

Original Article

Interprofessional work in cancer care: towards team work through interprofessional education

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Abstract

This paper explores some of the characteristics associated with learning about the care and management of people with cancer in an interprofessional setting. Most cancer patients have contact with a variety of health care professionals on their cancer journey. This journey is explored for a woman with breast cancer who experiences, reports and receives advice for the chronic fatigue that many such patients have during and after treatments. Recent literature, especially that informed by patients' viewpoints, indicates that some patients perceive their care as fragmented and can be given conflicting advice from different professionals within the team. This paper demonstrates that working in an interprofessional way is full of complexities for the practitioners involved and argues for interprofessional education as a way towards more effective team work when two or more health care professionals are members of that team.

The paper discusses theoretical aspects of interprofessional education, with a focus on knowledge development through shared learning and how this may be achieved for students studying cancer care. Barriers to the effective development of interprofessional knowledge are elaborated upon.

Keywords

Interprofessional education; cancer-related fatigue; professional knowledge; teamwork

INTRODUCTION

This paper explores some of the issues that are associated with learning about caring for people with cancer in an interprofessional way. It is important to relate some of the theoretical concepts of professional learning to the reality of the people cared for. The paper, therefore, also discusses the results of a survey of five colleagues' views on the assessment and control of cancer-related fatigue for a specific Case-patient with breast cancer. The data has been used for heuristic rather than empirical purposes. In this way, the data was able to act as a lens through it became possible to further understand education practice

and, in particular, enabled the practice of cancer care to inform a developmental theory of interprofessional education (IPE).

The data analysis and subsequent comment was the means by which three related issues in cancer care could be discussed, namely:

- the increasingly popular educational concept of cancer care practitioners learning together to work together;
- the needs of women with breast cancer who experience, report and receive advice for the chronic fatigue that many of them have during and after treatments;
- evidence that a significant number of cancer patients perceive their care as fragmented and are often given confusing and different advice from members of the cancer care team.

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The commentary on IPE in cancer care begins with a discussion of terminology and some background to interprofessional work and IPE in higher, professional education. Through the agency of the cancer journey of a woman with breast cancer, who is experiencing the chronic fatigue not uncommon in such patients, it is possible to show that care can be fragmented and confusing. Finally, there is a discussion of some preliminary work on theoretical aspects of professional education, present and future, which seeks to explain how IPE has the potential to reduce fragmentation and enhance patient care.

INTERPROFESSIONAL EDUCATION: NAMING AND EXPLAINING

The language used by those who engage in the discourse on IPE is complex. At present, a 'bewildering array of terms' are all used without consensus, with interprofessional, multiprofessional, shared and collaborative (amongst others) frequently appearing in the literature.¹ All these words are used in two different ways and there is no general agreement about their meaning. They describe the nature of a group of participants from the health and welfare professions and other people involved in the care of people who need health and welfare services. Importantly, this should also include the recipient of that care. They also designate the way in which practitioners interact in learning and work situations.

This paper draws on Hammick's differentiation of multiprofessional as the adjective to describe groups, cohorts etc. and both multiprofessional and interprofessional to signify the type of action these practitioners are involved in.² To distinguish between these types of actions, Barr's distinction of multiprofessional education (MPE) as simply learning together and IPE as learning together to promote collaborative practice, is followed.³ Given this distinction it is clear, within cancer care, that IPE has greater potential to influence the patient's experience than MPE. The later may achieve collaborative practice but may not actively facilitate or encourage students to work in this way once they return to their clinical areas.

The strong link between the concept of collaborative practice or interprofessional work and IPE

is well recognised. A recent survey of IPE in health and social care in the UK suggests that it continues to increase and, if effective, can amongst other things 'promote interprofessional collaboration' and 'improve the quality of care'.¹ Other authors, including Beattie, describing multi-disciplinary collaboration in healthcare include comment on the place of initiatives based on the learning together to work together approach.⁴ The philosophy behind this phrase is sound and is supported elsewhere, e.g. 'the prevailing belief is that students who share such learning experiences will emerge with skills to promote effective working in multiprofessional teams'.⁵

