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Benefits and losses: exploring healthcare staff perceptions of teamworking.

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Abstract

This study examines staff perceptions of teamworking in the field of stroke care, a concept that features strongly in government-led drives to improve healthcare. Three sites providing care to patients across the stroke care pathway participated in this qualitative exploratory study. Working practice was observed at the case study sites, and was recorded via field note transcripts. Staff participated in individual interviews, which were recorded and transcribed to develop an understanding of perceptions of teamworking. Through detailed coding and analysis of these transcripts we identified six perceptions regarding the impact of teamworking on staff and clients. We discuss these perceptions and consider how they may provide a greater understanding of healthcare working practice.

Key words: teamworking, benefits, stroke

Word count: 4,826

Introduction

In the UK the quality standard for stroke patient services is defined by access to a specialist team in a hospital stroke unit, followed by ongoing care from a community rehabilitation team (Royal College of Physicians, 2004, Department of Health, 2001). Research evidence underpins the provision of specialist stroke unit care rather than the placing of patients on general wards, with improved outcomes such as reduced mortality, and faster recovery reported (Royal College of Physicians, 2004).

However, whilst the evidence is that stroke unit care increases the quality of services in terms of patient outcomes, there remains a considerable lack of clarity regarding the elements of practice in specialist units that contribute to these better outcomes (Smits et al. 2003, McNaughton et al. 2003, Strasser et al. 2005, Kalra et al. 2000). It is also important to note that the improved outcomes reported have predominantly been in relation to hospital-based units at a time when increasingly provision is shifting from acute, to community care delivery (Department of Health, 1997, Royal College of Physicians, 2006), and that community care service delivery is less well resourced (Royal College of Physicians, 2006), and can be perceived by patients as less satisfactory (Commission for Healthcare Audit and Inspection, 2006).

It has been suggested that improved care outcomes in stroke may be associated with greater teamworking, with audits of care reflecting this importance of teamworking by measuring the frequency of multidisciplinary team meetings, shared record keeping and access to a range of professionals (Royal College of Physicians, 2006). This advocating of more teamworking has featured predominantly in UK government

legislation relating to improving healthcare services over the last years (Department of Health, 2004, Department of Health, 2001, Department of Health, 2000). However whilst “teamworking” is a commonly-used term, review of the literature confirms that it is a concept that lacks definition in healthcare (Enderby, Loxley,), and with clear links between greater teamworking and improved patient care remaining elusive (McCallin, 2001).

In the search for a link between teamworking practice and care outcomes, authors have suggested two potential avenues of investigation to consider: firstly, that teamworking may link to improved care (Hyer et al. 2000, West, 2002, Deeter-Schmelz and Kennedy, 2003, Latella, 2000); or alternatively that teamworking may lead to benefits in terms of service delivery (Wilson and Pirrie, 2000, Lavin et al. 2001, Davoli and Fine, 2004, Glasby and Lester, 2004, Payne, 2000). The point has also been made that with the increasing complexity and specialisation of healthcare, it may be the only way that the wide-ranging and expert knowledge needed can be provided (Hall and Weaver, 2001).

In contrast to potential benefits, there is the suggestion from research outside a healthcare context that there may be negative factors associated with teamworking. West (1994) in a classic text on teamworking, identified the phenomena of “social loafing”, when individuals work less hard when their efforts are combined. He suggested that team performance could be less than the aggregate of individuals working alone, and that group decision-making may be less effective. West and Poulton (1997) report the phenomenon of “risky shift” where groups tend to make more extreme decisions. In healthcare research there has been a call for more studies

to explore the belief that teamworking is always the best way to provide services (Pearson, 1997, Geddes and Chamberlain, 2001, Øvreitveit, 1997).

This paper examines staff perceptions of teamworking practice in the field of stroke care, with the aim of gaining a greater understanding of processes underpinning care delivery. The study involved an in-depth qualitative exploration of staff joint working practice at three case study sites across a stroke care pathway. In this paper we examine staff perceptions of teamworking practice, exploring potential associations between elements of working practice and care delivery and outcomes. We discuss the potential implications of these perceptions, and highlight potential areas for further research.

