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The Pictor Technique: Exploring Collaborative Working in Nursing

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Keywords

collaborative working, cancer and long-term conditions, nursing, interviews, Pictor, qualitative,

Relevant Disciplines

Business, Health Nursing, Psychology, Sociology, Social Policy, Social Work

Methods Used

Semi-structured interviews

Academic Level

Intermediate undergraduate; Advanced undergraduate; Postgraduate

Contributor Biographies

Nigel King is Professor in Applied Psychology and Director of the Centre for Applied Psychological Research at the University of Huddersfield, UK. He has a longstanding interest in the use of qualitative methods in 'real world' research, especially in community health and social care settings. His research interests include professional identities and inter-professional relations in community palliative care, psychological aspects of contact with nature and ethics in qualitative research. King is well-known for his work on Template Analysis and, more recently, the development of a visual interview technique known as 'Pictor.' **Joanna Brooks** is a Senior Research Fellow in the Centre for Applied Psychological Research at the University of Huddersfield, UK. Her primary research interests focus on applied research topics in health and education settings, usually around chronic health conditions. Brooks has a special interest in issues relating to 'significant others' such as family members and close peers, and particular expertise in using qualitative research methodologies to research lived experience.

Alison Bravington is a doctoral student at the Hull York Medical School and a member of the SEDA Research Group (Supportive care, Early Diagnosis and Advanced disease) at the Centre for Health and Population Sciences, University of Hull, UK. She is also a Campus Working Partner at the University of Huddersfield, UK. Bravington's research interests include patient experiences of cancer treatment and survivorship, and undergraduate experiential learning on practice placements. She has a special interest in graphic elicitation and other visual qualitative techniques.

Abstract

Pictor is a graphical visual technique with its origins in personal construct psychology and phenomenology. It was developed to explore experiences of collaborative working in health and social care contexts, but may be used in any setting where people with different backgrounds or perspectives need to interact around a specific task or goal. In this case study, we outline the principles behind the method and describe how it is used to collect data, and how such data may be analysed. We present a case example from a recent study of collaborative working amongst nurses and other professionals in relation to the care of people with cancer and long-term conditions. We conclude by reflecting on the strengths and weaknesses of the technique.

Learning Outcomes

By the end of this case, you should be able to

Understand the aims and principles underlying the Pictor technique

Understand the procedures involved in using the Pictor technique in a research project

Recognize how the Pictor technique relates to other visual methods in the social and human sciences

Introduction

In this section, we introduce the method that is the focus for this case study: the Pictor technique. We explain its origins in family therapy, and its philosophical underpinnings in personal construct psychology and phenomenology. Following this, we describe the steps involved in using Pictor in a research project. We conclude this section with some thoughts about the scope of the technique, suggesting the types of research topics and settings in which it might prove useful.

The Pictor Technique: Origins and Underpinnings

The origins of the Pictor technique lie in attempts to address a practical research problem. One of our then Ph.D. students at the University of Huddersfield—Angela Ross—was studying collaborative working between District Nurses (a type of community nurse in the UK) and Social Workers, using an approach based in construct psychology and phenomenology. (We say a little more about what we mean by collaborative working in the Case Example section.) She was interested in what it was like in their everyday practice for these professionals to work with each other in the delivery of care to patients/clients (the use of these two different terms in itself highlights some of the important differences in perspective between these two groups). What she found was that in interviews rather than providing accounts of collaborative working grounded in their actual experience, participants quite often drifted to a rather idealized version that seemed to be based in the professional ideology of their discipline.

Mulling over this with her supervisory team (Nigel King and Jan Firth from the University of Huddersfield and Phil Salmon from the Institute of Education, London), Angela recognized that reflecting on specific instances of collaborative working was actually quite a difficult task for many interviewees. Firstly, there were often a large number of different agencies and individuals (including both professionals and lay people) involved in a case—it was hard for the participant and the interviewer to hold them all in mind during the interview. The result was that the interview tended to focus on the obvious 'main players,' presenting a limited picture. Secondly, for experienced staff ways of working collaboratively had commonly become routinized—something they hardly thought about; they just did it. Reflection on specific cases therefore became difficult.

