



Nursing students' experiences of being a research participant: Findings from a longitudinal study

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SUMMARY

Aim: The paper reports on a study that highlighted the benefits to nursing students of taking part in research. **Background:** There is a great deal of literature and ethical guidance to protect research participants who take part in research. However, there is limited empirical evidence regarding the beneficial outcomes of research participation.

Methods: The findings reported in this paper were part of a qualitative, longitudinal study undertaken in the UK between 2007 and 2009. The study explored the empowerment of nursing students in clinical practice. Thirteen undergraduate nursing students were recruited to the study. Data generation was in the form of annual, individual interviews. Over the course of the study, students were asked about their experiences of participating in the research.

Findings: Nursing students reported significant benefits as a result of research participation. These were threefold: strengthening self; strengthening knowledge; and strengthening clinical practice. Protection of research participants is crucial, but emphasis on protection obscures the potential benefits that result from being a research participant.

Conclusions: Researchers who recruit nursing students to educational research must protect them from harm. However, in the process of weighing up risks associated with their educational research, they need to be cognizant of potential benefits that can arise for nursing students when they are asked to participate in nursing research.

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Introduction

Nurse researchers across the globe have an abundance of guidelines and governance procedures to support the ethical conduct of their research (Bradbury-Jones and Alcock, 2010). Most researchers accept that some form of governance is necessary to ensure maintenance and improvement of standards. According to Haigh et al. (2005), worries about abuse of power have led to the development of rigorous approaches to research governance in the UK. However, the extent of governance has met with some criticism. According to Lawrence (2007), governance procedures can appear 'burdensome' (p.328) and result in discouraging people from doing research. Johnson (2004) argued that

we have become 'hamstrung' by research governance and have lost sight of the actual harms and benefits involved in nursing research.

Researchers are charged with the responsibility of assessing such risks and benefits. This involves a careful balancing act between not doing (too much) harm and doing (some) good (Iphofen, 2005). This balancing has been acknowledged as an unscientific process (Johnson and Long, 2006; Long, 2007). We suggest that while weighing up benefits and harms, nurse researchers may be guided into weighting the scales unnecessarily on the latter. Our contention is that focusing attention unevenly on harm may be obscuring much of the good that can arise from research in nursing.

Background

Amidst the plethora of guidance that focuses on minimization of risk, there is a small body of literature acknowledging that benefits may arise from research participation. There appear to be three themes: emotional advantages; educational advantages; empowerment. In relation to the former, Eide and Kahn (2008) acknowledge the inherently therapeutic nature of the qualitative interview. They argue that although qualitative research does not begin with the

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intent of therapeutics, the act of open listening may result in it becoming so. This therapeutic aspect of the research interview supports the views of others (Collins, 1998; Birch and Miller, 2000; Dickson-Swift et al., 2006).

In terms of educational advantage, Dalziel (1996) evaluated the ethical and educational issues involved with student participation in psychological research. He argued that in education generally, students maintain higher levels of attention, information retention and engagement in the learning process when involved actively, rather than being passive recipients. For this reason, Dalziel suggested that being involved as a research participant can provide students with beneficial, experiential learning in relation to the research process.

Finally, Haigh et al. (2005) argued that in healthcare, patient participants may use researchers for their own benefit, in the following ways: 1) 'sponsorship' – to forward their grievances or anxieties to the person in charge of the clinical area; 2) human contact; 3) experience contextualisation – to help make sense of their situation or clarify understanding. For these reasons, Haigh et al. suggest that patients who take part in research may not be as disempowered as some literature suggests.

Overall however, existing literature regarding the benefits of research participation has limitations. Some studies highlight advantages of research participation, but within a broader research context – hence the issue is not addressed in any depth (Collins, 1998; Dickson-Swift et al., 2006; Eide and Kahn, 2008). Some research emanates from disciplines other than nursing, such as psychology and therefore may have limited transference to a healthcare context (Dalziel, 1996; Collins, 1998; Birch and Miller, 2000). Yet others, are situated within a healthcare context, but are concerned with patients, rather than students (Haigh et al., 2005). Overall, the extant body of research regarding the benefits of research participation fails to directly address the issue in a nursing context, particularly in relation to nurse education. The purpose of this paper is to address the gap in existing literature. To achieve this, we present findings from a study that point to the benefits of research participation. Specifically, we share our experiences of engaging in research with undergraduate nursing students.