Collaboration between professionals is currently seen as one way of achieving effective health and social care. The rationale for collaborative work is well explored by, for example, Leathard, who provides a national developmental perspective.⁶ Leathard supports the case for going interprofessional with comment on the need for rationalisation as health and welfare services become increasing complex, knowledge expands and specialisation continues to rise.⁶ Specific examples of interprofessional work from the UK are given by (amongst others) Pietroni, who looks at developments in primary care involving nurses, doctors and social workers and in Beattie's discussion of the challenges of working together in health promotion.^{4,7} From the US there is a generalised commentary by Schmitt and Casto provides examples of both inter-agency collaboration and hospital-based geriatric services, amongst others.^{8,9} In addition, Baldwin provides a useful historical view of interprofessional education and practice in the US.¹⁰

The reasons for these developments are well discussed in the literature. According to Baldwin, the replacement of a medical model of health with one featuring prevention and a family focus is the explanatory framework for introducing new and more collaborative ways of working in the US.¹⁰ Rawson highlights UK organisational and governmental demands to improve working practices, e.g. in child protection work, which has been closely examined in light of child abuse scandals.¹¹ In the UK health care recent and radical changes to under- and postgraduate health care education, including the introduction of continued professional education, are seen as

opportunities to introduce this way of working.¹² This, and the current move to implement evidence-based practice, provides a challenge for National Health Service (NHS) Trust managers. Batstone & Edwards report that some NHS Trusts are starting to explore how 'interactive' methods of learning, 'developed in parallel with team building' can 'enhance clinical effectiveness and clinical audit in a multiprofessional way'.¹²

Collaborative practice is also recognised by patients to be valuable to their care, as the recommendation of cancer patients that 'multidisciplinary teams ... should be available' clearly demonstrates.¹³ Thus the change to more collaborative approaches to professional care has gained almost universal support as a practice that should be encouraged.⁶ The current challenge is to provide integrated and seamless care that is perceived as effective by the patient and is an acceptable part of the working practice of all the professionals involved in their care.²

For patients with cancer the need for seamless care often centres around assessment and advice on symptom control during radical treatments. To inform thinking on how diverse professional knowledge may contribute to patient care it was decided to focus on one patient with one symptom. The following section describes how the data was collected and used to further illuminate the issue of providing symptom assessment and advice within a cancer centre necessarily staffed by a number of different professional practitioners.

THE CASE

The Case-patient is a 35 year old woman, with a diagnosis of breast cancer. She has had a lumpectomy and is presently being treated with adjuvant Cyclophosphamide, Methotrexate and 5-Fluorouracil (CMF), and radical radiotherapy. Her main complaint at this time (midway through the radiation treatment and after 6 cycles of CMF) is of tiredness. She is an intelligent, informed and confident professional woman with a family and career and has, to date, continued with her home and work commitments throughout treatment. She realises that she would benefit from some sound advice on how to cope with her fatigue. Accordingly, she discusses the subject with the health care

professionals she meets during her daily visits to the hospital.

Five cancer care practitioners, all experienced members of staff in the same cancer centre, agreed to participate in this study. The Case was verbally outlined to them and they were asked what advice they would give to the patient. Their responses were recorded on paper and the raw data of this cursory survey is given in Tables 1–5, with their permission.

Table 1. *The Dietician's Response*

The Dietician said:

no general advice as I lack the specific oncology knowledge;
worth assessing dietary intake since a poor intake may exacerbate tiredness;
improving diet may not necessarily eliminate the problem.

Table 2. *The Doctor's Response*

The Doctor said:

expected side effect of treatment;
do as much as you are able;
will settle in a couple of months post-treatment;
no specific medical intervention available;
and would have;
assessed the context as it could be a manifestation of, e.g. depression.

Table 3. *The Nurse's Response*

The Nurse said:

take one day at a time and do what you feel able to do;
we need to rule out other causes such as a low Hb, nausea and vomiting, poor appetite;
expected side effect of the treatments;
and would have;
assessed sleep pattern;
assessed social support systems, both professional and lay;
suggested the use of a diary to identify tiredness and sleep pattern;
discussed coping strategies.

Table 4. *The Pharmacist's Response*

The Pharmacist said:

do as much as you can;
it should get better with time;
and would have;
checked medication to find possible cause agent and suggest change if possible.