Design and methods

Qualitative methods were employed to gain an understanding of a complex working environment (Morse and Richards, 2002). A case study research strategy was adopted, to gain in-depth analysis (Wilson et al. 2000) of a real world setting (Keen and Packwood, 2000). A multiple case study design was selected to permit comparison and contrast (Bechofer and Patterson, 2000), with investigation at each site completed prior to commencement at a subsequent site. Yin (1994) emphasises the value of multiple sources of evidence to guide data collection and analysis, and in the study design parallel methods of data generation of individual interviews and fieldwork observation were employed.

Interviews

Individual semi-structured interviews were used to gain an in-depth understanding of the staff's perspectives (Spencer et al. 2003). The individual interviews were conducted in parallel to the observations at each site using a topic guide (Berg, 1998), with the topics being developed from 3 pilot interviews, and from reviewing the teamworking literature. The interviews covered information relating to organisational conditions, goal planning, group process and team roles, decision-making and communication systems. Participants were asked to describe the team that they worked in, who they would describe as being members of that team, and what the purpose of the team was. All participants had previous experience of working in other healthcare locations either as a student or member of staff, and they were asked to reflect on any similarities and differences in the way that staff worked together in different locations. They were asked whether they perceived any advantages or disadvantages of different ways of working for either themselves and for patients in their care. In addition to these topics, the semi-structured nature of the interviews also provided an opportunity to check and gain further understanding of observations made (Berg, 1998), with perceptions of participants predominantly echoing observations made. Interviews lasted 30 to 45 minutes and were tape-recorded and later transcribed.

Observation

Fieldwork observation was employed to enable the researcher to gain insight into the context at first hand (Rossman and Rallis, 2003), and to permit comparison and contrast between data sources (Bechofer and Patterson, 2000). In fieldwork observation the role of the researcher is of importance, and in this study a non-participant observer role was adopted (Bechofer and Patterson, 2000) as although

having health professional training, stroke was outside of the researchers clinical area. It is argued that choosing an area outside of the researcher's clinical expertise facilitated the process of care being the focus of scrutiny, and reduced the potential for participant discomfort at their practice being observed. Periods of observation were recorded via fieldwork notes (Pope and Mays, 2000), which were completed either during or immediately following visits to the sites, and later transcribed.

Ethical and sampling considerations

Ethical approval was granted as a multi-site study, and research governance procedures for each service were adhered to. Ethical approval required the maintenance of confidentiality and anonymity for the participating sites and individuals. In order to ensure this, it was agreed that sites would not be reported as individual case studies, but as findings across all locations, as staff groups at some sites were small and individuals could potentially be identifiable. The three sites chosen were in a single region of England, with sampling across a typical stroke care pathway, consisting of an acute hospital ward, a stroke unit, and a community service delivery context.

A total of 121 hours of observation was completed, including attendance at 10 team meetings. Periods of observation were conducted across a working week when more than one profession was present on site, and across time periods of between 19 and 30 days. 37 interviews were conducted with a range of staff from the professions of nursing, physiotherapy, occupational therapy, speech and language therapy, dietetics, psychology, medicine, and social work, together with non-professionally qualified

assistants. Sampling of staff for interview was on the basis of seeking a range of professions, a range of length of experience, and a range in terms of age and gender.

Data analysis

Data was in the form of transcribed text from the interviews and field notes. The management of the data was supported by the NVivo qualitative data analysis software (Richards, 2002), which facilitates the storage and retrieval of coded passages. Descriptive coding was used to record information about the data such as site and healthcare profession, and topic coding was used to link together portions of text describing the same theme or idea (Morse and Richards, 2002). The passages of text were read on a line-by-line basis and data which represented a particular idea or concept was given a code. For example a passage of text refers to a participant recalling that where she worked previously there were no team meetings and she says that this resulted in her not knowing when a particular patient was discharged. This extract was coded as relating to “communication.”

The NVivo software enables the relationships between codes to be reviewed and developed into a coding framework (a tree diagram type format) providing structure to the data analysis process, and enables chunks of text stored under a particular code to be easily retrieved and each example to be checked for consistency. In the example above, following review of the data coded to “communication” it was noticed that some of the communication related to formal team meetings and some to communication between staff outside of meetings, thus the “communication” code should be subdivided into branches representing “formal meetings” and “informal meetings”. In this vein, following line-by-line reading and coding of the data for each

study site, data linked to each code was retrieved and reviewed in an iterative process using principles of constant comparison (Glaser and Strauss, 1967). As new data was added from subsequent case study sites coding from previous sites was revisited in order to check whether emerging codes had an impact on previous data (Mason, 2002).

