Qualitative research in health care: Using qualitative methods in health related action research

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Qualitative research in health care

Using qualitative methods in health related action research

Julienne Meyer

The barriers to the uptake of the findings of traditional quantitative biomedical research in clinical practice are increasingly being recognised.

Action research is particularly suited to identifying problems in clinical practice and helping develop potential solutions in order to improve practice. For this reason, action research is increasingly being used in health related settings. Although not synonymous with qualitative research, action research typically draws on qualitative methods such as interviews and observation.

What is action research?

Action research is not easily defined. It is a style of research rather than a specific method. First used in 1946 by Kurt Lewin, a social scientist concerned with intergroup relations and minority problems in the United States, the term is now identified with research in which the researchers work explicitlly with and for people rather than undertake research on them. Its strength lies in its focus on generating solutions to practical problems and its ability to empower practitioners—getting them to engage with research and subsequent “development” or implementation activities. Practitioners can choose to research their own practice, or an outside researcher can be engaged to help them identify problems, seek and implement practical solutions, and systematically monitor and reflect on the process and outcomes of change.

Most definitions of action research incorporate three important elements: its participatory character; its democratic impulse; and its simultaneous contribution to social science and social change.

Participation in action research

Participation is fundamental to action research: it is an approach which demands that participants perceive the need to change and are willing to play an active part in the research and the change process. All research requires willing subjects, but the level of commitment required in an action research study goes beyond simply agreeing to answer questions or be observed. The clear cut demarcation between “researcher” and “researched” that is found in other types of research may not be so apparent in action research. The research design must be continually negotiated with participants, and researchers need to agree an ethical code of practice with the participants. This is especially important as participation in the research, and in the process of change, can be threatening. Conflicts may arise in the course of the research: outside researchers working with practitioners must obtain their trust and agree rules on the control of data and their use and on how potential conflict will be resolved within the project. The way in which such rules are agreed demonstrates a second important feature of action research—namely, its democratic impulse.

Democracy in action research

“Democracy” in action research usually requires participants to be seen as equals. The researcher works as a facilitator of change, consulting with participants not only on the action process but also on how it will be evaluated. One benefit of this is that it can make the research process and outcomes more meaningful to practitioners, by rooting them in the reality of day to day practice.

Throughout the study, findings are fed back to participants for validation and to inform decisions about the next stage of the study. This formative style of research is thus responsive to events as they naturally occur in the field and frequently entails collaborative spirals of planning, acting, observing, reflecting, and replanning. However, care needs to be taken in this process as it can be threatening; democratic practice is
not always a feature of healthcare settings. An action researcher needs to be able to work across traditional boundaries (for example, between health and social care professionals or between hospital and community care settings) and juggle different, sometimes competing, agendas. This requires excellent interpersonal skills as well as research ability.

Contribution to both social science and social change

There is increasing concern about the "theory-practice" gap in clinical practice; practitioners have to rely on their intuition and experience since traditional scientific knowledge—for example, the results of randomised controlled trials—often does not seem to fit the uniqueness of the situation. Action research is seen as one way of dealing with this because, by drawing on practitioners' intuition and experience, it can generate findings that are meaningful and useful to them.

The level of interest in practitioner led research is increasing in Britain, in part as a response to recent proposals to "modernise" the NHS through developing new forms of clinical governance. This and other national initiatives (the NHS Research and Development Strategy, the National Centre for Clinical Audit, the NHS Centre for Reviews and Dissemination, the Cochrane Collaboration, Centres for Evidence Based Practice) emphasise that research and development should be the business of every clinician. Practitioner led research approaches, such as single case experimental designs,10 reflective case studies,11 and reflexive action research,12 are seen as ideal research methods for clinicians concerned with improving the quality of patient care.13

In considering the contribution of action research to knowledge, it is important to note that generalisations made from action research studies differ from those made on the basis of more conventional forms of research. To some extent, reports of action research studies rely on readers to underwrite the account of the research by drawing on their own knowledge of human situations. It is therefore important, when reporting action research, to describe the work in its rich contextual detail. The researcher strives to include the participants' perspective on the data by feeding back findings to participants and incorporating their responses as new data in the final report. In addition, the onus is on the researcher to make his or her own values and beliefs explicit in the account of the research so that any biases are evident. This can be facilitated by writing self reflective field notes during the research.