To meet this challenge, Phil Salmon suggested that Angela could look at a method used in personal construct psychology-based family therapy. Personal construct psychology (PCP) developed from the work of George Kelly; it is centrally concerned with people as meaning-makers, and the way in which they develop understandings of themselves and their world through interaction with that world (see Butt, 2008) for an accessible introduction to Kelly's ideas, and Burr, King and Butt (2013) for an introduction to a range of PCP-based methods). The therapy method in question was developed by Hargreaves (1979). It required clients to represent members of their family by arrow-shaped cards which they laid out in a way that helped explain the dynamics within the family and enabled them to reflect on their feelings about them. For example, a client might place the arrow for 'Dad' a long way from the rest of the arrows to indicate his perceived remoteness from the family, or place the arrows for 'Self' and 'Sister' pointing towards each other to represent mutual supportiveness.

There are clear parallels between the task of reflecting on dynamics within a family and that of reflecting on roles and relationships within the network of professionals and lay people involved in a health and social care case. However, Hargreaves' aim was to facilitate therapeutic intervention, while ours was to elicit qualitative research data. We therefore went through a process of developing the therapy method into a research technique (which we eventually named 'Pictor'), initially through Angela's doctoral work (Ross, King & Firth, 2005) and subsequently through a series of studies mostly funded by Macmillan Cancer Support looking at collaborative working in palliative and supportive care (King, Bravington, Brooks, Hardy, Melvin & Wilde, 2013). In this development, we drew on phenomenological as well as PCP approaches. Phenomenology recognizes that accessing experience as it is lived is a complex and difficult enterprise and offers strong philosophical underpinnings and practical methodological strategies for doing this.

How to Use the Pictor Technique

In this section we outline the steps typically involved in using the Pictor technique to explore experiences of collaborative working, and describe how the data it produces may be analysed.

Collecting Data Using Pictor

For the sake of clarity we have broken the Pictor data-collection process down into five steps. In reality the boundaries between some of these are often quite blurred, but they provide a useful framework for thinking about how to use the technique in any particular study.

1. Choose the case to examine

In keeping with its phenomenological and constructivist roots, it is essential that the focus for the use of Pictor should be a specific example of collaborative working, in which the participant was directly involved. When working with health or social care professionals, or volunteer service providers, we would normally ask them to think of a case involving collaborative working that is relatively fresh in their mind. Depending on the needs of your study, you may be more specific than this; you may want to stipulate how recent the case should be or that certain agencies must have been involved. In Angela's doctoral research, because her research question was concerned with District Nurses and Social Workers, her cases required at least these two professions to be involved. If your research is with patients/clients of services, in all likelihood the participant's own case would be the focus. In research with lay carers, the aims of your project should determine whether they should be asked to concentrate on their own direct experience of formal and informal support, or their perception of the experiences of care and support for the patient/client.

2. Write identifiers on arrows for everyone involved in the case

Once they have chosen their case, we ask participants to think of all the people who have had some involvement in it. For each of them, we ask the participant to write down some kind of identifier on one sticky arrow. This may be a pseudonym, initials, a role title or similar. They must include themselves on an arrow, and similarly there must be an arrow for the patient/client. Unless it would be problematic for the study, we allow participants to represent a group or team of people on one arrow—indeed it can be telling if they choose to do so. (This includes representing themselves as part of a team, as we have found to be quite common amongst nurse participants.) The packs of sticky arrows available from stationers usually come in different colours; we generally alert participants to the fact that they could choose to use colour to indicate something about the different people they include, but there is absolutely no requirement that they should do this.

Sometimes participants want to include things other than people on their arrows. One example is pets, which figure quite prominently on some patient/client and carer charts, and occasionally on those of professionals too. We would not normally see any problem with this, as the role of pets in the lives of those facing serious ill-health or some other form of adversity is an important topic to explore. In some instances, participants depict events or procedures in a case with arrows: 'referral from family doctor,' 'chemotherapy' and so on. If a chart becomes dominated by these kinds of arrows, it can detract from its ability to depict the participant's perspective on roles and relationships, and you might feel it necessary to guide them a little back towards what you want to explore. However, we have very rarely found this necessary, and would always bear in mind the central importance of the participant feeling free to choose to include whoever (or whatever) he or she feels should be there to tell their story of the case.