The data analysis strategy did not include crosschecking of coding by a number of researchers. As Morse (1997) and Silverman (2001) propose, it is argued that the individual who has experienced the setting forms understandings that frame the data gathering and analysis process, which may differ from other individuals that have not experienced the setting, limiting interpretation. By using the parallel data generating methods of observation and interviews, it could be argued that the checking of observations made during the interviews was a form of respondent validation (Silverman, 2001), and that using multiple sources of data may have contributed to methodological rigour (Yin, 1984).

Results

Analysis of the data reveals that staff perceive that teamworking practice could have a number of benefits and losses. Staff identified factors associated with teamworking practice impacting both on themselves and also on patient care. These benefits and losses will be presented in terms of: (1) group support, (2) knowledge and skills sharing, (3) holistic care, (4) timely intervention/discharge (5), goal planning, and (6) time.

Group support

At all the sites the stroke team was reported to be a source of support, for example:

“We all need to support each other...and have opportunities to discuss what’s going on..” (Document 'individual interview 27’).

“I used to think is the MDT ideal....interdisciplinary working...is that idea..did it come about because it is good for the patient or...did it come about because it feels good for the....clinicians cos it’s certainly a much nicer way to work for the clinicians....much more supportive..you know....” (Document 'individual interview 29’).

Observations and the interviews suggested that the allied health professionals at the hospital sites seemed to provide particular support for each other, with evidence of them grouping together on occasions to present a larger number, or more powerful force in team meetings, for example:

“Therapists as last week had previously met before this meeting to decide goals.” (Document 'field notes 4’).

“Once a week when it’s MDT we can guide the medics into what might be a more appropriate ..” (Document 'individual interview 11’)

Linked to the notion of mutual support, staff referred to the benefits of a more generally supportive environment in teamworking, akin to the creation of a positive atmosphere:

“If they can see everybody working together it’s going to make them feel happier, and if they are happier it can help with their recovery...” (Document 'individual interview 9’).

“There’s much more of a sense of pulling together I think that’s got to be beneficial for the patient....” (Document 'individual interview 29’).

Knowledge and skills sharing

Along with group support, the opportunity to discuss patients at team meetings and on other occasions was a key benefit of teamworking identified by staff, and frequently observed, for example:

“You’ve always got somebody based on this unit to ask, rather than having to fill in a load of contact forms, and things like that.” (Document 'individual interview 7’).

“I could see the major benefits in doing that and I’d come away from one hour of a session maybe with an OT maybe knowing more than in four or five of my sessions on my own trying to think.. well is it due to this or due to this..” (Document ‘individual interview 10’).

“Skills of information sharing/swapping seem to be a key point again - sharing of profession specific information.” (Document ‘field notes m’)

“Cos we work in such a close interprofessional team then we all learn from each other.” (Document ‘individual interview 4’).

“Sharing information, and knowledge, yeah.... I mean I am always going down there and asking therapists what they think, um can you tell me about this because I’m not quite sure, so there’s always that sharing of knowledge as well.” (Document ‘individual interview 7’).

“I think some problems may not have been picked up in as much depth and as much detail as what we’re able to do. And that’s obviously going to benefit the patient”. (Document ‘individual interview 34’).

Holistic care

Associated with the opportunity to discuss patients with other professionals, was the reported benefit of having additional information and receiving knowledge from others in the team, which enabled staff to better provide their own profession-specific care. This reported benefit more specifically could be associated with enhancing problem-solving and clinical decision-making, or alternatively gaining a more complete “whole person” view, for example:

There is the fact that because I kind of know things about the patients that strictly speaking aren’t just to do with dietetics it enables me to work more holistically with that patient”. (Document ‘individual interview 12’).

“It...helps me professionally put what I do in context, into a greater context...it’s like that thing of having that umbrella, so I don’t just go and see a patient and just be thinking you know I want them...just to be able to take such and such fluids or to be able to do this with their communication...it’s putting it into context..and um...and seeing ...and it helps me work out how I suppose where speech therapy fits into life I suppose...you know the patients life”. (Document ‘individual interview 14’).