Methods

The findings reported in this paper were part of a larger, longitudinal, qualitative study undertaken in the UK.

Study aim

The aim of the overall study was to explore the empowerment of nursing students in clinical practice. The intention was to capture their experiences on their trajectory from the first to the third year of their educational programme. Data were generated through annual, semi-structured interviews during 2007–2009. All interviews were conducted by (CB-J). Students were asked to recount situations from clinical practice where they had experienced a sense of empowerment or disempowerment. Acknowledging that this might evoke mixed feelings, each interview was brought to a close by checking that students were not upset as a result of having been interviewed. This kind of de-brief is considered good practice (Kvale, 1996). This simple, yet necessary strategy yielded unexpected benefits. In addition to data generation relating to nursing students' empowerment, the study also yielded rich, serendipitous data regarding students' experiences as research participants, as reported in this paper.

Data were analyzed according to the framework analysis of Ritchie and Spencer (1994). Initial analysis was undertaken by two of the researchers (CB-J & SS(b1)) who subsequently came together to reflexively discuss their individual analyses. These were revised until consensus was achieved. This process was an attempt to enhance the

analytical rigour of the study. The outcome of this analytic approach was the identification of three themes: strengthening self; strengthening knowledge; and strengthening clinical practice.

Rigour and ethical issues

Approval for the study was gained from the University Research Ethics Committee. At the time of the study (CB-J) was working as a nurse lecturer in the same university from which the nursing students were recruited. This had implications for potential misuse of power by virtue of the relatively powerful position in relation to the student research participants. According to Clark and McCann (2005), when asked to participate in research – especially by their own lecturers – students' competence to refuse may be impaired. They argue that the unequal power relationship may compromise informed consent. For this reason, student participants in this study were assured that refusal or withdrawal from the study should be without fear of reprisal.

Findings

Findings are presented around three inter-related themes: 'strengthening self'; 'strengthening knowledge'; 'strengthening clinical practice'. Coding has been used to protect students' anonymity. This comprises a participant number and students' year of study. According to Tod (2006), longitudinal interviews have the capacity to capture evolving experiences of participants over time. In this study, the temporal nature of research participation was captured, particularly for second and third year nursing students. This is reflected in the participant codes: St2/Yr3 denotes student 2 on the third year of the programme.

Strengthening self

'Strengthening self' is related to the personal benefits arising from research participation. Several students expressed how the research interviews had provided an opportunity to reflect on clinical practice, for example:

It has been quite good...quite interesting. Some of the things you don't expect to find out about, you know what I mean? It was very interesting to find out things [about self] because you can point out things in other people quick enough, but you forget to look at yourself (St10/Yr3).

The longitudinal nature of this study provided an ideal forum for reflection as illustrated by one student at the end of the study:

When I have been to see you I tend to go away thinking 'I've done another year, I've done another six months', or however long it is, it is quite nice [because] it tends to be the same recurring things doesn't it? The things that you were worried about and you think 'well I was worried about this last year and I am still here' [because] last year I didn't know if I was going to get through (St12/Yr3).

Opportunity for reflection appeared to have therapeutic value:

I actually quite like it...it is almost like reflection...it is nice to sit down and chat about things that you don't really get that opportunity to do so deeply...so it is giving the opportunity that you wouldn't normally get a chance to do ...it is a bit like counselling (St1/Yr3).

I haven't told anybody any of this you know? It's like counselling! (St5/Yr1).

Thus, for many students, benefits of research participation were primarily concerned with a strengthened self, facilitated by opportunity for reflection and interaction with an interested other. For other students however, benefits lay more with strengthened knowledge.