3. Lay the arrows on the paper to represent the case as experienced

Once the participant has written identifiers on arrows, we ask them to stick them to a large sheet of paper—we usually use A1-size flip-chart paper (approx. $84 \times$ 59 cm / 33 × 23 in)—in a manner that helps them tell the story of the case from their perspective. We advise them that they may want to use the direction of arrows and the distance between them to represent aspects of roles and relationships but that there are no absolute rules as to how they should place them—they should do whatever they feel is appropriate to represent the case. In our early use of Pictor, which was solely with professionals, we in effect merged stages 2 and 3. We would explain to participants what we wanted them to write on the arrows, and what they should then do with them to create a chart on the paper; once we were sure they understood, we would leave the room and let them get on with these tasks. Typically they would take 10 to 15 minutes to do so. We followed this strategy because we were concerned to minimize the risk of us leading the participant to construct the chart in a manner that we expected. When we began to use Pictor with patients and carers (see Hardy, King & Firth, 2012) we found some were less confident in their understanding of what was required and preferred the researcher to stay with them while they laid out the arrows. We also found it helped to keep the stage of labeling arrows separate from the task of placing them on the paper—though stressing to participants that they could add additional arrows subsequently if another person or agency came to mind. Many lay participants wanted to talk about their reasoning for placing arrows in particular places as they constructed the chart, so we would always keep the audio-recorder running whilst they did this.

4. Discuss the chart

On completion of the stages 1 through 3, the researcher asks the participant to talk them through the case, using the chart to prompt them. If participants mention individuals, services and so on that they did not include on the original chart, we would invite them to add extra arrows as they felt appropriate. Sometimes in the course of discussion, participants want to move arrows, usually to indicate changes in roles and/or relationships over time. In these instances, we would draw a dotted line around the arrow they are moving, to record its original position. In our experience, it is important to use the chart directly to facilitate discussion—asking questions such as: 'Why did you place this group of arrows here?,' 'Did you use the colour of the arrows to represent anything in particular?,' 'What, if anything, were you trying to indicate by the fact that this arrow is pointing in the other direction to those around it?' Be careful not to make assumptions about how a participant has chosen to use the arrows—while we know that there are commonalities in how people use features such as direction of arrows, colour and proximity between them, in any one case the participant may have a very idiosyncratic way of engaging with the technique. It is

always important to check with them the basis of how they have carried out the Pictor tasks—note the phrase 'if anything' in the example of a probing question.

5. Capture the chart

While it is possible simply to roll up the chart at the end of the interview to take it back to your place of work, there is a danger that arrows could become detached. Wherever circumstances allow, we therefore straightaway draw around the arrows with a fairly thick black felt-tip pen, and write within the outline the name/role title on the original sticky arrow. If the participant has written real names on arrows, we would anonymise with a pseudonym at this stage. On occasions when it is not realistic to carry out this task immediately, you should do so as soon as possible on your return from the interview. As well as drawing around the arrows, you will need to label each chart with a participant identifier (plus an interviewer identifier if there is more than one researcher involved) and the date on which the interview took place.

The next step is to obtain a good quality digital image of the chart. Should you be fortunate enough to have access to a very large format scanner, you can scan it straight in; an alternative is to take a digital photograph of each chart that can then be uploaded to a computer. If doing this, you need to make sure you have a decent quality camera and that you set up your shots in well-lit conditions. Be careful to position the camera face-on to the chart rather than at a slant.

Analysing Data From Pictor Interviews

The Pictor technique was developed to elicit detailed accounts of specific experiences of collaborative working. As such, transcripts of interviews in which it has been used could simply be analysed using whatever method is appropriate to the approach taken—for example, some form of thematic analysis, narrative analysis and so on. However, this would neglect the value of the charts themselves as data to accompany the written textual material. We recommend that at the very least, you have the charts available whilst analysing the interview transcripts and refer to them to clarify participants' accounts and to highlight examples of how they experienced

collaborative working. Often, it is worth analysing the charts rather more systematically—for example, looking at who is (or isn't) included on them, whether there are common patterns in how certain aspects of participants' experiences are portrayed, or examining whether different patterns in the way charts are laid out may link to differences in experience between certain groups of participants. Such analyses will tend to be more illuminating the larger your data set is, though even in quite small studies the fact that some charts look very different from the others should encourage you to examine charts and transcripts closely to establish whether this reflects something meaningful and of relevance to your research aims. The example in the next section illustrates how attention to patterns in and across charts can deepen analysis.