“Without each piece of the jigsaw you wouldn’t get the full picture....for the patient...that’s what needed we’re all different..different professions and you

need....all of them to get the best outcome.....” (Document ‘individual interview 1’).

Timely intervention and discharge

Staff referred to benefits in terms of timely, earlier, or more speedily provided intervention leading to better clinical outcomes:

“So interprofessional working if it’s patient centred with carer involvement should makeit should assist in speedier recoveryfrom a team of people that by all working together its there....it’s early on, we all know that the research shows that the earlier the access to rehabilitation the earlier access and interprofessional working maximises the potential reduces the disability, so these are all the things I think interprofessional working does....” (Document ‘individual interview 16’).

“It speeds the process up, also so, so because like I said cos there is always somebody based on this unit that you can seek advice from, so you are not having to say, oh you’ve got to wait, you know you are queuing referrals.” (Document ‘individual interview 4’).

“If there is a team based approach the client is able to move on and get referrals on.” (Document ‘individual interview 13’).

There was also discussion regarding better outcomes in terms of earlier discharge from hospital services into the community, for example:

“It’s about reducing disability, earlier access, maximising that ability, and yet early discharge into an environment that’s conducive and more appropriate.” (Document ‘individual interview 16’).

“Often discharges can move faster when we have these MDTs cos we’ve got the OT and physio and social worker there...and OT can say we need another week...physio can say we’ll be discharging and then its down to medical staff to finish off the final testing...” (Document ‘individual interview 19’).

However, earlier discharge was described as not always being a desirable outcome, with policy and resources driving the need for speedier discharge,

“Emphasis seemed to be on patient discharge as soon as possible - need for throughput, asked for decisions on them by the next meeting”. (Document ‘field notes p’).

“With getting patients home quicker it’s appropriate if they can get the...appropriate rehab at home then it’s a good goal to have to get them quicker...but if we think it’s gonna compromise their..what’s the

word...achievements...sometimes we feel a bit rushed that we have to get them out...” (Document 'Individual interview 25').

“And I think they do need to go out, but I don’t think the quick as possible should be there, I think its at the right time for that person...” (Document 'individual interview 10').

Decision-making

Some staff described the benefits of teamworking to be associated with team decision-making, for example:

“The benefits is that you have got a plan of care....that... basically has been assessed by a number of professionals with the knowledge of being able to treat that patient from a higher level...no one person has made that decision....and that’s got to be better than one person making a decision about one persons care.” (Document 'individual interview 10').

It was also perceived that there was benefit in having cohesion amongst different professionals, by presenting a team “united front” in decision-making”, for example:

“It’s no good if we’re all saying different things to them or some of us are giving lots and lots of reassurance that everything is going to be alright and someone is saying they’ll never be able to walk again...we need to know and decide amongst ourselves what the storyis....really to be consistent...” (Document 'individual interview 29’).

Staff highlighted the individual professional responsibility of traditional working patterns, and reduction of this feeling of individual responsibility in teamworking because of team decision-making, for example:

“I like that cos you can work closely, share the responsibility, get somebody else’s perspective..” (Document 'individual interview 22’).

“You don’t feel isolated when you are making a decision.. for example in MDT, if you are thinking.. oh I want them to stay here a bit longer, and I know that I can go and discuss it with the others and put my point of view and they’d think well I can see that and you get the support of the team. You don’t ever feel like you as an individual are making a decision anymore, which has to be better for the patient hasn’t it...” (Document 'individual interview 10’).

“For me it is better, cos you get information from everybody, you are not relying on your own decisions, you can get information from other people.....” (Document 'individual interview 7’).

It is interesting to note that whilst the multi-disciplinary team meeting was declared by staff to be the main forum for decision-making, observations of these meetings recorded in the field notes exclusively describe care management decisions such as discharge and transfer, with no examples of discussion regarding ongoing treatment at these meetings, for example:

“Afterwards I wondered what the objective was that the meeting had fulfilled, apart from the medic being informed. The therapists and nurses were aware of the goals for each patient, it did help to clarify management in terms of meetings for review and discharge”. (Document 'field notes d').

