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Abstract
UK government policy is encouraging healthcare staff to blur traditional roles, in the drive to increase joint working between practitioners. However, there is currently a lack of clarity regarding the impact that changes to traditional working practice might have on staff delivering the services, or on patient care. In this article, we report findings from three qualitative case studies examining interprofessional practice in stroke care, in which the influence of professional differences emerged as a significant theme. We draw on findings from individual semi-structured interviews, as well as fieldwork observations, to describe the influence of professional knowledge and skills, role and identity, and power and status considerations in interprofessional working. The insights that were gained contribute to the understanding of how professional differences impact on healthcare staff joint working, and suggest that the elements identified need to be fully considered in drives towards changed working practice.

Keywords: *Interprofessional working, professional, case study, stroke*

Introduction

In the UK the call for change to healthcare service delivery has become a resounding one over the last few years, with attention being paid to the way that healthcare staff are trained, employed, developed by further training, and work together. These changes have been driven by an explosion of policy documents (Department of Health [DoH], 2000a,b,c; DoH, 2004) as part of a ten-year process of reform of the National Health Service. Leathard (2003, p. 30) describes these policy documents as leading to an ''avalanche of change'' in healthcare staff working practice.

Throughout the history of the National Health Service, the professions and elements of professionalism have played a central role in service delivery. It has been noted that a major distinction between joint working practice in healthcare and in other contexts such as business and industry, is that workers in healthcare have professional groupings and different allegiances (Firth-Cozens, 2001). Professional organizations were developed to support practitioners in enhancing standards of care and in policing standards of their colleagues (Saks, 2000). Traditionally, definitions of professional practice have emphasized the key aspects as being: a high degree of expertise; the freedom to control the management of the task; a system of ethics; professional standards; and autonomy and dominance over

other groups (Southon & Braithwaite, 2000). Authors however, have emphasized the need for new understandings of traditional professional relationships in response to changing healthcare delivery. Higgs and Jones (2000, p. 4) for example call for an ''interactional professional'' model, redefining professional autonomy as ''independence in function . . . . combined with responsibility and accountability for one's actions''. Similarly, Hafferty and Light (1995) discuss the need for ''reprofessionalization'' as individuals shift their identity and commitments from their profession to the organization that they work in.

Medicine is the most established and dominant of the healthcare professions (Hafferty & Light, 1995; Page & Meerabeau, 2004). Other professions such as nursing and the therapy professions (for example Occupational Therapy, Physiotherapy and Speech and Language Therapy) have faced challenges in establishing position and status (Saks, 2000). Interprofessional working clearly presents considerable challenges to practices dominated by these power and status considerations. Colyer (1999) argues that ''the leadership presently vested in medical practitioners must change'' if joint working is to be a reality. Similarly, Kennedy (2006) emphasizes that professionals must be encouraged to redefine their professionalism in order to change power differentials. In a discussion of Co-operation Theory and Social Exchange Theory, Loxley (1997, p. 39) describes the need for parties to have equal powers if joint working is ''not to degenerate into coercion''.

Professional differences have been described as ''tribalism'' (Beattie, 1995), developed as a result of professions evolving separately, with deeply rooted boundaries between them. These differences may be a result of different training and philosophical approaches underpinning the professions (Fitzsimmons & White, 1997). Practitioners traditionally have been trained to function both independently and autonomously within professional groupings, and also have adopted the identity, norms and stereotypes held by members of their particular profession as part of a process of professional socialization (Fitzpatrick et al., 1996; Howkins & Ewan, 1999; Mann et al., 2005).

Policy changes are impacting on these professional groupings, encouraging role blurring and role re-design, with calls for greater flexibility in individual roles and skills as patient needs demand (Skills for Health, 2006). Humphris and Masterson (2000, p. 187) emphasize that a ''whole-systems approach'' to role development is needed, with professions evolving to ''become almost unrecognisable in the nature of their role and function''. Other authors emphasize that a balance has to be found which respects individual profession expertise, identity and responsibility, but which equally recognizes interests and qualities shared with others (Biggs, 2000). It has been argued that there may be a need for ''domain mapping'' to help workers understand their own role and that of others (Hornby & Atkins, 2000, p. 155), if the danger of role confusion (Lahey & Currie, 2005) or ''a sense of loss and insecurity'' (Williams & Sibbald, 1999) is to be avoided.