Strengthening knowledge

'Strengthening knowledge' had two foci: substantive knowledge and research knowledge. In terms of the former, this study had focused on nursing students' empowerment in clinical practice. By the end of the study many students had benefited from exploring their own empowerment. Several students commented that their understanding of empowerment had improved. For example:

I didn't really have a clue about it [empowerment] and now we have talked about it, it makes sense now (St9/Yr3).

I think it has made me more aware of empowerment...of the concept...in the first year when we came across the word 'empowerment' and it was like 'I don't know what that means!' whereas I think I will sort of do that [think about empowerment] automatically now. There are times when I will think 'I guess I was empowered then' (St6/Yr3).

I have been much more aware of situations where I've felt empowered or disempowered or it's kind of hit me more when something's happened that I've thought 'gosh! That was empowering!' (St10/Yr2).

For some students, strengthened knowledge was less about knowledge of empowerment, and more to do with an enhanced understanding of the research process. Specifically, one student referred to application of research to practice:

When you think about putting research into your work you have a better idea about how they maybe got to the conclusions that they have...it's not just somebody sat there with a tick board... it is real somehow (St13/Yr3).

Such was the benefit of research participation that some students had been inspired to become involved in research in the future:

I enjoy taking part actually and it has inspired me to want to do this sort of thing when I am qualified (St4/Yr3).

This student summed up the benefits of strengthened knowledge:

These sorts of things [taking part in research] empower you to think outside the box.

Strengthening clinical practice

Another benefit of research participation was that of 'strengthening clinical practice'. Some students indicated that their involvement had a positive impact on their placement experiences. For example:

It has a positive effect because if I had been in a situation where I have felt disempowered, then I have felt, 'well, what do I need to do to not feel like that and to kind of re-empower myself?' (St13/Yr3).

Um...after doing this with you I felt better going out on placement... like I shouldn't be listening to what other people are saying. I should feel more in control of what I'm thinking (St8/Yr2).

One student's account demonstrated the interdigitation of strengthening knowledge and strengthening clinical practice. The student talked of the impact of publications arising from the study and the positive outcome for other students and mentors (a Registered Nurse who supports and assesses nursing students in clinical practice):

If I've contributed to providing the information in terms of empowerment and what it means to me and how you become empowered, if some other student or mentor reads that, you know...then I think it is great. If coming here and giving you that information helps someone else to not feel scared and feel like they can take some control then I just think it's great! (St1/Yr3).

The words of one student sum up the experiences of being a research participant. Specifically, the missed opportunity for students who had declined to participate:

I think it is interesting, it makes you feel like you are involved in something...people are very unwilling to take part in things because they think it is going to be a big hindrance on their time and that they probably won't get anything out of it. But I think that you *do* get something out of it...when I've mentioned it to my friends in the group, they have gone, 'Oh really? I didn't think it would be like that!' (St13/Yr3).

Discussion

Several students reported that they derived benefit from sharing their experiences with an interested person. Specifically for many, the interview provided a therapeutic opportunity. The cathartic impact of story telling during the qualitative interview is one described by others (Munhall, 1991; Sorrell and Redmond, 1995; Eide and Kahn, 2008). Some students likened the interview to counselling and again, this supports the findings of other researchers (Dickson-Swift et al., 2006). Collins (1998) highlighted the potential for the researcher to be positioned as 'confidante'. Our findings support this view. Indeed, one student reported that they had never previously discussed what was shared during the interview. Thus, our findings suggest that the qualitative interview can provide an environment for safe discussion, facilitated by a non-judgemental, listening ear. This can have the effect of catharsis.

Although there may be benefits in the therapeutic nature of the qualitative interview, this is not without problems. Eide and Kahn (2008) provide a reminder that qualitative research is to investigate individuals' experiences, not to provide a therapeutic service. Ramos (1989) cautioned of the potential manipulative nature of the interview, whereby participants disclose intimate details that they would not do otherwise. Indeed, from some perspectives, stimulating such disclosure could be regarded as an act of power (Bradbury-Jones et al., 2008). For such reasons, the psychological effects of research need to be carefully managed (Robley, 1995; Clark and McCann, 2005; Parahoo, 2006; Williamson, 2007). Notwithstanding the potential challenges, this study provides empirical support for the 'therapeutic interview'. It supports the view that the close researcher-participant relationship may yield therapeutic benefits (Eide and Kahn, 2008).

