The challenges of carrying out an ethnographic study within my own profession of diagnostic radiography.

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Abstract

This paper is based on lessons learnt from a doctoral thesis for a Professional Doctorate.

The doctoral study being reflected upon explored the culture in a Diagnostic Imaging Department (DID), looking at how radiographers work and what the issues were within their working environment. As a diagnostic radiographer and educator the researcher struggled with her role as researcher, practitioner and educator throughout the research. These three sometimes conflicting roles had an influence on the way in which the research was carried out and the way in which the results were analysed and the findings were presented.

The study used ethnography to study the culture in a DID. Observation for a four month period was carried out by the researchers in a DID in the East of England. After the observation the researcher conducted semi-structured interviews with key informants from the DID to explore issues further.

This paper outlines some of the challenges involved in carrying out this research. The paper will focus on the three main roles that the researcher had during the research; those of researcher, practitioner and educator and how these influenced the decisions made and the way in which the research was carried out. Ethnography cannot be objective or value free, but rather the researcher is a key part of the findings and as such their perspective needs to be clearly visible throughout the work.

This paper looks at the way in which the researcher chose to approach her work, conduct her research and represent her findings in the writing up stage.

Methodological and methods dilemmas and some of the ethical/practical dilemmas "in the field" are discussed.

The paper briefly touches on the implications of the findings for the diagnostic radiography profession and how the researcher feels about presenting her work to colleagues.

Introduction

Having just completed my professional doctorate I wanted to reflect on my role as a researcher and the influence that I had on the research process and the data collected.

My doctoral study explored the culture in a Diagnostic Imaging Department (DID), looking at how radiographers work and what the issues were within their working environment. As a diagnostic radiographer and educator myself, this was a subject very close to me, and I was studying my own profession.

At many times throughout the research I struggled with my role as researcher, practitioner and educator. It became obvious as the research progressed that my behaviour in different situations was governed by the role that I was playing, and it was difficult sometimes, particularly when carrying out participant observation to know which role to take on.

These three sometimes conflicting roles had an influence on the way in which the research was carried out and the way in which the results were analysed and the findings were presented.

The study used ethnography to study the culture in a DID. I carried out participant observation for a four month period in a DID in the East of England. After the observation I conducted semi-structured interviews with key informants from the DID to explore issues further.

Three roles

At present I am working as a Senior Lecturer in Diagnostic Radiography at a University in the East of England. I also practice as a Diagnostic Radiographer at a local Trust and at a local Minor Injuries Unit, carrying out 'bank' shifts. I completed my Professional Doctorate in July of this year, so until recently I was also a researcher.

During my research these three roles influenced my behaviour.

Educator

As an educator my main motivation has always been to have a positive influence on the future of my chosen profession. Therefore during the participant observation there were several occasions where I wanted to take radiographers aside and help them with problems that they were encountering. There were a few occasions when radiographers were struggling with techniques or had questions which I was able to answer and when the students were present I felt the tension between my role as educator and researcher. I found it difficult to observe students working in the department, as they saw me as their lecturer, and I was there as a researcher.

Practitioner

As a diagnostic radiographer observing my own profession, there were times during the observation when I wanted to step in and help. Wearing my radiographer's uniform also led me to question my identity as I was dressed as a radiographer, but I was not being a radiographer. When the department was busy, I experienced guilt at not helping the staff out. As the period of observation progressed I found myself doing more to assist the staff in terms of passing on messages and moving and handling, so much so that I had to remind myself on many occasions about the reason I was there. During the observation, as I became a part of the culture, radiographers would ask my opinion about things or discuss their practice with me.

Rudge (1995) highlights this tension and talks about the ethics of assisting in the practice area when your role there is to be a researcher and to observe. Johnson (1995) says that health care professionals as researchers will feel torn between the needs of the patients and the researcher role.

Researcher

This role was very new to me, and as such I was 'finding my way'. I had to develop my own way of working, and carve out a place to be. Being a researcher within practice area felt very alien and it took me a while to adapt to this new role.