As the primary means of distinguishing one profession from another, professional knowledge is a key concept in healthcare working practice. Hall (2005) argues that there are differences in the way that individual professions construe and use professional knowledge. He describes clinicians ''looking at the same thing and not seeing the same thing'', as a result of possessing profession-specific ''cognitive maps''. Hubbard and Themessl-Huber (2005) highlight the potential complexity of the erosion of traditional profession-specific knowledge boundaries, emphasizing that joint working is not just about transferring information between professionals, but about creating new thinking. Authors such as Jeffery et al. (2005) echo the significance of examining processes for sharing profession-specific knowledge, describing the need to create ''shared mental models'' (shared knowledge and understandings) in successful interprofessional working.

Purpose

Our purpose in this article is to report findings from a qualitative multiple-case study, which explored the nature of joint working practice amongst staff providing services to stroke patients. In the UK, stroke care has been at the forefront of interprofessional working, with ongoing audits and standards specifying the involvement of a range of professionals in service delivery (Royal College of Physicians, 2006). This study aimed to examine joint working amongst these professionals, and to explore elements which impact on functioning, such as organizational conditions, team relationships, and communication systems. In this article we aim to present one aspect of the study, the findings relating to the theme of professional groupings, which emerged as particularly significant. In particular we examine data relating to profession-specific knowledge and skills, professional role and identity, and perceptions of power and status linked to professional background.

Method

The findings reported are from in-depth case studies of joint working practice at three sites providing care to stroke patients. We used purposive sampling to select examples of practice across a typical stroke care pathway of hospital ward, specialist stroke unit, and community stroke team within a single region of the UK. Ethical approval was obtained via the NHS ethics procedure as a multi-site study, and research governance procedures for each organization were adhered to.

Data were collected via several sources. In particular for the findings reported here, we used semi-structured interviews with staff of thirty to forty five minutes duration, together with periods of fieldwork observation. The interviews were carried out by the first author, tape-recorded and later transcribed. A topic guide (Berg, 1998) was prepared, encompassing significant features of joint working identified in the literature, and developed following three pilot study interviews. The topic guide included: staff perceptions of working practice at the sites; organizational conditions; goal setting; team process and team roles; professional roles and identity; beliefs about teamworking; and communication systems. A total of 37 interviews were carried out, with sampling to represent a range of professions and length of experience (see Table I).

In order to gain insight into the context at first hand, we used an observation method in conjunction with the individual interviews. Observational methods may be of several types, with a continuum of participation at one end to observation at the other (Bechofer & Patterson, 2000), depending on the role of the researcher. For this study a non-participant observer role was adopted, with the first author carrying out the observations in parallel to the interviews. During the field work, data were collected via field notes, which documented observations, conversations, feelings and interpretations (Roper & Shapiro, 2000). Periods for observation were selected to give representation across a working week when more than one profession was present totalling 110 hours of observation (see Table II), with study periods at the three sites of 30 days, 19 days and 26 days duration.

Data gathering was concluded at a study site when we believed that saturation was reached and that new material was only adding bulk to the data (Glaser & Strauss, 1967). In total we analysed 68 documents, consisting of 30 field note transcripts, 37 interview transcripts, and a research diary.

Table I. Breakdown of staff interviews by profession, years experience and gender.