Nursing students in this research reported that they had learned a great deal from taking part in a study that explored their empowerment. This stimulated heightened awareness of the phenomenon which, in turn, appeared to impact on clinical practice. For some students, strengthened knowledge was concerned not only with empowerment, but also with regards to the research process. This strengthened their understanding of research utilization in nursing practice. Additionally, some students expressed motivation towards engaging in research when they become a registered nurse. This is important given that contemporary nursing literature highlights

deficiencies in critical thinking ability among newly recruited nurses (Fero et al., 2009) and concerns about registered nurses' lack of research opportunities and competence (Taylor et al., 2010).

Dalziel (1996) highlighted similar benefits among psychology students. He argued that taking part in research equipped students with an understanding of research design. Furthermore, he contended that when students take part in more than one research project, they can reflect on differences in research methodology between them. Dalziel suggests that a key strategy to enhance the learning of students who take part in research is to provide time for de-brief following interview: in the same vein as that described in this paper. He argues that this provides immediate opportunity to discuss theoretical issues and research methods used by the researcher to help students understand the strengths and difficulties of the research they have been involved with. Dalziel's findings regarding the educational benefit of research participation are related to psychology students. There appear to be no parallel studies in nursing, but the nursing students who participated in the study as reported in this paper, appeared to have strengthened knowledge as a result of their participation.

According to Haigh et al. (2005), patients who participate in research may use the researcher in a number of ways. They highlight potential empowering effects of research participation whereby researcher support may help participants survive their hospital experience. Similarly, findings of this study indicate that taking part in educational research helped some students 'survive' their clinical placements. Students reported being able to cope better on placement; one referred to this as 're-empowering'. Research suggests that nursing students can be disempowered in clinical practice (Bradbury-Jones et al., 2007). This is not surprising given that empirical evidence shows that nursing students do not feel valued on placement (Levett-Jones et al., 2009); are not accepted as legitimate team members and are ignored or excluded (Cope et al., 2000; Silén-Lipponen et al., 2004; Hoel et al., 2007). Moreover, they are often treated disrespectfully by registered nurses (McKenna et al., 2003; Evans and Kelly, 2004; Almost, 2006; Curtis et al., 2007). For this reason, reports of students in this study that suggested increased empowerment as a result of taking part in the study were heartening.

Overall, there are risks when nurse educators recruit nursing students to their studies. We have already cited the potential for coercion. Allowing any researcher into one's life may imply a loss of power (Iphofen, 2005). However, power imbalance may be more acute when the research relationship involves a nurse educator and nursing students. Bradbury-Jones and Alcock (2010) highlight the phenomenon of 'I'll do it if it helps' among nursing students who are asked to participate in educational research. They advise that this may reflect a subtle sense of coercion. It is incumbent upon nurse researchers to take steps to minimize potential coercion and guard against using nursing students as research participants for convenience. However, the purpose of this study has been to show that nursing research should not be focused exclusively around harm. We have presented empirical evidence that illuminates the benefits of educational research for nursing students, through: strengthening self; strengthening knowledge; and strengthening clinical practice.

Limitations

Before bringing the paper to a close, its limitations need to be acknowledged. Primarily these relate to data generation and transferability. In relation to the former, asking nursing students about their experiences may have resulted in biased responses. It may be that they were reticent about expressing anything other than positive comments for fear of upsetting the researcher; causing offence, or reprisal. For this reason, the findings need to be considered with some caution. A reflexive stance on behalf of the interviewer (CB-J), coupled with students' ongoing consent to participate at each year of the

study, were seen as key strategies to address these potential limitations. However, it is noteworthy, that of the thirteen students who embarked on this longitudinal study, twelve remained until the end (one student left the nursing programme and was thus unable to continue in the study). This is despite the fact that attrition is an inherent problem in longitudinal research (Watson, 2008). The high retention rate lends support to the positive experiences cited by the students. In terms of transferability, this was a qualitative study undertaken in one area of the UK and for this reason exaggerated claims for its transference to other contexts need to be avoided. However, there is no reason why experiences of the nursing students in this study should differ significantly from other students who take part in well-conducted research. Indeed, it is likely that the findings have relevance to other national and international contexts. Overall, the findings point to the significant benefits to be derived from nursing students' participation in educational research.

