine*, *11*, 31–43.
- Higginson, I. J. (2004). It would be NICE to have more evidence. [Editorial.] *Palliative Medicine*, *18*, 85–86.
- Janssens, R., & Gordijn, B. (2000). Clinical trials in palliative care: An ethical evaluation. *Patient Education and Counselling*, *41*, 55–62.
- Jenkins, C. A., Taube, A. W., Turner, K., Hanson, J., & Bruera, E. (1998). Initial demographic, symptom, and medication profiles in patients admitted to continuing palliative care units. *Journal of Pain and Symptom Management*, *16*, 163–170.
- Jubb, A. M. (2002). Palliative care research: Trading ethics for an evidence base. *Journal of Medical Ethics*, *28*, 342–346.
- Lamont, E. B., & Christakis, N. A. (2002). Physician factors in the timing of cancer patient referral to hospice palliative care. *Cancer*, *94*, 2733–2737.
- Moore, S., Corner, J., Haviland, J., Wells, M., Salmon, E., Normand, C., et al. (2002). Nurse led follow up and conventional medical follow up in management of patients with lung cancer: Randomised trial. *British Medical Journal*, *325*, 1145–1147.
- Raudonis, B. M. (1992). Ethical considerations in qualitative research with hospice patients. *Qualitative Health Research*, *2*, 238–249.
- Rinck, G. C., van den Bos, G. A. M., Kleijnen, J., de Haes, H. J. C. J. M., Schadé, E., & Veenhof, C. H. N. (1997). Methodologic issues in effectiveness research on palliative cancer care: A systematic literature review. *Journal of Clinical Oncology*, *15*, 1697–1707.
- Stajduhar, K., & Davies, B. (2005). Variations in and factors influencing family members' decisions for palliative home care. *Palliative Medicine*, *19*, 21–32.

- Todd, J., Rees, E., Gwilliam, B., & Davies, A. (2002). An assessment of the efficacy and tolerability of a “double dose” of normal-release morphine sulphate at bedtime. *Palliative Medicine*, *16*, 507–512.
- Walsh, D., Donnelly, S., & Rybicki, L. (2000). The symptoms of advanced cancer: Relationship to age, gender, and performance status in 1,000 patients. *Supportive Care in Cancer*, *8*, 175–179.
- World Health Organization. (2005). *WHO definition of palliative care*. Retrieved March 20, 2005, from <http://www.who.int/cancer/palliative/definition/en/>

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