Case Example: Collaborative Working in Nursing

To illustrate the Pictor technique, we are using an example of a recent study we carried out, looking at collaborative working in nursing. The study, titled 'Unpicking the Thread' (UTT, for short), was carried out in one metropolitan borough in the north of England, and was funded by Macmillan Cancer Support (see King, Melvin, Brooks, Wilde & Bravington, 2013). It sought to address the following overall aim:

To examine how generalist and specialist nurses work with each other, with other professionals and with patients and carers to support cancer and long-term condition patients.

In qualitative research terms, this was a large project, with 79 participants from numerous different professional and lay person groups, who provided us with more than 100 Pictor charts. This has the advantage for the present case study of allowing us to illustrate how you can analyse large amounts of Pictor-based data, and the challenges that this creates, alongside the detail of using Pictor in a specific interview. To help readers who may not be familiar with the UK National Health Service (NHS), we have provided a glossary in the appendix of this case study.

Context and Setting

This project is one of several that we have been involved with (alongside colleagues at the University of Huddersfield and elsewhere) concerned with collaborative working in health and social care. By "collaborative working" we mean the ways in which professionals from different backgrounds work together to deliver care and/or support to service users. This could be in the context of a long-term and ongoing working relationship between the professionals, or a transitory interaction related to a specific task—or anything in between these points. We have also been interested in how such collaborative working is very important in health and social care because many people require help from multiple agencies, and the way those agencies work together (or fail to) can be crucial in how well such people are cared for. Many of the catastrophic failings in care over the years have been due in no small part to different agencies failing to work effectively with each other.

The UTT study was based in one metropolitan borough in the north of England, which is largely urban with high levels of deprivation and morbidity, though also encompassing more suburban and semi-rural areas. Health care for people living in the borough is mostly provided by one NHS Community Trust and one Acute (i.e. hospital) Trust. Similarly, most of the population receive social care through a single Local Authority. However, a minority of the population accesses health and/or social care services outside of the borough, mostly in immediately neighbouring areas.

Study Design

Overall Approach

We provide in this subsection an overview of the study design as a whole, with particular reference to how we set out to use Pictor in this piece of research.

The UTT study methodology centred on the use of semi-structured interviews incorporating the Pictor technique with specialist and generalist nurses, both in the

community and in the acute sector. Table 1 summarises recruitment of different groups within the core sample.

To provide a rich understanding of the wider service context in which these nurses worked, we identified a range of other key stakeholder groups who we also interviewed, including managers, general practitioners (GPs), social care staff and representatives of patients and carers (total N = 30). For the purposes of this case study, though, we concentrate on the participants from the nursing profession.

Interview Design, Incorporating Pictor

At the start of each interview we asked the participant to briefly summarise their career history and also tell us about their current role. We then moved on to the Pictor part and asked them where possible to think of two cases that were fresh in their mind and involved collaborative working: one centred on a cancer patient and one on a long-term condition (LTC) patient. If they were unable to provide both, we just asked them to talk about a case of the type with which they were familiar. It is worth noting that the majority of nurse participants provided both types of cases—even those whose job description was focused on a particular disease type (e.g. community specialist diabetes nurse; acute lung cancer specialist nurse). This reflects the prevalence of co-morbidities in the population, especially the older population who make up most of the workload for most nurses. For those providing two cases we carried out the full Pictor procedure (as described previously) on each in turn. Once this was finished, we concluded the interview with questions about their hopes, fears and expectations for the future of their service and for care provision for the patient group they worked with in general.

Example of a Pictor Chart

The example we have chosen is from a district nurse, who we refer to by the pseudonym 'Tina.' She describes her involvement in the case of an elderly man living at home, who was suffering from a relapse of previously-treated oesophageal cancer with liver metastases. The chart (Figure 1) shows the patient at the centre of a circle of arrows with 'Family,' 'District Nurses' and 'Social Worker' closest and all

pointing towards the 'Patient' arrow, and three others a little further out, two of which point away from the patient ('PCNS'—the specialist palliative care nurse—and 'Hospital at Home'). To the right, clearly separate from the circle around the patient, is an arc of six other arrows, all but one ('Physio/OT'—this refers to physiotherapists and occupational therapists) pointing away from the centre.