Profession	Years qualified		Gender
Nursing	Less than 1	1	Male 2
	One to two years	1	Female 8
	Three to five years	0	
	Six to ten years	3	
	More than 10 years	5	
Physiotherapy	Less than 1	0	Male 1
	One to two years	1	Female 5
	Three to five years	2	
	Six to ten years	2	
	More than 10 years	1	
Speech and Language Therapy	Less than 1	0	Male 0
	One to two years	0	Female 4
	Three to five years	2	
	Six to ten years	1	
	More than 10 years	1	
Occupational Therapy	Less than 1	0	Male 0
	One to two years	1	Female 7
	Three to five years	1	
	Six to ten years	1	
	More than 10 years	4	
Other professions (Medicine, Dietetics, Clinical Psychology)	Less than 1	1	Male 1
	One to two years	0	Female 3
	Three to five years	2	
	Six to ten years	0	
	More than 10 years	1	
Assistants (staff not professionally qualified)	Less than 1	1	Male 1
	One to two years	0	Female 5
	Three to five years	3	
	Six to ten years	2	
	More than 10 years	0	

Table II. Summary of the data.

	Site one	Site two	Site three
Observation hours (field notes).	45	33.5	42
Meetings attended (field notes).	3	4	3
Staff interviews (interview transcripts)	16	13	8

Data management and analysis

The QSR NVIVO software was used to facilitate storage and retrieval of the data. The transcripts were stored as individual documents, and each document was read on a line-by-line basis and coded. A start framework (Miles & Huberman, 1994) of codes derived from the literature on joint working and the pilot interviews had been prepared, however this start framework was continually revised and expanded in an iterative process, as the coding proceeded. Coding was carried out in parallel to data gathering, with revisiting of all coding

at the conclusion of each case study before commencing the next, and at the conclusion of the data gathering. Emerging findings were discussed with and reviewed by the second author, and also in a process similar to respondent validation, emerging concepts were discussed with participants during the fieldwork.

Findings

Following analysis of the data we uncovered three elements of professional groupings which are significant in interprofessional working: (i) professional knowledge and skills, (ii) professional role and identity, and (iii) power and status.

Professional knowledge and skills

Profession-specific knowledge. The ''knowledge and skills'' code was the fourth most frequently occurring code in the data set (preceded by organizational conditions, patient experience, and role and identity boundaries), occurring in 134 passages across 39 different documents. The perception of staff was that professional differences were preserved by each having greater depth of their own specialist knowledge and skills, for example:

> What marks each profession apart is actually . . . everybody has got this genericy surface bit but that once you get . . . . into this real depth of competence . . . that's almost where you have got the boundaries . . . . (Physiotherapist)

> I think we all cover everything at a basic level and it's where the depth comes into it . . . it's what defines the professions. (Occupational therapist)

> But I mean you can't make it generic, you can make the basic core skills generic . . . but cognitive testing and psychometric testing is very specific and it's not a simple case of handing someone a questionnaire it's quite a complicated task. (Psychologist)

Knowledge and skills exchange. The field note data and the staff interviews suggested that whilst each profession had depth of profession-specific knowledge and skills, that exchange and sharing was a key feature of interprofessional working practice at the sites:

> You've got a wide range of expertise . . . . that are round you all the time . . . . I think you gain more knowledge from being surrounded by people that you can hear on the telephone or hear talking between themselves. (Social worker)

> They'd be asking us for guidance, but we would pass skills on to others, so we'd be saying to a physio and OT, we'd be passing skills to them and if we were doing a group we'd be passing skills to the nursing and rehab team so that they could do it without psychological input. It is about sharing skills a lot. (Psychologist)

> The people here were available to have their brains picked and then we started to problem solve together. (Speech and language therapist)

> They are pretty good really and they understand the importance of nutrition and you know it makes quite a refreshing change to be able to know that they're actually going to be doing their best for the people from a nutritional point of view. (Dietician)

Professional role and identity

Role boundaries. In the data 143 passages (the third most frequently occurring code) are coded to ''role and identity boundaries'', with staff reporting that professional role boundaries remained clear, for example:

I know what my job is . . . and I know what other people's job is . . . I think . . . I don't overstep the boundaries and I don't think they do either. (Nurse)

Well obviously it's profession led . . . 'cos physio and OT are not always the same . . . . . physios obviously . . . . see physio side . . . OT . . . OT side and so on. (Assistant)

All professions seemed to have clear role, each looking to other where appropriate when questions asked by the family. (Field notes)

People would go to the person they would know would be the best source of identifying what to do about it. So here there's not conflict with people deciding without going to the right person first. (Occupational therapist)