“Little discussion of profession specific work, nothing for example regarding what type of therapy is being given, main discussion regarding the service provision”. (Document 'field notes n').

Observations suggested that the decision-making regarding ongoing care of patients, such as type of intervention, specific treatment goals and assessment seemed to be occurring outside these team meetings, for example:

“The physio said to me that there is a pre-meeting meeting when they talk through the clients before the main meeting”. (Document 'field notes m').

“Discussion of where going with a case between the physio and an assistant - they were discussing how little progress was being made and the physio asked if they needed discharging. (Document 'field notes v').

Goal planning

In the interviews staff reported that shared goal planning was a benefit of teamworking, for example:

“Everybody is coming from the same angle ...if it's a good team that works together well and we discuss things and we've got goals...whether it's just physio OT goals or whatever....and the patient is involved...everybody knows what we're aiming for...everybody works together...to get that done and then the end result is achieved better...if it works well...” (Document 'individual interview 26').

“I think...from a patient point of view definitely it is cos we're all working towards the same....goals hopefully”. (Document 'individual interview 30').

There was often reference however to the difficulty in team goal planning, and as outlined above it was often the staff from the allied health professions who tended to set goals together, for example:

“Well I am sure each discipline has their own goals....when they come in...and that’s....and that should be allied to the outcome for the patient....at the end of the day...but... whether that actually happens in reality I don’t know” (Document ‘individual interview 17’).

“That’s what we need to be doing...our own individual goals....but we also are meant to bring that in with the MDT to do goal setting as well...so that we do have a clear plan...it’s been something that’s been a bit hit and miss I guess...but like what we try to do...OT and physio in particular....it’s meant to be a whole MDT thing..but I think therapists...are better at doing it....is that we actually meet before the MDT and try to goal set together....and ...trywe had a go yesterday..trying to set them for a patient..” (Document ‘individual interview 22’).

Time constraints

Staff often raised concerns regarding team functioning to issues of time, and expressed concern at the need to balance patient contact time against teamworking time. Multi-disciplinary meetings for example were identified as an important decision-making forum, but staff expressed concern at the time taken up by them during a working week, for example:

“It is extremely time consuming, not that that matters.” (Document 'individual interview 3’).

They described how processes associated with teamworking such as meetings, team record keeping and shared goal planning took up extra time, and how they often were required to make choices between these and patient contact time, for example:

“To be honest I just see my bit and I don’t look at anybody else’s bit..which maybe I should....but I just don’t have the time.” (Document 'individual interview 25’).

“We don’t generally go in for goal setting...cos we haven’t got time..” (Document 'individual interview 19’).

“The down side is you start to get more meetings and things going off so it’s more time out from patient contact time” (Document 'individual interview 10').

“It can be frustrating because again that takes time out to be able to communicate to pass that knowledge on or be open to other peoples opinions, um... takes time out of what it is you are wanting to do, so if you’ve got your day planned and you’ve got six or seven sessions in and you want to see those patients... if you need to take the time to pass that knowledge on or gain more knowledge that obviously has an impingement on time” (Document 'individual interview 11').

Discussion

Perceptions of staff regarding the benefits and losses of teamworking in stroke care have been identified here, relating to group support, sharing of knowledge and skills, holistic care, timely intervention and discharge, decision-making, goal planning, and time constraints.

Staff concerns regarding the time taken up by teamworking, echo the work of Atwal (2004) who found that lack of time was the biggest barrier to teamworking in healthcare. Staff reported making the difficult choice between time for patient care, and teamworking time, with individuals needing to weigh up the benefits of teamworking. This created the potential for different perceptions of the value of teamworking amongst individual team members.

Staff identified the benefits of working together in terms of support, the sharing of knowledge and information, and a reduction in individual responsibility and decision-making. The sharing of knowledge and information was described as being of benefit both to staff themselves and to patient care. This perception of the benefits of sharing information is supported by the work of Hoopes and Postrel (1999) and also Nelson and Coopridier (1996) who discuss the concept of creating a shared (team) knowledge. These authors conclude that a shared knowledge base is associated with increased

team performance. Linked to this sharing of knowledge, was the gaining of a more holistic view of a person, which staff described as beneficial to their own profession-specific work and enabled them to better provide care. This more holistic view of patients could also be a feature of a shift from a more medical model view of care to a more rehabilitative model or more patient-centred care, a change in viewpoint often associated with teamworking (McCallin, 2001).