INSERT FIG 1 ABOUT HERE

Once Tina had constructed the chart, the interviewer asked her to talk her through the story of what had happened in this case, referring to aspects of the chart to probe for more detailed answers or obtain clarification. A central part of this story was the conflict between the district nursing (DN) team and the hospital-at-home (HAH) service. (Note that the participant did not use a separate arrow to represent herself but rather includes herself as part of the DN team. We have found that district nurse participants quite frequently do this; we would suggest that this represents their collective, team-based way of seeing their working lives.) Tina describes how HAH staff received a referral from the patient's GP to help him while a package of social services support was being organized. Rather than negotiating with the DNs as to how they best work together to support the patient, the HAH team in effect (from Tina's perspective) simply tried to take over responsibility:

"...and then I got a phone call from the hospital at home team saying oh 'we're going in now to see to this gentleman' and I said, 'I beg your pardon.' 'Yeh we're going out to give him all the palliative care needs.' I said 'excuse me, we've been going in for over a month here' and we had a bit of a to-do [argument] which went straight to top management"

Tina was particularly unhappy with this turn of events not only because of the rude manner of the person she spoke to from HAH but also because she felt they lacked the skills to give appropriate care, and their involvement caused confusion and distress for the family. She represents all this by placing the HAH arrow close to but pointing away from the patient. This contrasts with the other groups who had close involvement with the patient that Tina saw as positive—her own DN team, the social worker and the patient's family, who all point towards the patient.

Having noted how Tina used the direction of the arrow to indicate problems with the HAH team, the interviewer wanted to explore whether the same meaning was implied by other arrows pointing away from the patient. It quickly became apparent that this was not the case. The PCNS is placed on the edge of the inner circle, pointing away, not because of role and/or relationship conflicts but because she had stepped back from close regular involvement as the DNs were able to provide the support needed. For the services depicted by arrows in the arc to the right of the inner circle, Tina did not seem to be using direction to imply anything about roles and relationships; instead it is the distance from the centre that she uses to mark these as 'peripheral' to the everyday care of the patient. This does not mean they were unimportant—it is simply a representation of the amount of direct contact with the patient they had. In fact, she is very positive about the role of some of these agencies, such as the pharmacist:

'[Interviewer] And who else then have we got down the outside?

[Tina] The pharmacist, he was fantastic because anything we needed he got us. Even although it was an out of area GP^1 he got the stock we needed before that was signed because this patient was so poorly'

This shows how important it is that the interviewer does not jump to conclusions about how the participant has constructed the chart; as in this case, the same feature (here, the direction of arrows relative to the patient) may be used in different ways within the same chart to represent different things.

Analysing Pictor Data From 'Unpicking the Threads'

Interview transcripts from the study were analysed using the Template Analysis style of thematic analysis (see our case study 'Doing Template Analysis: Evaluating an End-of-Life Care Service' in *SAGE Research Method Cases* for further details of this method—Brooks and King, 2014). During this process, we referred to Pictor charts where they helped us to make sense of participants' accounts. However, we also carried out an analysis of the charts themselves, looking for commonalities and differences across participant groups that might throw further light on processes of

collaborative working. This involved a content analysis of charts from the key nursing groups that we interviewed, examining:

- How many different individuals/services were represented on the chart
- Who they included on their chart (and who they didn't include)
- Whether those included were placed in central or more peripheral positions in relation to the patient
- The overall format of the chart

The use of content analysis with visual data derived from qualitative interviews requires careful consideration to avoid drawing invalid conclusions—we discuss this issue further in the final section of this case study titled 'Strengths and Limitations of the Method.' Here we provide examples of the kind of findings that came from carrying out these analyses.

1. How Many Different Individuals/Services Were Represented on the Charts?

The simplest form of chart content analysis is just to count the number of arrows included, as a possible indicator of how extensive your participants' collaborative connections are, and whether this differs between groups. However, there is a complicating factor here; we know that sometimes participants place the same individual or service on more than one arrow in different positions on the same chart—and this proved to be the case in the present study. We also know that occasionally participants use some arrows to represent steps in a process or sequence of events rather than professional or lay people involved in the case. A better measure is therefore what we refer to as the number of 'unique agents'; that is, the number of different individuals (e.g. 'GP,' 'Patient's daughter'), groups (e.g. 'DN team,' 'family') or services (e.g. 'Hospice,' 'Social Services') represented at least once on a chart.