Some staff described the importance of clarity in professional roles:

I think when you are sharing tasks you can become confused as to where your role is . . . um . . . in just . . . . . you do need to hold on to where you are, 'cos I think multidisciplinary working and working as part of a team does not involve splitting roles. (Psychologist)

I think that's where you can get a little bit of the conflict . . . if it's like well that's my role . . . if people are not confident in what they are able to offer. (Physiotherapist)

I think you need to be very confident about where your own boundaries are. (Occupational therapist)

Data coded to ''nurse role'' is the most frequently occurring of the data describing individual profession roles, being present in 110 passages across 37 documents. At all three sites staff referred to nursing as being in a unique co-ordinating role, which was different to that of other professions:

They tend to be the ones right in the middle of everything. (Physiotherapist)

We pull everything together we're the ones in the middle. (Nurse)

The nursing role was described as being the provider of personal and basic needs care, but also as relating to medicines and medical needs, and thus being different from the allied health (therapist) roles, for example:

Nurses would talk more about medication and continence and things. (Occupational therapist)

I think it's that they think you're a nurse so you're things medical and pressure area care and things like that as opposed to rehab the actual rehab. (Nurse)

Another staff group that was perceived as ''medical'' rather than ''rehabilitation'' were the doctors/consultants:

> Yeah it's discussed in the MDT, but they normally set the goals . . . and work towards them . . . . that's their part of the job if you like. (Doctor)

> At one point the consultant drew the distinction between patients who were ''medical'' and those who were ''rehab''. (Field notes)

Role substitution and role blurring. Whilst professional roles seemed clearly defined, it was interesting to note that for professions that had less presence at the locations, elements of their role could be taken on by other staff if needed, for example:

> A little bit, I would say there is role blurring on here . . . I think when it's necessary there is . . . if people are around . . . then you don't necessarily need to have to. (Speech and language therapist)

> No SLT present, medic asked nurse for each patient whether they were swallowing all right and nurse gave information. (Field notes)

There was some evidence of nursing taking on a role that encompassed elements of all the therapy professions. At the hospital sites this was linked to this profession having a twenty-four hour presence, for example:

> I mean that's very much blurring of roles . . . cos we're not here at night. (Physiotherapist)

The occupational therapy role seemed the least well defined, with some variation between the sites:

> It's well who co-ordinates the whole package who's really there to sort it all out to make sure they go home with everything that they need .. and that to me feels a bit hit and miss . . . kind of . . . often the OT picks that up. (Physiotherapist)

> The OT is going to know most about perception and cognition . . . although now we've got more psychology input that's going to be an interesting . . . more of a merger that will develop. (Occupational therapist)

> Boundaries are getting slightly blurred . . . . . um . . . because the home visit for example is an area which is predominantly the OT . . . area and it's for us to set it up for us to decide who goes . . . and it gets very much on here like it's a joint thing with the OT and physio. (Occupational therapist)

Professional identity. During the interviews professional identity was explored by asking participants where they felt their loyalties lay, to the team or to their profession. Staff frequently referred to themselves and their colleagues as being ''the team'' in discussions, however, in contrast to this espoused team membership, it is interesting to note that there was variation amongst staff as to whether they saw their identity as a team member or as a member of their profession. Some staff linked their perceived identity as a team member to feelings of closeness achieved by regular contact and smaller staff numbers, for example:

I do see myself as part of the physio department . . . .but um..I probably feel my loyalty is more to the stroke unit than the physio department as a whole because it is too big. (Physiotherapist)

I would say probably slightly a larger percentage to the team . . . than to the OT service cos I am based here and these are the people that I work with every day. (Occupational therapist)

However, professional identities remained strong, in particular relating to notions of duty of care, and everyday patient treatment:

Primarily I am a physiotherapist and my responsibilities are to the patient. (Physiotherapist)

I also do think that it is important . . . where you do keep that professional identity because there's dangers in not doing that . . . and there's risks associated with that particularly in a climate that's ever changing and the fact of litigation and things like that. (Nurse)