Table 5. *The Radiographer's Response*

The Radiographer said:
 radiotherapy does make you feel as if 'your get up and go has got up and gone';
 it is a normal effect of treatment, affecting the whole person not just the part being treated;
 it is not permanent and will improve when treatment stops;
 can we change your treatment time to help;
and would have;
 assessed her daily lifestyle and what sort of tiredness she was experiencing;
 discussed coping strategies such as rest and activity patterns.

The intention here is not to present an analysis of this data from a clinically normative perspective. The aim in collecting these views was to look at any differences, and the nature of these, from the perspective of the patient who, in theory, could have been the recipient of all this advice and assessment. She will have received some common advice on how to cope (Table 6) and would have had similar assessments to give further help and guide referral to colleagues (Table 7).

ORGANISATION OF CANCER CARE KNOWLEDGE

Tables 6 and 7, with their very elementary data analysis, are a good demonstration of the effect of a traditional professional education system at the patient interface. Whilst there are commonalities of advice and assessment there are also certain aspects which are specific to one particular professional. This is not unexpected. However, if the patient did not see either a pharmacist or a dietician it could be concluded that neither her medication or diet would be considered a factor in her fatigue. Equally, if she had developed a good rapport with the dietician or pharmacist during her time as an in-patient having surgery, or within the chemotherapy clinic, and had not felt like raising the issue of her tiredness with either the radiographer, nurse or doctor, the advice she would have been given and any assessments to help self-management of her fatigue, would have been incomplete.

It is important to stress here that no judgements are being made about the right or wrong of what any of these practitioners said. The comparative use of Piper's integrated fatigue model (Figure 1)

Table 6. *The advice given to the Case patient*

Advice given	Dietician	Doctor	Nurse	Pharmacist	Radiographer
Expected or normal side-effect of treatment		✓	✓		✓
Do what you feel able to do		✓	✓	✓	
It will improve after the treatment stops	✓			✓	✓
Discussed coping strategies			✓		✓
Change the time of your treatment					✓
Suggested the use of a diary			✓		
Enquired about other causes			✓		

Table 7. *Assessments to help the Case patient*

Assessments	Dietician	Doctor	Nurse	Pharmacist	Radiographer
Sleep pattern			✓		
Social support					
Daily lifestyle		✓	✓		✓
Context					
Medication				✓	
Diet	✓				

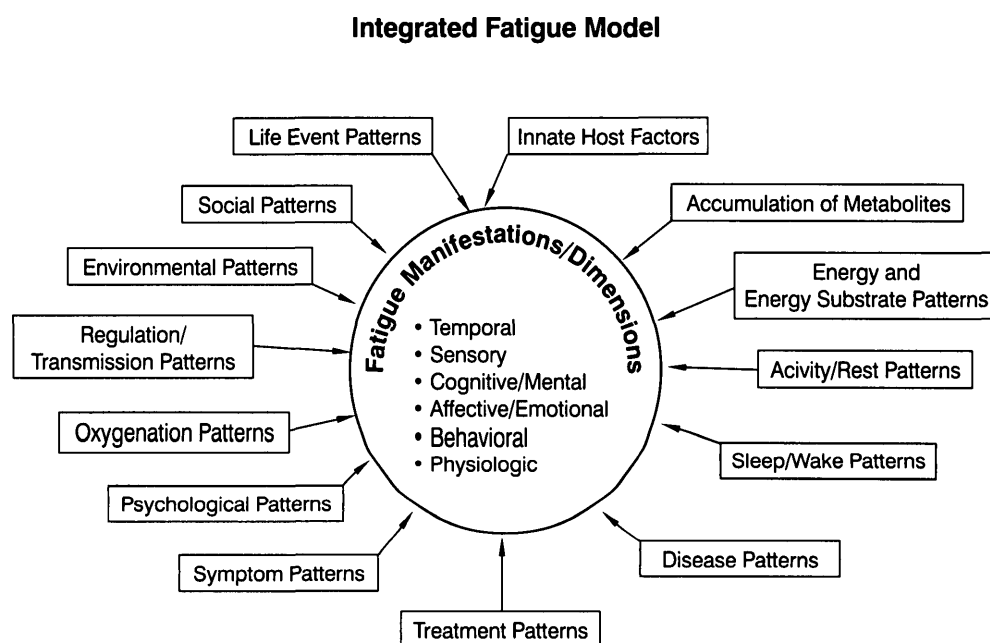


Figure 1. An integrated fatigue model (Reproduced by kind permission of Barbara F. Piper DNSc. RN, FAAN)

