Methodology

Action research: a systematic review and guidance for assessment

H Waterman[1*]
D Tillen[1]
R Dickson[2]
K de Koning[3]

[1] School of Nursing, Midwifery and Health Visiting, University of Manchester, Manchester, UK
[2] School of Health Sciences, University of Liverpool, Liverpool, UK
[3] Royal Tropical Institute, Amsterdam, The Netherlands

[*] Corresponding author

Action research

Executive summary

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Executive summary

Background

Action research is employed in many healthcare settings in the UK but its scope and role in this context is not clear. It is practised under a variety of names and has been applied in many settings since Kurt Lewin coined the phrase in 1947. Its particular strength lies in the coupling of participation and research to action and change.

Objectives

1. To provide a definition of action research.
2. To identify action research projects conducted in UK healthcare settings.
3. To analyse the identified action research in relation to:
   - project aims
   - reasons for choosing action research
   - issues addressed by action research
   - outcomes and impacts
   - strengths and limitations.
4. To develop guidance for the assessment of action research proposals and reports.

Methods

There were four interlinked phases: a preliminary literature search, a systematic literature review combined with a consultative process, and data synthesis. This interpretative systematic review combined data from written reports of action research with primary data collected from focus group interviews.

Fourteen electronic databases were searched. Relevant journals and conference proceedings were handsearched and the project was advertised at research conferences. Over 400 NHS research and development (R&D) managers and 300 action researchers were contacted.

Research reports were included if they:

- were carried out in a UK healthcare setting
- were published after 1974
- demonstrated or indicated an intention to follow a cyclic process in which problem identification, reflection, research, an action intervention and evaluation were interlinked
- indicated that a partnership existed between the action researcher and the participants involved in the change process.

In anticipation of the limitations of the published material, five focus group interviews with participants from included studies and two additional focus groups of action researchers attending an action research conference were carried out.

Data from the studies reviewed were entered into a statistical software package. For closed questions, frequencies were calculated to provide descriptive information; for open questions, content analysis was undertaken. Data from the focus groups were integrated with data from the systematic review. A narrative overview for each of the objectives was produced. Data synthesis was substantively different in the achievement of the sub-objective on the strengths and limitations of action research. Here the studies and focus group interviews were analysed, drawing on a process similar to meta-ethnography. Data were compared and contrasted, and organised into categories from which themes emerged.

Results

The definition

Reflection on the literature and the primary research findings led to the following definition being used in this review.

Action research is a period of inquiry that describes, interprets and explains social situations while executing a change intervention aimed at improvement and involvement. It is problem-focused, context-specific and future-oriented. Action research is a group activity with an explicit critical value basis and is founded on a partnership between action researchers and participants, all of whom are involved in the change process. The participatory process is educative and empowering, involving a dynamic approach in which problem identification, planning, action and evaluation are interlinked. Knowledge may be advanced through reflection and research, and qualitative ▶

and quantitative research methods may be employed to collect data. Different types of knowledge, including practical and prepositional, may be produced by action research. Theory may be generated and refined, and its general application explored through the cycles of the action research process.

It is hoped that the definition will contribute to debate on the role of action research within the healthcare setting. It is expected that it will be refined as the understanding and process of action research evolve.

An overview of healthcare action research in the UK

The search yielded 285 possible studies, of which 59 met the inclusion criteria. Most were conducted between 1988 and 1996. The duration of projects ranged from 1 to 48 months (median 12 months). Nurses formed the largest percentage of active participants (70%) and the majority of projects took place in hospitals (53%). There were 21 funded studies (36%). Interview, questionnaire and observation were the three most common methods of data collection. Qualitative research methods predominated.

Aims, reasons and issues addressed

The primary aims of the included studies were assessment of current situations, development of changes and evaluation of project outcomes. The reasons for choosing action research were participation, facilitation of change and a cyclical process related to change. Issues addressed included professional education, assessment of clinical practice (areas where there was a conflict in clinical practice or a lack of evidence) and assessment of professional roles. The results suggest that action research is frequently selected to understand and resolve complex problems, and that the participatory nature and the process of action research enables the development of relevant and appropriate practices, services and organisational structures.