The strength of action research is its ability to influence practice positively while simultaneously gathering data to share with a wider audience. However, change is problematic, and although action research lends

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**Action research typology (adapted from Hart and Bond)**

- **5 Improvement**
  - Toward controlled outcome and consensual definition of improvement
  - Toward tangible outcome and consensus definition of improvement
  - Towards improvement in practice defined by professionals and on behalf of users

- **6 Cyclic processes**
  - Research components dominant
  - Action and research components in tension; action dominated
  - Research and action components in tension; research dominated

- **7 Research relationship, degree of collaboration**
  - Identity: causal processes that can be generalised
  - Time limited, task focused
  - Outside researcher as expert or research funding

**Conflict model of society**

- **Structural change**
  - Action components dominant
  - Change course of events; recognition of multiple influences upon change

**Consensus model of society**

- **Rational social management**
  - Identifies causal processes that are specific to problem context or can be generalised, or both
  - Spiral of cycles, opportunistic, dynamic

**Educative base**

- **1 Educative base**
  - Re-education
  - Re-education or training

**Individuals in groups**

- **2 Individuals in groups**
  - Closed group, controlled, selection made by researcher for purposes of measurement, inferring relationship between cause and effect
  - Work groups or mixed groups of managers and workers, or both

**Problem focus**

- **3 Problem focus**
  - Problem to be resolved in the interests of resolved in the interests of research based practice and professionalisation
  - Problem to be explored as part of the process of change, developing an understanding of meaning of issues in terms of problem and solution

**Change of intervention**

- **4 Change of intervention**
  - Social science experimental intervention to test theory or generate theory, or both
  - Top down, directed change towards predetermined aims

**Improvement**

- **5 Improvement**
  - Toward controlled outcome and consensual definition of improvement
  - Toward tangible outcome and consensus definition of improvement

**Cyclic processes**

- **6 Cyclic processes**
  - Research components dominant
  - Action and research components in tension; action dominated

**Identity**

- **Causal processes that can be generalised**
  - Identifies causal processes that are specific to problem context or can be generalised, or both

**Time**

- **Limited, task focused**
  - Spiral of cycles, opportunistic, dynamic

**Outside researcher as expert or research funding**

- **Identity**
  - Identifies causal processes that are specific to problem context or can be generalised, or both

- **Time**
  - Spiral of cycles, opportunistic, dynamic
Lay participation in care in a hospital setting: an action research study

Participation
- Careful negotiation to recruit willing volunteers to examine practice and initiate lay participation in care
- "Bottom up" approach to change via weekly team meetings
- Researcher as facilitator and multidisciplinary team member

Democracy
- Goal of empowering practitioners and lay people in this setting
- Working collaboratively with multidisciplinary team
- Participants given "ownership" of the data to determine how it might be shared with wider audience

Contribution to social science and social change
- Case study of multidisciplinary team on one general medical ward in London teaching hospital using:
  - Qualitative methods to highlight key themes emerging in the project
  - Quantitative methods for comparison of subgroups

Main action-reflection spirals
- Reorganising the work of the ward:
  - Changes in patient care planning
  - New reporting system, including bedside handover with patient
  - Introduction of modified form of primary nursing system
- Multidisciplinary communication:
  - Weekly team meetings instituted
  - Introduction of a handout for new staff and team communication sheet
  - Closer liaison with community nurses before discharge
- Lay participation in care:
  - Development of resources for patient health education
  - Introduction of medicine reminder card system
  - Patient information leaflet inviting patients to participate in care

Results
- Insights into health professionals' perceptions of lay participation in care
- Some positive changes achieved (for example, improved attitudes to lay participation in care, patient education, improved ward organisation)
- Identified barriers to changing healthcare practice

Different types of action research

Four basic types of action research have been identified: experimental, organisational, professionalising, and empowering (table). Though this typology is useful in understanding the wide range of action research, its multidimensional nature means that it is not particularly easy to classify individual studies. For instance, a study might be classified as “empowering” because of its “bottom up approach” in relation to the fourth distinguishing criterion of “change intervention,” but the other distinguishing criteria may be used to classify the same study as a different action research type (experimental, organisational, or professionalising). This situation is most likely to occur if the researcher and practitioners hold differing views on the nature of society. It may be more fruitful to use this typology as a framework for critiquing individual studies and, in particular for thinking about how concepts are operationalised, the features of particular settings, and the contribution of the people within those settings to solutions.

Action research in health care

At a time when there is increasing concern that research evidence is not sufficiently influencing practice development, action research is gaining credibility in healthcare settings. For example, the Royal College of Physicians in England has become involved in an action research study exploring the roles of clinicians, clinical audit staff, and managers in implementing clinical audit and ways of overcoming organisational barriers to audit. The NHS Research and Development Programme has commissioned a systematic review of the action research. Elsewhere Ong has used “rapid appraisal,” a type of action research, to engage users in the development of health care policy and practice.