Conclusions

Periodically in the UK, a Research Assessment Exercise (RAE) is conducted to assess the quality of research in higher education institutions to determine future funding. The two most recent RAE – in 2001 and 2008 – have had something to say about educational research in nursing. The first, noted that some educational research failed to demonstrate its influence. The second highlighted fewer outputs pertaining to educational issues in nursing, over the preceding seven years. With this in mind, it would be ironic to close this paper without highlighting its potential influence. It is our contention that the findings of this study demonstrate the benefits that can arise for nursing students when they take part in nursing research. We hope the influence is one of inspiration for other nurse researchers, to undertake educational research. The corollary of this might be for the forthcoming Research Excellence Framework – which replaces the Research Assessment Exercise – to report increased, high quality outputs in relation to educational nursing research. Moreover, more nursing students will benefit from strengthened: self; knowledge; and clinical practice. This may result in a generation of nurses who are inspired to 'do this sort of thing' in the future.

References

- Almost, J., 2006. Conflict within nursing work environments: concept analysis. *J. Adv. Nurs.* 53 (4), 444–453.
- Birch, M., Miller, T., 2000. Inviting intimacy: the interview as therapeutic opportunity. *Int. J. Soc. Res. Methodol.* 3 (3), 189–202.
- Bradbury-Jones, C., Alcock, J., 2010. Nursing students as research participants: a framework for ethical practice. *Nurse Educ. Today* 30, 192–196.
- Bradbury-Jones, C., Sambrook, S., Irvine, F., 2007. The meaning of empowerment for nursing students: a critical incident study. *J. Adv. Nurs.* 59 (4), 342–351.
- Bradbury-Jones, C., Sambrook, S., Irvine, F., 2008. Power and empowerment in nursing: a fourth theoretical approach. *J. Adv. Nurs.* 62 (2), 258–266.
- Clark, E., McCann, T., 2005. Researching students: an ethical dilemma. *Nurse Res.* 12 (3), 42–51.
- Collins, P., 1998. Negotiating selves: reflections on 'unstructured' interviewing. *Sociological Research Online* vol. 3, no.3, Available: www.socresonline.org.uk/socresonline/3/3/2.html.
- Cope, P., Cuthbertson, P., Stoddart, B., 2000. Situated learning in the practice placement. *J. Adv. Nurs.* 31 (4), 850–856.
- Curtis, J., Bowen, I., Reid, A., 2007. You have no credibility: nursing students' experiences of horizontal violence. *Nurse Educ. Pract.* 7, 156–163.
- Dalziel, J.R., 1996. Students as research subjects: ethical and educational issues. *Aust. Psychol.* 31 (2), 119–123.
- Dickson-Swift, V., James, E.L., Kippen, S., Liampittong, P., 2006. Blurring boundaries in qualitative health research on sensitive topics. *Qual. Health Res.* 16, 853–871.
- Eide, P., Kahn, D., 2008. Ethical issues in the qualitative researcher-participant relationship. *Nurs. Ethics* 15 (2), 199–207.
- Evans, W., Kelly, B., 2004. Pre-registration diploma student nurse stress and coping measures. *Nurse Educ. Today* 24, 473–482.
- Fero, L.J., Witsberger, C.M., Wesmiller, S.W., Zullo, T.G., Hoffman, L.A., 2009. Critical thinking ability of new graduate and experienced nurses. *J. Adv. Nurs.* 65, 139–148.
- Haigh, C., Neild, A., Duncan, F., 2005. Balance of power – do patients use researchers to survive hospital? *Nurse Res.* 12 (4), 71–81.