Staff, in addition identified the benefits to patient care in terms of service delivery benefits; thus supporting authors such as Wilson and Pirrie (2000) and Lavin and Reubling (2001). Staff talked about the faster processing of referrals, so care provided more speedily. This factor may be especially important for stroke care outcomes as the evidence suggests that early rehabilitation produces better outcomes (Department of Health, 2005). This suggestion from the data that care may be provided more speedily in teamworking, may highlight an important benefit of teamworking in stroke care, which is worthy of further exploration in regard to the evidence base linking improved service delivery to patient outcomes.

A further benefit of teamworking described by some staff in the acute setting was that of earlier discharge. Staff did stress however, that earlier discharge was not always a better outcome, but that it should be timely discharge. During the period of data collection there were significant policy drivers for earlier discharge in place, which staff reported were impacting on their practice. There was also considerable media and government-led attention regarding hospital-acquired infections that were mentioned by staff, with earlier patient discharge potentially reducing the risk of infection.

The finding that there was a perceived reduction in individual responsibility and decision-making in interprofessional working, offers a less straightforward discussion of possible benefits and losses. Although perceived by the staff as a benefit, the reduction in individual responsibility could potentially be a loss. Loxley (1997) raises the issue of accountability in collaborative working, with the potential for difficulty in getting redress for unsatisfactory care, for confusion in roles, and the masking of difference. Øvreitveit (1997) identifies collective responsibility as the sign of a fully integrated team, but warns that this does not mean that individual members are accountable as a group rather than individually professionally accountable.

It is important to note that in the UK there have been a number of high profile inquiries into failures in care provision, which have significance for this discussion regarding responsibility. The report following the Bristol Inquiry for example highlights the need for clarity in “identification of responsibilities of members of the team” to avoid “uncertainty in how to get things done” (Bristol Royal Infirmary, 2001). The Victoria Climbié Inquiry report also describes a lack of accountability and calls for a “clear process of decision-making and monitoring of performance” to avoid “organisational confusion and buck passing” (Lord Laming/Great Britain Home Office, 2003, paragraph 17.86). If teamworking is perceived as a reduction in individual responsibility amongst staff, this may be a worrying development.

Shared decision-making however, could also be viewed as a positive factor, with studies indicating that patient safety (a reduction in clinical errors) can be associated with effective collaboration (Schmitt and Bleakley, 2006, Alonso et al., 2006). Staff

in this study certainly perceived that “better decisions” were made as a result of shared decision-making. Glavin (2006) highlights that medical error is one of the ten leading causes of death in Western medicine. Alonso et al. (2006) describe 70 percent of all medical errors as being attributable to breakdowns in interactions in health care teams, highlighting the need for increased information exchange and consultation with others. Whilst, staff themselves did not raise the potential for patient safety to be a benefit of teamworking, by adopting a team decision-making strategy this may be a significant benefit.

It is recognised that this work has reported findings from a particular client group, in a small number of study sites, and in common with most qualitative studies makes no claim to generalisability. Further work is needed to assess whether the identified benefits and losses identified in this study are transferable to other client groups and other contexts. This examination of care delivery has also not explored the service user perspective, and this is an important area for further work, as client views of teamworking are currently under-researched, and it would be interesting to compare staff and client perspectives.

Qualitative studies such as this are helpful methods for developing greater understanding of complex phenomenon, such as working practice. The qualitative methods used in this work have been able to generate large volumes of data in order to gain an understanding of practice in the field, which can be seen as a strength of this methodology. The data generation methods of fieldwork observation and interviews have been successful in gaining insight into staff viewpoints and have provided the opportunity to make cross-comparisons between data types, such as in

relation to the declared systems of decision-making in interviews compared to observations made. Whilst considering that the findings of this study are robust, it is recognised that the researcher as the primary tool in data gathering and analysis cannot be seen as viewing the data through a completely “neutral observer” lens, and that individual interpretations of the data are inevitable. It has sought however, to address considerations of methodological rigour through transparency of method, by staying close to the data (Spencer, 2003), and through the use of multiple sources of data (Yin, 1984).