indicates that collectively the patient would have been given sound advice and that all the assessments may have been relevant.¹⁴ The responses received reflect the major elements in Piper's model. For example, behavioural aspects, such as lifestyle and sleep patterns, and physiological influences, such as possible pharmaceutical causative agents and the insult of radiotherapy, were all mentioned. Cancer related fatigue has a complex multidimensional nature and it remains poorly understood. As Vogelzang et al. point out, it is still a disease and cancer-therapy symptom that is less amenable to treatment than, for example, pain, and its impact on patient's daily lives is not perceived in the same way by patients, their caregivers and oncologists.¹⁵ The diversity of the responses tabled above is likely to be associated with the nature of cancer-related fatigue as much as the professional knowledge of the respondents.

However, the important issue in this present discussion is that all this advice, plus a few assessments, from five different practitioners, had it all happened to the patient (and this is, of course, possible) may have left her feeling confused. Her experience could be like that of patients who reported to the National Cancer Alliance about their dissatisfaction with their care and from whose collective voice the recommendations that 'Effective interprofessional and interagency com-

munication and information exchange, across all sectors is vital.' and 'Continuity of care and continuity of staff should be the norm.' arose.¹³ In a similar way Krishnasamy, in this case for patients with fatigue of advanced cancer, links future effective management of cancer-related fatigue with a co-ordinated programme of care and professional teamwork.¹⁶

For interprofessional communication and co-ordinated care to take place there is a need to understand how the differences shown in Tables 6 and 7 were created. It is necessary to find a way forward whereby patients receive the correct assessment and advice (and that may include a referral), whoever they consult, in a straightforward manner, minimising confusion and emphasising continuity of care. The following sections of this paper explain how professional differences arise and suggest a way to effect more interprofessional and interagency communication and information exchange. The basis for this work has two components. One is the development and organisation of professional knowledge, which, of course, lead to the soundness and individuality of the advice each cancer care practitioner offered in this study. The other is, importantly, the development and organisation of interprofessional knowledge through IPE, which has the potential to be the way forward to overcome problems of frag-

mentation of care and the giving of conflicting advice to patients.⁷

RE-ORGANISING CANCER CARE KNOWLEDGE

Bernstein describes how knowledge boundaries shift to produce new ways of knowing.¹⁷ The early organisation of knowledge was in terms of singular discourses with their defined, unique space and name, e.g. 'biology, psychology'.¹⁷ The strong classification of these discourses changed with the introduction of the regionalisation of knowledge in, e.g. architecture, medicine, nursing, radiography, pharmacy etc. With IPE regionalisation progresses further and produces new discourses that integrate knowledge from a number of regions. In effect, with IPE, 'terrains' of knowledge emerge.²

Within the terrain of knowledge of fatigue in patients with breast cancer would rest collective knowledge from (at least) all the practitioners approached to comment on the Case-patient previously described. IPE is a learning environment where different practitioners can bring their professional knowledge and begin the mapping of new terrains. In the example used in this study, the terrain will develop ways of knowing about fatigue in breast cancer patients from the collective knowledge of all practitioners in cancer care. Of course, the educational setting will not be the only route whereby such a terrain is mapped. Other collaborative ventures, involving a diversity of professionals, e.g. conferences and joint publications, will also shape the terrain and add to, in this case, the discourse of fatigue in breast cancer patients. Although, the value of such a development is clear it will give rise to professional and practice-related issues which need recognising and addressing. Not the least of these is the need for each practitioner to have, and to retain, their specific professional knowledge.

For example, the pharmacist has the expert knowledge to check the patient's medication, to identify a possible causative agent for fatigue and suggest a change if that is possible. This practice is not open to others in the cancer care team but, for co-ordinated and seamless care, knowledge by the team of the value of doing this is invaluable. Whilst it is acknowledged that IPE is not a route to generalist knowledge by all, at the same time, dur-

ing IPE knowledge can be exchanged at several levels, possibly the most useful being that which enables informed and speedy referral of the patient to the correct practitioner.