Outcomes and impacts of included studies

Outcomes and impacts varied and were dependent on where in the research process they were assessed (e.g. during the problem identification, planning or evaluation phase). Immediate outcomes from group action produced such things as clarification of issues and identification of need (problem identification phase), development of innovation and preparation for change (planning phase), and education, change and ownership (evaluation phase). Personal and professional developments were noticeable outcomes throughout. For the purpose of this review, impacts were defined as 'a lasting effect or influence', as defined by the action researchers involved. A number of studies reported impacts such as continuation of newly established initiatives, adoption of projects into educational curricula and acceptance of new clinical practices.

Pivotal factors – strengths and limitations of included studies

Eight pivotal factors related to action research were identified: participation, key persons, action researcher–participant relationship, real-world focus, resources, research methods, project process and management, and knowledge.

Guidance for assessment of action research projects and proposals

These eight factors were used in combination with the definition to develop 20 questions that may be useful in the evaluation of action research protocols and project reports. These questions (and the accompanying explanatory notes) should be field-tested in order to assess their validity.

Conclusions

Action research is a complex research process that has been used in a wide variety of healthcare settings in the UK. A number of definitions of action research are currently being applied to the methodology. The definition provided here includes the major components of an action research methodology.

This definition emphasises the importance of 'involvement' in the action research process, which is consistent with the emphasis in NHS policy to increase the active participation of users of services in their care. However, few users were involved in the studies included in this review.

The review suggests that action research is being used and has the potential to play a role in achieving the goals of the NHS. Specifically, the methodology has the potential to be useful in areas such as developing innovation, improving healthcare, developing knowledge and understanding in practitioners, and involvement in users and staff.

The findings indicate that action research is suited to developing innovative practices and services over a wide range of healthcare situ-

ations. The review demonstrates how the action research process can assist in the establishment of an environment that promotes the generation and development of creative ideas and implementation of changes in practice.

Implications for policy

- Action research should be considered as complementary to other research approaches with the NHS.
- Action research has a potential role within the NHS R&D programme.
- A mechanism for evaluation of the quality of action research is required.

Implications for practice

A movement towards the acceptance within the NHS of the value of action research could be assisted by:

- the inclusion of action researchers on appropriate R&D bodies
- the provision of appropriate information on action research to those involved in policy development and funding decisions
- the dissemination of results of action research projects
- the adjustment of funding and reporting mechanisms to allow for the action research process
- the development of collaborative educational/healthcare institution action research education programmes
- field testing of the guidance for assessing action research.

Implications for future action research

Funding of action research would be appropriate in (but not limited to) the following areas:

- innovation, for example, in the development and evaluation of new services
- improvements in healthcare, for example, monitoring the effectiveness of untested policies or interventions
- development of knowledge and understanding in practitioners and other service providers, for example, promotion of informed decision making
- involvement of users and NHS staff, for example, investigation and improvement of situations in which there is poor uptake of preventative services.

Publication

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NHS R&D HTA Programme

The NHS R&D Health Technology Assessment (HTA) Programme was set up in 1993 to ensure that high-quality research information on the costs, effectiveness and broader impact of health technologies is produced in the most efficient way for those who use, manage and provide care in the NHS.

Initially, six HTA panels (pharmaceuticals, acute sector, primary and community care, diagnostics and imaging, population screening, methodology) helped to set the research priorities for the HTA Programme. However, during the past few years there have been a number of changes in and around NHS R&D, such as the establishment of the National Institute for Clinical Excellence (NICE) and the creation of three new research programmes: Service Delivery and Organisation (SDO); New and Emerging Applications of Technology (NEAT); and the Methodology Programme.

Although the National Coordinating Centre for Health Technology Assessment (NCCHTA) commissions research on behalf of the Methodology Programme, it is the Methodology Group that now considers and advises the Methodology Programme Director on the best research projects to pursue.

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