Objectivity

Ethnography involves the study of a particular social group or culture in naturally occurring settings (McGarry, 2007; Hobbs and May, 1993). Spradley (1979) maintains that the aim of ethnographic research is to gain an understanding of the culture from the point of view of the members of this community. Hobbs and May (1993) concur with this saying that ethnography is a way of telling it like it is, describing the culture observed and looking at the social world being studied as seen from the inside. However Davies (1999) argues that the researcher's understanding of the culture forms the basis of the findings, which come from the information provided by informants. Denzin (1997) agrees with this point saying that "there can never be a final representation of what was meant or said - only different textual representations of different experiences" (p5). There are many interpretations and representations of an experience. The researcher has their own interpretation of an event and the participants may have a different interpretation. The researcher attempts to uncover the participants' interpretation and draw their own conclusion about the event using the many versions that exist to try to make sense of the experience.

In order to document their findings the researcher needs to become part of the culture being studied to gain understanding and insight. They need to have direct and sustained contact with those being researched within their cultural setting. This involves watching what happens, listening to what is said and asking questions (O'Reilly, 2005). So, although I already understood and was part of the overall culture within radiography, in order to carry out my study I needed to spend time within the DID in order to become immersed in the culture there.

Ethnography employs several research methods, which link findings together (O'Reilly, 2005) and allow for what Richardson and St. Pierre (2005) call crystallisation. Richardson and St. Pierre (2005) argue against the more quantitative term 'triangulation' saying that this term suggests that there is one objective truth that we are trying to plot through the use of different research methods. They propose that in undertaking qualitative research we need to acknowledge that there are many dimensions in which to approach the world (just like a crystal has many facets and dimensions) and that what we see depends on our viewpoint and perspective. As researchers we are trying to understand a little more about the different facets of the crystal as there is

infinite variety. In utilising different research methods we gain a greater understanding of the world and different people's viewpoints.

The perspective and views of the researcher need to be evident throughout the research to give it credibility and authenticity.

The written product of an ethnographic study should be a systematic and thorough account of the culture, which persuades the reader about its plausibility (Atkinson, 1990). The ethnographer uses thick description (Geertz, 1973) and their interpretation to paint a picture of the culture studied. Thick description is a detailed description of an event which includes the situation and context and allows the reader to begin to interpret what has been observed. An ethnographic study must take account of the context in which the data was gathered. All data is contextual and is grounded in the moment of its existence (Denzin, 1997). The data are collected in context, within natural surroundings and must be contextualised with clear descriptions of the occurrences in order to make the account believable (O'Reilly, 2005; Atkinson, 1990).

Clifford and Marcus (1986) say that an ethnography can only be partial and incomplete as it is only the perception of the researcher. They say that the researcher's voice pervades and situates the analysis. An ethnography therefore tries to provide some insight into the culture being studied but through the lens of the researcher. The written product includes those occasions that the researcher is a part of and "ethnography is historically determined by the moment of the ethnographer's encounter with whomever he is studying" (Clifford and Marcus, 1986 p51). Denzin (1997) also talks about whose interpretation is presented by the ethnographic text and the crisis of representation and legitimisation. This is about how the researcher can produce a legitimate account of an event based on what they have seen and what the participants have seen because we all interpret events differently and "there can never be a final representation of what was meant or said" (Denzin, 1997 p5). So, how can we tell who's interpretation of the event is the 'correct' one? The ethnographer tries to record the many voices of the participants and add their own interpretation and meaning. Davies (1999) takes this further by saying that the ethnographer tries to get to the meanings behind social action, and the cultural knowledge of the informants is the basis of the researcher's understandings and interpretations. The researcher tries to tap into the rules and assumptions of the participants in order to understand the culture.

Approach to the work, conduct of research and representation of findings.

Part of my introduction was biographical so that the reader understood my perspective and could see from which position I had approached the research. I hoped that knowing this would help the reader to understand the reasons for my research approach and for the decisions I made throughout the process.

The act of capturing data may shape what is said and in turn influence how it is analysed (Miles and Huberman, 1994). This is an interesting point that is made in much of the literature about data analysis. I therefore tried wherever possible to present the raw data in the text so that the reader could review my interpretation of the data presented.

The way in which qualitative research is presented should allow the reader to be confident about the rigour of the work. A good way to do this is to allow the research participants' voices to be heard. There were therefore many quotations presented within the results chapters of my work to illustrate the themes.