In addition, and perhaps most importantly, there is the potential in IPE settings for the development of knowledge. Informed by collective thinking from diverse epistemologies a new terrain of knowledge may emerge, encouraging practitioners to think in novel ways and subsequently to enhance practice. Bernstein in his explanation of the link between meanings and the material world, writes of the 'potential discursive gap' that can be created when meanings are not 'totally consumed' in context.¹⁷ In cancer care it is clear that the meaning of fatigue for patients (the context) is not fully understood. IPE can provide one of the settings where that potential gap can be filled with alternative realisations, it can be a site for the (previously) unthinkable, with contributions for all the practitioners involved in the topic to discover 'the yet to be thought'.¹⁷

The previous paragraph is, of course, a very simplistic way of explaining how to learn about what is not yet known and the development and organisation of this new terrain of knowledge. The reality is that putting IPE into practice, and creating a learning environment which fosters the development of interprofessional knowledge, is likely to be very difficult.

Many complex factors influence the acceptance, implementation and success of IPE. It is important to understand these and the impact they will have on the IPE learning environment. For example, traditional professional education, established for the reproduction and production of knowledge unique to a specialised occupational group, can produce conflicts for educators and students participating in IPE. Hammick points out that IPE is a pedagogy with its own classification and aims to 're-contextualise traditional and discrete bodies of knowledge'.² IPE teachers need to recognise the ideological differences that will exist between interprofessional learners and work through any negativity that this produces as well as enhancing the positive benefits of learning together for 'enhancing collaborative care'.² Additionally, in complex areas of patient care such as cancer-related fatigue, education is (mainly) about the

re-production of knowledge.¹⁷ It is suggested that IPE has the potential for 'producers' of knowledge to emerge, those whom Bernstein writes of as analogous to the prophets in the religious field.¹⁷ This similarity exposes a note of caution since prophets can have difficulty being heard in their own land. We need to be aware of the reception that the learner from the IPE setting may receive when they attempt to put their newly found knowledge into practice in their work environment.

The difficult issues which may arise in developing and implementing IPE should not, however, deter the creation of such learning environments. It is important to enable practitioners to share their knowledge, understand what they can learn from, and about, their colleague's knowledge and, collectively, to create the new knowledge needed to meet the needs of patients.

Other barriers to the effective development of interprofessional knowledge that need to be addressed if professional practitioners are to be given opportunities to learn together to work together include:

- the impact of professional socialisation;
- traditional staff relationships;
- equity of staff development funding and release from clinical duties;
- the role of support for work-based learning.

The list is not exhaustive. It is simply an acknowledgement of a number of other complex issues involved in implementing IPE that have not been considered in this paper due to the constraints of space.

CONCLUSION

Earlier IPE was referred to as learning together to promote collaborative practice.³ This is often said to be achieved by sensitising students to the role of other practitioners and facilitating team-working skills. This paper has considered the potential for IPE to contribute to collaborative work further by showing that it also has the potential to re-contextualise traditional discrete bodies of professional knowledge. IPE has an undermining influence on the constructs of traditional knowledge.² Through this characteristic, used in a positive and constructive way, it can initiate the re-organisation of knowledge into a collective terrain, drawing upon

all the diverse regions of professional knowledge that, together, inform professional practice.

The responses discussed earlier in relation to cancer-related fatigue indicate the range and complexity of knowledge needed to effectively help such a patient. At the present time the body of knowledge of this, and other topics in cancer and health care, remain under-developed. For many of these topics it could be argued that development is dependant upon an approach which is, in itself, developmental, i.e. interprofessional. This need for interprofessional work is confirmed by Vogelzang et al in their description of a Fatigue Coalition in the USA, which is 'designed to help patients, physicians and other practitioners better understand the onset duration and progression of fatigue in patients with cancer' and the newly formed UK Multiprofessional Forum for Cancer Related Fatigue.¹⁵ At a more local level, Leedham and Platt describe a fatigue clinic staffed by an occupational therapist, physiotherapist and dietician as a service 'best offered by the contribution of more than one professional'.¹⁸ These are all positive steps in the pursuit of knowledge about cancer-related fatigue and how to apply such learning within the clinical setting. It is vital to extend these interprofessional models throughout cancer services and education.

If future patients are to perceive that their care is delivered with interprofessional collaboration, knowledge must be shared and, in that sharing, re-created into terrain that all cancer care practitioners own and acknowledge. Although it may be difficult to establish, and will produce problems of its own for educators and students, IPE has the potential to achieve that important knowledge sharing and creation.

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