Looking at the numbers of unique agents for the main groups of nurses we interviewed, the highest mean was for Community Matrons (18 unique agents compared to a mean of 14 for the next highest group). The Community Matron is a relatively new role in the NHS, introduced to help manage older patients living in the community with a complex mix of long-term conditions. It therefore makes sense that they tend to have to interact with a wide range of other services as well as family members to support their patients. It is notable, though, that even the group that included on average the fewest unique agents —hospital-based cancer specialist nurses—had a mean number of approximately 12. This supports our argument that in examining collaborative working researchers need to look more widely than just the obvious 'main players' involved with any patient.

Because we obtained two Pictor cases from most of our participants, we were able to look at whether there tended to be any consistent difference in the number of unique agents included in charts relating to cancer patients and long-term condition patients. Overall, we found that there was no marked tendency for one type of patient case to be associated with more extensive collaborative working than the other.

2. Who Was (and Wasn't) Included Where on the Charts?

Simply looking at who is included in what charts can be useful, but stronger insights into differing experiences of collaborative working may be gained by also considering the prominence within charts of particular individuals and agencies. In analysing the 'Unpicking the Threads' charts, we looked at the inclusion and positioning of all our core nursing groups on Pictor charts. We categorised positions as 'centrally involved,' 'in the mix,' or 'peripherally involved.' We found that none of the 11 Acute Nurse Specialists included a Community Matron in their chart. Furthermore, they tended to include community-based staff in general relatively infrequently, and usually in peripheral positions on their charts. In contrast, community-based nurses did include acute-based Specialist Nurses on their chartsthough more so for the long-term condition specialists than the cancer specialists. This pattern suggests that communication between community-based and hospitalbased nurses may tend to be a rather one-way flow, with possible implications for mutual understanding and effective coordination of services. Examining the content of the interviews supported such an interpretation, as there were organisational arrangements and patterns of working that could serve as a barrier to collaboration across this boundary.

3. Overall Format of the Charts

Having collected a large number of charts over several studies in palliative, supportive and long-term condition care (well over 200 individual charts to date), we

have noted that despite the variety amongst them, there are a few common formats to which most charts adhere. Because we do not tell people how they should configure the arrows on the chart, consistent differences that map on to differences amongst participants can prove illuminating. One distinction we have noted is between what we call 'network' and 'timeline' formats for charts. Network charts are principally organised around the nature of relationships and roles between the agents depicted on the arrows; for example, using proximity on the chart to depict a close working relationship, or diverging directions of arrows to represent conflict. The chart provided by Tina (Figure 1) is a typical network format. In contrast, timeline charts are mainly organised around a temporal sequence of activities, with arrows showing who was involved in the case at what stage. Sometimes the main stages or events in the story of the case are themselves shown on arrows—for example 'referral to hospital,' 'diagnosis,' 'chemotherapy.' Figure 2 shows an example of a timeline chart from a hospital-based diabetes specialist nurse.

INSERT FIG 2 ABOUT HERE

We know from our previous studies that most participants produce network format charts, and this was the case overall in 'Unpicking the Threads': 51 out of 79 charts from our core nursing groups were in network format, 23 in timeline and 5 mixed the two formats. However, when this is broken down further by whether nurses were community- or acute-based, we see a substantial difference. For communitybased nurses, 45 out of 61 charts were networks, 12 timelines and 4 mixed. For the Acute Nurse Specialists, only 6 of 18 charts were networks, 11 were timelines and 1 mixed.

It is crucial here to note that although we are using the frequencies of different formats as an indicator of differences between groups, we are absolutely not suggesting that any kind of confirmatory statistical analysis could or should be used to draw conclusions. The charts are not an objective 'measure' of collaborative working, but rather a means of capturing at a particular point in time participants' subjective experiences of the phenomenon. In this case, having noted the unusual pattern of chart formats for Acute Nurse Specialists, we looked in detail at their individual charts and transcripts to seek a credible interpretation. We concluded that the pattern can be understood in terms of the episodic nature of much of these nurses' contacts with patients— they tend to see them either at moments of crisis or for scheduled checkups, but often have little involvement with them between these points. Also, their collaboration with other professionals is frequently in the form of referring patients for further assessment, treatment or support rather than coordinating with a disparate set of other agencies, as community-based nurses often have to do. These circumstances, we argue, make the timeline format well-suited to the work experiences of Acute Nurse Specialists.

Conclusion

To conclude this case study, we reflect on the potential scope of the Pictor technique, and highlight what we see as the principal strengths and limitations of the technique.