Data analysis is the process of systematically searching, arranging and making sense of the data (Creswell, 2007). The data gathered from observations and interviews were analysed to look for common themes. patterns of behaviour and actions (Fetterman, 1989). During data analysis the original research question and subsequent questions were re-visited to look for answers. It is important to acknowledge that I may see things differently from those actually involved in the situations I observed. It is also important to acknowledge that data analysis is not a distinct phase of the research process; rather data collection and analysis are simultaneous and continuous processes (Bryman and Burgess, 1994). The collection and analysis of data are closely linked and each shapes the other in an iterative process. When reading the data I had to make decisions about what I felt was important and needed to be included in the thesis and what could be discounted. These decisions were based on my own interpretation of events from the observational data and my interpretation about what the participants were telling me during the interviews.

Ethnographers should "...claim no more for the account than what it is, a partial, selective and personal version" (Brewer, 2000 p44). My personal interpretation resulted in the coding, grouping and labelling of the data. As a researcher I had adopted a critical attitude, to look for and seek alternative explanations, keep methods and data in context, and represent the polyphony of voices (many versions of truth) (Brewer, 2000).

Within qualitative research reliability and validity tend not to be used to measure the quality of the research as these are quantitative measures. Instead the following terms can be used; credibility, transferability, dependability and conformability.

Credibility.

This can be achieved through prolonged engagement with the participants, allowing time to fully understand the group, build trust and rapport, and gain honest responses (Polit and Beck, 2004).

Transferability.

This can be achieved by providing a thick and thorough description in order to contextualise the data. This allows the reader to make inferences about contextual similarities (Polit and Beck, 2004).

Dependability.

This measures how stable the data are over time. The researcher should use an audit trail to record how the data were collected and how conclusions were reached (Holloway and Wheeler, 2002).

Conformability.

This acknowledges the influence of the researcher and does not hide it. However, the researcher should still aim to provide data that accurately represents the participant's responses.

My account was written in the first person as I believe that it is impossible to take 'me' out of the research.

Dilemmas "in the field".

Because of the way in which I gained access to the field I was aware of coercion and made every effort to ensure that participants made an informed decision about taking part in the research and did not feel obliged to do so because the manager had given permission for me to work in the DID. Roberts (2007) discusses coercion in her paper about carrying out research on her own students. She was aware of the pressure to consent to be involved in the study for students as she was their lecturer. However, she points out that from her experience the students were not easy to coerce into divulging information that they wanted to keep private. I agree with this notion, and I believe that the staff in the DID had the opportunity not to participate in my study and they also had many opportunities to discuss subjects that they did not want me to hear about or be aware of outside of my earshot.

Johnson (2004) speaks about openness in research and gives examples of past research that was covert in which participants were unaware that they were part of a study. This is not permissible now due to stringent ethical requirements and ethics committees are very keen that researchers consider their position and do not misuse any power that they might have over the participants to coerce them into taking part.

Before the commencement of the study I had to decide how I would deal with the observation of mal-practice. It was decided in discussion with the manager of the DID that I would intervene if necessary and that I would report any instances to the manager of the DID. This was difficult for me as I did not feel that this was my role as a researcher to 'police' the department. Dixon-Woods (2003) says that "ethical issues about when and how to intervene are not uncommon" (p326), and other writers speak about the dilemma of

observing bad practice and if intervention is necessary (Hobbs and May, 1993; McGarry, 2007).

Johnson (1997 and 2004) discusses why intervention is a difficult concept for researchers in the clinical environment. He calls the lack of intervention by a researcher the 'wildebeest perspective' (Johnson, 1997), referring to nature documentaries where the person filming does not intervene when the predator stalks and eats the vulnerable newborn and ageing wildebeests as it is argued that intervention would disturb or intervene with nature. Johnson (1997) argues that in some cases researchers should perhaps have intervened, for example to relieve pain. He goes on to state that it is useful to consider where interventions or their avoidance can be planned for or predicted in research, but this does not reflect the turmoil of the real and messy world of clinical research. When considering when I might have to intervene I realised that it was not as simple as saying I would intervene when I thought that the patient or my colleagues were in danger or at risk. This was fine in terms of radiation dose, but there could be other occasions where there could be a small risk or maybe where I felt that the care of the patient was not optimal. I needed to decide where I would draw the line. As a radiographer I needed to abide by my professional code of conduct and this provided some guidance. Johnson (2004) calls this an 'intervention dilemma' and suggests the development of a personal 'bottom line' of care below which the researcher feels they must intervene. For me this was if I felt that anyone could be physically harmed unnecessarily as a result of an interaction. It is important to report practice that is less than satisfactory in research, because although this may be controversial, without reporting such incidents future practice cannot improve and the profession can move forward.