- Hoel, H., Giga, S.I., Davidson, M.J., 2007. Expectations and realities of student nurses' experiences of negative behaviour and bullying in clinical placement and the influences of socialization processes. *Health Serv. Manage. Res.* 20, 270–278.
- Iphofen, R., 2005. Ethical issues in qualitative health research. In: Holloway, I. (Ed.), *Qualitative Research in Health Care*. Maidenhead, Open University press, pp. 17–35.
- Johnson, M., 2004. Real-world ethics and nursing research. *Nurs. Times Res.* 9 (4), 251–261.
- Johnson, M., Long, T., 2006. Research ethics. In: Gerrish, K., Lacey, A. (Eds.), *The Research Process in Nursing*, 5th edition. Oxford, Blackwell Publishing, pp. 31–42.
- Kvale, S., 1996. *Interviews: An Introduction to Qualitative Research Interviewing*. Sage Publications, Thousand Oaks.
- Lawrence, D.J., 2007. The ethics of educational research. *J. Manipulative Physiol. Ther.* 30 (4), 326–330.
- Levett-Jones, T., Lathlean, J., Higgins, I., McMillan, M., 2009. Staff–student relationships and their impact on nursing students' belongingness and learning. *J. Adv. Nurs.* 65 (2), 316–324.
- Long, T., 2007. How are these ethical issues to be resolved? In: Long, T., Johnson, M. (Eds.), *Research Ethics in the Real World: Issues and Solutions for Health and Social Care*. Edinburgh, Churchill Livingstone/Elsevier, pp. 63–83.
- McKenna, B., Smith, N., Poole, S., Coverdale, J., 2003. Horizontal violence: experiences of Registered Nurses in their first year of practice. *J. Adv. Nurs.* 42 (1), 90–96.
- Munhall, P.L., 1991. Institutional review of qualitative proposals: a task of no small consequence. In: Morse, J.M. (Ed.), *Qualitative Nursing Research: A Contemporary Dialogue*. Newbury Park, Sage Publications, pp. 258–271.
- Parahoo, K., 2006. *Nursing Research: Principles, Process and Issues*, 2nd. Basingstoke, Palgrave Macmillan.
- Ramos, M.C., 1989. Some ethical implications of qualitative research. *Res. Nurs. Health* 12, 57–63.
- Ritchie, J., Spencer, L., 1994. Qualitative data analysis for applied policy research. In: Bryman, A., Burgess, R.G. (Eds.), *Analysing Qualitative Data*, pp. 173–194. Routledge, London.
- Robley, L.R., 1995. The ethics of qualitative nursing research. *J. Prof. Nurs.* 11 (1), 45–48.
- Silén-Lipponen, M., Tossavainen, K., Turunen, H., Smith, A., 2004. Learning about teamwork in operating room clinical placement. *Br. J. Nurs.* 13 (5), 244–253.
- Sorrell, J.M., Redmond, G.M., 1995. Interviews in qualitative nursing research: differing approaches for ethnographic and phenomenological studies. *J. Adv. Nurs.* 21, 1117–1122.
- Taylor, J., Irvine, F., Bradbury-Jones, C., McKenna, H., 2010. On the precipice of great things: the current state of UK nurse education. *Nurse Educ. Today* 30, 239–244.
- Tod, A., 2006. Interviewing. In: Gerrish, K., Lacey, A. (Eds.), *The Research Process in Nursing*. Blackwell Publishing, Oxford, pp. 337–352.
- Watson, R., 2008. Longitudinal studies. In: Watson, R., McKenna, H., Cowman, S., Keady, J. (Eds.), *Nursing Research: Designs and Methods*. Churchill Livingstone/Elsevier, Edinburgh, pp. 262–268.
- Williamson, T.K., 2007. The individual in research. In: Long, T., Johnson, M. (Eds.), *Research Ethics in the Real World: Issues and Solutions for Health and Social Care*. Edinburgh, Churchill Livingstone/Elsevier, pp. 9–28.