Action research has also been used in hospital settings to facilitate closer partnerships between staff and users, notably in a study which focused on the introduction of lay participation in care within a general medical ward of a London teaching hospital (box). This study used a range of methods, including depth interviews, questionnaires, documentary analysis, and participant observation to generate data about health professionals’ perceptions of lay participation in care and the difficulties encountered in changing practice.

In this study, health professionals expressed extremely positive views about user and carer involvement when completing an attitude scale, confirming the results of previous research on health professionals’ attitudes towards user and carer involvement in care. However, the interview data showed that they had some serious doubts and concerns, and observation of practice revealed that these doubts and concerns were inhibiting the implementation of lay participation. This action research was able to explore the relation between attitudes and practices and explain what happened when lay participation was introduced into a practice setting. It showed that although current policy documents advocate lay participation in care (user and carer involvement), some health professionals were merely paying lip service to the concept and were also inadequately prepared to deliver it in practice. By...
working closely with practitioners to explore issues in a practical context, the researcher gained more insight into how the rhetoric of policy might be better translated into reality.

Conclusions

Action research does not focus exclusively on user and carer involvement, though clearly its participatory principles makes it an obvious choice to explore these issues. It can be used more widely—to foster better principles makes it an obvious choice to explore these issues. It can be used more widely—to foster better practice across interprofessional boundaries and between different healthcare settings, for example. It can also be used by clinicians to research their own issues. It can be used more widely—to foster better practice across interprofessional boundaries and between different healthcare settings, for example. It can also be used by clinicians to research their own practice. It is an eclectic approach to research and draws on a variety of data collection methods. The focus on the process as well as the outcomes of change helps to explain the frequent use of qualitative methods by action researchers.

Competing interests: None declared.

Further reading


An unusual treatment

Feeding the fish

The revival of the use of living organisms to help in treating illnesses has grabbed the attention of the media recently. Reports of the use of leeches in plastic surgery and maggots in dermatology raise the question of which other animals may be of benefit, a concept some call “biotherapy.” While there are promising studies of the use of maggots to help the healing of necrotic and infected wounds, those wounds with high moisture content defy even the larvae. Rumours of healing fish had reached Professor John Church, chairman of the International Biotherapy Society. Perhaps organisms which live in an aquatic environment could help to heal “wet wounds”; he mused. We received anecdotes of the widespread use of such fish in southern India, and so, while travelling through the region, I decided to hunt down the practice in order to see if it worked. To my surprise, the practice was well known, particularly in rural areas. Locals with skin infections, infestations, and wounds would bathe the affected limb in the pond, while certain fish would be drawn to the lesion and nibble at it, thereby removing diseased tissue. After some searching I discovered Rishimangalam Tank, a local “holy pond” in the centre of Trivandrum, Kerala State. Through the services of an interpreter, some local boys were happy to collect some fish they recognised, using their dhotis as fishing nets. My intention had been to pickle them in a jar of gin for later identification. However, by coincidence, that very evening I met Professor Padmanabham of the fish biology department at the University of Kerala. He was familiar with Macropodus cupanus, the fish which he identified for me, as he had written a thesis on it. He told me that the practice of bathing limbs in pools for fish to help healing was widespread; in particular, mothers brought their children to be cured of scabies. The fish live in polluted water where they survive by both aerial and gill respiration, possessing accessory labyrinthine organs. Their preferred food is mosquito larvae, and as they eat constantly they do not need starving before use, unlike some species of maggots. Once drawn to the limb by substances which diffuse from the wound into the water, they eat, enjoying living and dead tissue equally. Although they nibble at the necrotic tissue faster, the eating of the living tissue can be quite painful. Perhaps we are not all ready to have our British wounds nibbled away, but with the use of local anaesthetic cream before treatment, the day may yet come where dermatology departments offer maggot treatment for the drier lesions, and the “biopool” for the wetter ones.

Jonathan Cohen, senior house officer, Enfield

We welcome articles of up to 600 words on topics such as A memorable patient, A paper that changed my practice, My most unfortunate mistake, or any other piece conveying instruction, pathos, or humour. If possible the article should be supplied on a disk. Permission is needed from the patient or a relative if an identifiable patient is referred to. We also welcome contributions for “Endpieces,” consisting of quotations of up to 80 words (but most are considerably shorter) from any source, ancient or modern, which have appealed to the reader.


9 Secretary of State for Health. The new NHS. London: Stationery Office, 1997 (Cm 8807.)


14 Meyer J, Bridges J. An action research study into the organisation of care of older people in the accident and emergency department. London: City University, 1998.