It doesn't matter whether you are a nurse or a therapist or whatever . . . but obviously you have got a registration that you have to fall back on ..that you have to be able to demonstrate . . . that you are competent in things. (Nurse)

Power and status

Decision-making. There are 80 passages coded across 31 documents for ''doctor role'' in the data, second only in number to ''nursing role''. This is surprising considering that at two of the sites patients were required to be medically stable to be transferred there, and that one of these sites had no doctor as part of the team. Despite having an infrequent presence, the medical staff had status as decision-makers, for example:

Nurses emphasising need for medical confirmation of discharge for patients indicated, and other team members also using medic as discharge tool. (Field notes)

It is his ultimate responsibility but he can't make those decisions alone and sometimes they still do try and do . . . this is the decision and if you don't agree with it . . . tough (Speech and language therapist)

Decisions re discharge seem to be taken solely by the consultant, one occasion when he seemed to have put back discharge date, only staff nurse knew about it, no-one else. (Field notes)

There has to be a discharge form which the medics have to sign. (Nurse)

However, in contrast to this, there was evidence of some staff perceiving there to be an erosion of these traditional status assumptions:

I don't see a consultant being at the top of the tree . . . because I see that 99% of the time we can manage without one. (Speech and language therapist)

It should be a circle with everybody in it..I don't think it should be . . . a hierarchy . . . a sort of pyramid with the consultant at the top . . . .the rest of us at the bottom . . . I think that's

wrong...cos...I think that yes the consultant is the highly paid highly qualified um..professional...but they have quite a limited role. (Occupational therapist)

There was some evidence of the other professions having discussions regarding decisions amongst themselves, prior to meetings where medical staff would be present:

We know what those patient's problems are, in depth and the medics don't because they only come on...you know...if that patient needs any medical input....or once a week when it's MDT...that we can guide the medics into what might be more appropriate. (Physiotherapist)

Context. It was also perceived that the particular context of stroke care impacted on traditional power and status assumptions. The community site had no allocated medical staff, and participants reported that this created differences between hospital-based and community interprofessional working in terms of leadership and responsibilities:

At the moment the team functions without a medic....which is.. interesting...but they function quite well without a medic.... we do have access....you know if we do want to access...but it's not medic driven. (Occupational therapist)

It's easier in In-Patients [hospital setting] because you can always relate it back to the consultant....if there was a problem then it always relates back to the consultant..... whereas if something goes wrong here it's always the therapist that has been involved or therapists. (Physiotherapist)

Staff also contrasted status in the ''medical model'' view of care in acute medicine, to the more ''rehabilitative model'' needed in stroke care:

Sometimes in a medical model their way of working is the one to go with...however in a team like this when it's rehabilitation...the medical model isn't the right model to take. (Speech and language therapist)

Because it's rehab orientated we get more recognition from the medical staff....on a rehab ward than we would do on an acute ward. (Occupational therapist)

Discussion

Our purpose in this article was to explore the influence of professional differences in staff perspectives on their working practice at three sites providing care for stroke patients. We have described three elements of professional groupings that seemed significant in staff functioning, these being (i) professional knowledge and skills, (ii) professional role and identify, and (iii) power and status.

The findings describe professional differences at the study sites being clearly preserved, associated with individual professions having depth of particular knowledge and skills. This preservation of differences may be explained by examining the literature on professional education and clinical reasoning. Authors in this field highlight that the acquisition and continuing development of profession-specific knowledge and clinical reasoning is currently not fully understood, but can be considered to be more than a collection of knowledge and skills (or competencies) that can be easily transferred. Fish and Coles (2000) describe the

"professional artistry", Schön (1983) the "grey areas of practice", and Hall (2005) the "cognitive map" unique to each professional achieved by practitioners as they gain experience and become "expert" (Dreyfus & Dreyfus, 1986). This study has found that depth of knowledge and skills was perceived as the central element preserving professional differences, suggesting the need for further understanding of the nature of profession-specific knowledge.