Scope of Pictor technique

The Pictor technique developed in research looking at collaborative working in health and social care settings, focusing on specific patient/client cases. Published work providing examples of the use of the method are at the moment all within this area, though they have already extended to the experiences of those in receipt of care in addition to those providing it, as previously noted (Hardy et al, 2012). However, we are confident that Pictor could be used in other settings where people with different roles and/or professional backgrounds need to work together to carry out a particular project or task. Within several of our projects, we have already used it in this way with health service managers who do not have a clinical role; they have constructed and discussed charts based on examples such as the introduction of a new information technology system and the development of an end-of-life care pathway. We have also piloted the use of Pictor outside of the health and social care context with promising results. Further pilot work has moved beyond collaborative working (as commonly understood) to other situations where we may need people to reflect on networks of roles and relationships around important goals or activities in their lives. These include exploring the peer relationships and support networks of children suffering from chronic illnesses and teaching the technique to professional life coaches as a reflective tool to utilise with clients. We have also used Pictor quite widely as a training and development tool, to help professionals reflect on how they work with others (Bravington, 2011, describes the use of Pictor as a reflective tool for student nurses and midwives). We certainly encourage other researchers to think creatively about the kinds of settings and topics for which Pictor might prove helpful.

Strengths and Limitations of the Method

First and foremost, the main strength of Pictor is that it does achieve what we wanted it to do when we developed it. We have found that it enables research participants to reflect in detail on complex cases of collaborative working, and that it serves as a very effective focus for discussion in interviews. Furthermore, most people find it easy to understand what is required of them, and many comment that the exercise of creating the chart was interesting and engaging for them. Unlike some visual methods, Pictor does not presuppose any artistic ability on the part of participants, who are therefore not inhibited by any self-perceived lack of such skills. As we hope we have illustrated, the charts themselves are a potentially valuable aid to interpretation of participants' experiences—they are not just a way of eliciting a better interview (though they do that as well). We have also found it very helpful to use examples of charts to illustrate findings in published articles and presentations.

We have had some instances where participants have not found it easy to engage in the kind of reflection required for the Pictor technique, though these have been a very small minority. In an even smaller number of cases participants have flatly refused to do the task. Most of these problems have arisen with lay participants rather than professionals or managers, which is not surprising given that the latter groups (especially in health and social care) tend to be quite familiar with the notion of reflecting on practice in general. Having said that, the great majority of our lay participants have successfully constructed and discussed Pictor charts, and many have commented that they found the experience valuable. This includes very sick patients with life-limiting illnesses and their carers. As we noted above, we have found it often to be helpful to offer to stay with lay participants while they construct charts, and we usually bring examples with us to show them the sort of thing we are requesting. Normally we would use examples—either real or constructed for the purpose—that are not based on the same topic area as the study at hand, to minimize the risk of leading the participant.

There can be challenges to the use of Pictor in terms of the need for suitable space for the participant to carry out the chart-construction task, though with some forethought a solution can usually be found. Other practical issues include ensuring a suitable supply of sticky arrows—we have found the major online stationery companies a reliable source—and taking digital images of sufficient quality that the writing on the arrows is legible on a computer screen. This may be difficult where a participant has written more than a few words on some arrows, and you might find it necessary to summarise what you put on the drawn outline of the original arrow. We recommend that you retain the original hard copies of charts in case of problems with the legibility of digitised versions.

Some Final Thoughts

We have found Pictor to be a powerful research technique for exploring experiences of collaborative working in health and social care. Within the larger domain of visual methods in the social sciences—and more specifically, participantgenerated graphical methods—we feel Pictor can make a valuable contribution. It has the potential (as previously noted) to be used in a wide range of settings beyond health and social care, where people from different backgrounds or perspectives need to interact in relation to a specific project or goal. It can enable a very detailed and nuanced exploration of individual experiences and at the same time provide insights into differences and similarities amongst groups of participants. Most participants find it engaging and enjoyable, as have we as researchers.

Notes

1. The patient was under the care of a GP who was based outside of the area covered by Tina's DN team. This can sometimes lead to administrative problems and delays.

Discussion Questions

1. In what ways can the Pictor technique facilitate participant reflection during interviews?

2. Think of three different settings in which you could use the Pictor technique. What might be the specific challenges arising from each of them?

3. What are the key points to bear in mind when analysing the content of Pictor charts across multiple cases?

4. Consider the similarities and differences between the Pictor technique and other visual methods used in the social sciences.

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