This exploratory work has identified potential links between teamworking and care delivery outcomes, which have the potential to be investigated further. The data suggests that the benefits of teamworking may be: a more supportive environment for staff, a more speedily provided service delivery; a broader understanding of an individual client and their needs by the professionals involved with them; shared knowledge and skills amongst professionals; and shared decision-making. Further work is needed to investigate these benefits in other settings, and crucially, to determine whether these benefits outweigh any potential losses such as a reduction in time available for care, and defined responsibility.

References

- Alonso, A., Baker, D., Holtzman, A., Day, R., King, H., Toomey, L., & Salas, E. (2006). Reducing medical error in the military health system: how can team training help. *Human Resource Management Review*, 16(3), 396-415.
- Atwal, A. (2004). Discharge planning and multidisciplinary teamwork: an interprofessional battlefield. *Journal Of Interprofessional Care*, 18(1), 79-80.

- Bechofer, F., and Patterson, L. (2000). *Principles of Research Design in the Social Sciences*. London: Routledge.
- Berg, B. (1998). *Qualitative Research Methods for the Social Sciences. Third Edition*. Needham Heights MA: Allyn and Bacon.
- Bristol Royal Infirmary, (2001), *Learning from Bristol: the Report of the Public Inquiry into Children's Heart Surgery at the Bristol Royal Infirmary 1984-1995*, Bristol, Bristol Royal Infirmary Inquiry 2001. Command Paper CMS207.
- Commission for Healthcare Audit and Inspection. (2004). *Caring for people after they have had a stroke*. London: Commission of Healthcare Audit & Inspection.
- Davoli, G., Fine, L. (2004). Stacking the Deck for Success in Interprofessional Collaboration. *Health Promotion Practice*, 5(3), 266-270.
- Deeter-Schmelz, D., Kennedy, K. (2003). Patient Care Teams and Customer Satisfaction: the role of team cohesion. *Journal of Services Marketing*, 17(7), 666-684.
- Department of Health. (2005). *Reducing Brain Damage: Faster Access to Better Stroke Care.*, London: National Audit Office.
- Department of Health, (2001). *National Service Framework for Older People*, London: DOH.
- Department of Health. (1997). *The new NHS: modern, dependable*, London: Stationary Office.
- Geddes, J., & Chamberlain, C. (2001). Home based rehabilitation for people with stroke: a comparative study of six community services providing co-ordinated multidisciplinary treatment. *Clinical Rehabilitation*, 15, 589-599.
- Glasby, J., Lester, H., (2004). Cases for change in mental health: partnership working in mental health services. *Journal Of Interprofessional Care*, 18 (1), 7-16.

- Glaser, B. & Strauss, A. (1967), *The Discovery of Grounded Theory*, New York: Aldine De Gruyter.
- Hall, P., & Weaver, L. (2001). Interdisciplinary education and teamwork: a long and winding road. *Medical Education*, 35(9), 867-875.
- Hoopes, D. & Postrell., S. (1999). Shared knowledge, "glitches" and product development performance. *Strategic Management Journal*, 20, 837-865.
- Hyer, K., Fairchild, S., Abraham, I., Mezey, J., Fulmer, T. (2000). Measuring attitudes related to interdisciplinary training: revisiting the Heinemann, Schmitt and Farrell "attitudes towards health care teams scale". *Journal Of Interprofessional Care*, 14 (3), 249-258.
- Kalra, L. E., A, Perez, I. Knapp, M., Donaldson, N., Swift, C. (2000). Alternative strategies for stroke care: a prospective randomised controlled trial.
- Keen, J. & Packwood, T. (2000). Using case studies in health services and public policy research. In C. Pope, & N. Mays, (eds.), *Qualitative Research in Health Care*, London, BMJ Books.
- Latella, D. (2000), Teamwork in rehabilitation. In S. Kumar (ed.), *Multidisciplinary Approach to Rehabilitation*, Woburn MA: Butterworth-Heinemann.
- Lavin, M., Ruebling, I. (2001). Interdisciplinary health professional education: a historical review. *Advances in Health Sciences Education*, 6 (1).
- Leathard, A. (2003). Introduction. In A. Leathard (Ed.), *Interprofessional Collaboration: From Policy to Practice in Health and Social Care*. Hove: Bruner-Routledge.
- Lord Laming/Great Britain Home Office, (2003) *The Victoria Climbié Inquiry. Report of an Inquiry by Lord Laming*, London: DH Publications, Command Paper CMS730.
- Loxley, A. (1997). *Collaboration in Health and Welfare*. London: Jessica Kingsley.