Thankfully I did not have to intervene at any time during my research, although I did observe some less than satisfactory practice with regard to communication with patients. As an educator I found it difficult to stand by and observe these interactions, I wanted to take the radiographer to one side and help them to reflect on and learn from what had happened, but this was not my role as a researcher.

I decided to record my observational data in a notebook which I took with me into the DID. I left my notebook on the work surface in the DID when I went into the X-ray rooms. I wanted staff to realise that I had nothing to hide from them and I told them that they could read my notes at any time. I wanted the staff to feel that I was being open and honest with them about what I was observing. Costley and Gibbs (2006) talk about the issue of caring for participants when they are known to you and how you can try to instil trust. They use the expression 'moral trusting' and say that the instillation of trust helps to promote the researcher's integrity. I wanted the participants to know that I wasn't there to check up on them or to write down everything they were doing to see if they were doing their job properly. In this way I hoped to reduce the feeling that I was a 'spy'.

Assigning numbers to staff members protected their identity. The numbering system was used for the whole study.

Implications for the profession.

I was also optimistic that my research would have a positive effect on the DID. I had asked a lot of questions, and challenged the radiographers to consider their practice and the reasons behind the decisions they made. Simmons (2007) talks about affecting change through research, and proposes that the researcher can challenge the reasons for behaviour through questioning, resulting in changes in practice.

Some of these findings do not paint a good picture of the profession. As a researcher I am interested in and open to the findings, and I feel that it is important to articulate them to my readers. However, as a practitioner and as an educator in diagnostic radiography I find these results to be uncomfortable.

Part of the process for me is becoming comfortable with sticking my head above the parapet and saying 'this is what I think', and this is what I have found out about the culture in my own profession of diagnostic radiography.

Conclusion

Me as a researcher.

I have enjoyed learning about research and developing some expertise in my chosen area.

One of the highlights of the Professional Doctorate was actually conducting the research and collecting the data. At times I had to 'think on my feet' and problem solve. This is an area I thrive on in both my personal and professional life and I relish the challenge. The inductive nature of my research maintained my interest in the topic and I feel passionate about my research and about my findings.

Me as a practitioner.

During the research I was able to study my own profession in greater depth. It was interesting to look into the work place culture in radiography and to reinforce and provide evidence for some of the things I had thought about the profession. I have been able to explore further the reasons for the way in which radiographers work and behave. I am also interested in taking my ideas forward to carry out further research into my profession.

However, some of the results of my research are not very flattering for the radiography profession. For me, this was quite difficult to come to terms with. I found it difficult to observe some of the negativity that is evident within the profession. It was sad to see that some radiographers do not show interest in Continuous Professional Development (CPD), evidence-based practice and research. There seems to be apathy towards moving the profession forward or wanting to see progression within radiography. I was also disappointed to observe the way in which radiographers communicate with colleagues from

other professions. There appeared to be a lack of understanding and awareness of one another's roles and a lack of willingness to find out what other professions do. Radiographers need to ensure that other professionals understand their role and that they understand the role of other professionals in order to promote interprofessional team working.

I also observed some poor communication between radiographers and patients which was difficult to deal with. I wanted to intervene, but as discussed earlier in the methodology section, this was not the reason for my presence, so I did not intervene.

I do, however feel that it is important to uncover these issues. I hope that in the dissemination of my findings I can make a positive contribution to the future of the radiography profession. The findings from my research will assist radiographers, prospective radiographers and other professionals in understanding the workplace culture within a DID and amongst radiographers.

Me as an educator.

As an educator I was particularly interested in the way in which students learn from others through role modelling. It was evident from this study that a lot of the behaviour I saw was learnt from others and that students learnt to 'fit in'. I was interested to see how radiographers taught one another informally through sharing and discussing their practice with one another.

There were several occasions during the research that I wanted to intervene and teach the radiographers or challenge them to reflect on something that had happened. This made me think that as educators we do need to get out into practice and see what the educational needs are of our practitioner colleagues, so that we can assist them in their own CPD.

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