The findings regarding knowledge and skills relate closely to the second element of functioning examined, that of professional role and identity. Authors such as D'Amour and Oandasan (2005) propose that knowledge exchange will result in the reforming of professional roles. In support of this, the study found that there was some blurring of roles, for example highlighting the nursing role as taking on knowledge and skills from the therapy professions. There was also some evidence in the data of role substitution, when staff were able to take on some elements of a role if a profession was absent.

However, whilst some role substitution was possible, we argue that the study in fact found little evidence of role boundary blurring, with role clarity being apparent in observed and reported practice at the sites. Whilst participants in this study recognized that knowledge and skills transfer was a feature of their working practice, and this may have enabled some role substitution to occur, this transfer did not seem to have impacted on traditional role demarcations. Indeed, some staff identified the need for clear boundaries. This finding suggests that the reformation of professional boundaries may be more complex than a simple exchange of knowledge and skills, and the impact of any reduction of role clarity may need further investigation.

An interesting aspect of roles at the sites was the distinction drawn by participants between professions with primarily medical versus rehabilitative roles. This seemed to be a widespread perception of professional difference, possibly formed by processes of professional socialization, or particular discipline perspectives. Professional practice has been described as encompassing tacit knowledge (Rogers, 2004), complex clinical reasoning (Boshuizen & Schmidt, 2000; Higgs & Jones, 2000), and enculturation (Bromme & Tillema, 1995). We suggest that these elements may need to be examined further if professional differences are to be understood.

In regard to professional identity, there was variation amongst staff whether they saw themselves firstly as a member of their particular profession, or predominantly as a team member at that site. The importance of the preservation or erosion of professional identity has been highlighted by other studies (Davoli & Fine, 2004; Pellatt, 2005; Williams & Sibbald, 1999), with processes of establishing professional identity and changing identity in a team context being complex. The findings from this study suggest that organizational factors such as team size and regular contact were important in establishing a team rather than professional identity.

Another aspect of professional differences that the literature highlighted is the element of power and status. In the data this element was most closely associated with decision-making and the medical role, seeming to suggest that changed healthcare practice to date has had little impact on changing power and status assumptions. It is important to note however, that the perception amongst participants was that the sites were operating in a mostly non-hierarchical system. At the acute sites medicine had the role of decision-maker in terms of the process of patient care (i.e., referrals on to other agencies, further testing, discharge) and medication. At these sites patients were also admitted "under the care of the consultant", thus preserving this ultimate decision-making role.

However, although the data describes the power of the medical staff in relation to decision-making, it seemed that this was a perception that was perpetuated by all, but which

was not always the reality with non-medical staff sometimes reaching consensus amongst themselves, and able to influence decision-making by this association. On these occasions it seemed that the status of medicine was preserved but not necessarily the decision-making power. Payne (2000, p. 142) describes power as ''a matter of perception not actuality''. Applying a Social Exchange Theory view or a Co-operation Theory view of joint working (see Loxley, 1997), even where there may be some sharing of the power of decision-making via joint working, it is hard to identify a circumstance where medicine could be seen to benefit from erosion of its' status.

The findings regarding the influence of context and healthcare model on power and status assumptions are also of significance in this discussion. The client care pathway of patients who have had strokes is that of decreasing involvement of medicine as care moves from acute to rehabilitation in the community, and the perception of staff was that interprofessional working was different in these contexts. In the community context there seemed to be a ''status equal'' position, which may have been associated with little or no medical involvement, a finding supported by Hugman (2003) and Colyer (1999). Also, it seemed that as care became less acute and ''medical model'' orientated, that medicines' dominant position was eroded.

Conclusions

Qualitative studies such as this are helpful methods for developing greater understanding of complex phenomenon, such as interprofessional working practices. The influence of professional differences emerged as an important factor within interprofessional working. The findings highlight that the significant elements of professional groupings in interprofessional practice are: knowledge and skills; professional role and identity; and power and status. We suggest that the influence of these needs to be fully considered in understanding and implementing changes to healthcare working practice. Further work is needed, in particular, to investigate the area of professional knowledge acquisition and exchange in joint working. In this article we have argued that professional knowledge is a complex area of professional difference. The importance of context and models of healthcare raise the possibility that issues of professional differences may vary between patient groups and working locations, and this needs further exploration.

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