- Mason, J. (2002). *Qualitative Researching* (2nd ed.). London: Sage.
- Mccallin, A. (2001). Interdisciplinary practice - a matter of teamwork: an integrated literature review. *Journal of Clinical Nursing*, 10 (4), 419-428.
- McNaughton, H., McPherson, K., Taylor, W., Weatherall, M. (2003). Relationship between process and outcome in stroke care. *Stroke*, 34, 1-5.
- Morse, J., Richards, L. (2002). *Readme First for a User's Guide to Qualitative Methods*. Thousand Oaks CA: Sage.
- Morse, J. (1997). Perfectly healthy but dead: the myth of inter-rater reliability. *Qualitative Health Research*, 7, 445-447
- Nelson, K., & Coopriider, G. (1996). The contribution of shared knowledge to IS group performance. *MIS Quarterly*, December, 409-432.
- Øvretveit, H. (1997). How To Describe Interprofessional Working. In P. J. Øvretveit, Mathias, T. Thompson (Ed.), *Interprofessional Working for Health and Social Care*. Basingstoke: Macmillan Press.
- Payne, M. (2000). *Teamwork in Multiprofessional Care*. Basingstoke: Palgrave.
- Pearson, P. (1997). Evaluating Teambuilding. In P. Pearson, and Spencer, J. (eds) (Ed.), *Promoting Teamwork in Primary Care*. London: Arnold.
- Pope, C., and Mays, N. (2000). Qualitative Research in Health Care. In C. Pope, and Mays, N (Ed.), *Qualitative Research in Health Care*. London: BMJ Books.
- Rossmann, G. & Rallis, S. (2003), *Learning in the Field*, Thousands Oaks CA: Sage.
- Richards, L. (2002). *Using NVivo in Qualitative Research*. Melbourne: QSR International.
- Royal College of Physicians. (2006). *National Sentinel Stroke Audit, Phase 1 Organisational Audit 2006*. London: Royal College of Physicians.

- Royal College of Physicians. (2004). *National Sentinel Stroke Audit*. London: Royal College of Physicians.
- Schmitt, M. & Bleakley, A. (2006). *Generative activities for patient-centred practice*. Paper presented at the All Together Better Health III conference, London.
- Silverman, D. (2001). *Interpreting Qualitative Data*. London: Sage.
- Smits, S., Falconer, J., Herrin, J., Bowen, S., & Strasser, D. (2003). Patient-focussed rehabilitation team cohesiveness in veterans administration hospitals. *Archives of Physical and Medical Rehabilitation*, 84, 1332-1338.
- Spencer, L., Ritchie, J., Lewis, J., Dillon, L. (2003). *Quality in Qualitative Evaluation: a framework for assessing research evidence*. London: Government Chief Social Research Office.
- Strasser, D., Falconer, J., Herrin, J., Bowen, S., Stevens, A. & Uomoto, J. (2005). Team functioning and patient outcomes in stroke rehabilitation. *Archives of Physical and Medical Rehabilitation*, 86, 403-409.
- West, M., Borrill, C., Dawson, J., Scully, Carter, M., Anelay, S., Patterson, M., Waring, J. (2002). The link between the management of employees and patient mortality in acute hospitals. *International Journal of Human Resource Management*, 13(8), 1299-1310.
- West, M. (1994). *Effective Teamworking*. London: Sage.
- West, M., Poulton, B. (1997). Primary Health Care Teams: In a League of their Own. In P. Pearson, and Spencer, J. (eds). *Promoting Teamwork in Primary Care*: London: Arnold.
- Wilson, A., Williams, M., Hancock, B. (2000). *Research Approaches in Primary Care*. Abingdon: Radcliffe Medical Press.

Yin, R. (1994). *Case Study Research. Design and Methods. Second Edition*. London:
Sage.