A systematic review of evaluations conducted in Adelaide Community Health Services

Gwyn Jolley, Fran Baum, Catherine Hurley, Denise Fry, Megan Kyriacou

Gwyn Jolley
gwyn.jolley@flinders.edu.au
SA Community Health Research Unit
Fran Baum and Catherine Hurley
catherine.hurley@fmc.sa.gov.au
Flinders Universiry
Denise Fry
Consultant
Megan Kyriacou
South Australian Community Health Research Unit

Paper presented at the Australasian Evaluation Society 2004 International Conference 13-15 October-Adelaide, South Australia www.aes.asn.au

Abstract

Systematic reviews tend to focus on specific interventions and populations. Few programs offered by CHS fit this category. Most evaluations have looked at process and quality issues. Few have considered outcomes.

This paper presents findings from a systematic review of CHS evaluations. The review was conducted to learn more about evaluation in CHS – extent, approach, complexity and quality; and to assess the feasibility of systematic review of these mainly small-scale, qualitative evaluation reports. A review protocol and selection criteria were developed. Ninety-three reports were each reviewed by two reviewers from the review team.

The diversity of work in CHS was confirmed. Challenges to systematic review included the lack of consistency in content and style. Few evaluations used the methods referred to in the 'hierarchy of evidence'. Standards for assessing qualitative methods are still in their infancy. Long-term resource commitment is needed to increase evaluation capacity for CHS and development of appropriate methods for systematic review.

Introduction

The systematic review reported here aimed to facilitate an analysis of the evidence for the effectiveness of community health services. The research was built on an earlier study (Baum, Duffy & Jolley 2003) that considered current methods of measuring effectiveness and the problems associated with applying these methods in a community health context. Three factors were identified as contributing to the difficulty of assessing community-based interventions: the issue of attribution, the

complexity of most community health interventions and the problems this poses for evaluators and, finally, the importance of ensuring that seductively simple evaluation methods do not drive the type and scale of community health interventions.

The objectives of the systematic review were to:

1. Identify and document community health service evaluations
2. Trial the application of systematic review and analysis to the evaluations
3. Assess the effectiveness and appropriateness of systematic review to community health evaluations
4. Determine areas in which common assessment tools could be used by community health services
5. Contribute to an evidence base for community health services and approach

Community health context

Community health services (CHS) have been part of the landscape of Australian health care through most of the twentieth century. Community health services share a common philosophy with that espoused by the World Health Organisation in key documents such as the 1978 Alma Ata Health for All Declaration:

- Focus on health promotion
- Comprehensiveness of services
- Multidisciplinary teams
- Community involvement
- Partnership with other sectors
- Equity
- Social and population view of health

During the period of the study in metropolitan South Australia, community health services have been separately incorporated bodies serving a geographic area. Examples of the type of services and programs offered by community health services are listed in Box 1.

Box 1. Main service categories offered by community health services in metropolitan South Australia

Community development and capacity building
Working with groups(e.g. suicide prevention, community gardens, urban re-generation) social health activities (environmental health action groups, health rights groups, sexual abuse survivors); information and resources provision.

Mental health
Counselling, support groups, information and advocacy, information.

Physical health
Medical and nursing, screening, self-management of chronic disease, health promotion to encourage healthy lifestyles

Interpersonal violence
Child abuse, child sexual abuse, violence intervention, support groups, counselling.

Early childhood development
Speech pathology, nutrition, immunisation, information and education for parents, early intervention

Drug and alcohol
Needle exchange, counselling, information and education, access to methadone program, community action and advocacy

Sexual and reproductive health
Counselling, information and education, information about services and referral, screening for cancer.

Adapted from: DHS 2001

It is also useful to think of community health in terms of the three main areas of activity:

- One-to-one services eg. allied health, counselling
- Group programs eg chronic disease self-management, information, skills and support around a shared issue

- Community development and social action eg. supporting a residents' action group, advocacy for policy change

The comprehensive nature of community health means that services would normally have some activities in each of these areas.

Systematic reviews and applicability to community health evaluation

The past decade has witnessed an increasing focus on the search for evidence of effectiveness with health services. Lapsley (2000) describes the growth of the hospital and other health service accreditation movement through the 1980s and 1990s and concludes that there have been moves "towards more rigour in assessing institutional quality" (Lapsley, 2000, p. 284). Initiatives such as the Cochrane Collaboration have lead to more emphasis on producing evidence bases for medical and other interventions. The National Health & Medical Research Council has supported the development and dissemination of evidence-based guidelines as a national activity. Lapsley (2000, p. 288-9) notes that these guidelines "are important tools in achieving quality assurance because they assist and promote professional accountability, facilitate an evidence-based approach to clinical decision making and improve the process and outcomes of clinical and preventive care". Perhaps the most significant feature of these initiatives is the attention they bring to the fact that many medical interventions are not as well evaluated as many imagined and many have not been systematically assessed. This means that strong evidence-bases for quite a few health service activities are lacking, including both hospital and community health services. Perhaps the difference for community health is that attention is more readily drawn to its activities because so many of them concern health promotion and disease prevention areas of health service activity that normally attract more critical scrutiny. Curative interventions are given more credibility, even though they are often not backed by an evidence base, partly because even if cure is not the outcome, the care compensates for this. In the light of the pressures and issues described above, community health services need to find ways to assess, document and promote their achievements in more effective ways than they have to date.

Methods

The study commenced in February 2003. A reference group including the research team, community health practitioners and Department of Health policy people was established to guide and support the study. Initial selection criteria were established: all evaluation reports from the five community/women's health services in the metropolitan region dated 1999 – 2002 were identified and collected (n=120). Inclusion and exclusion criteria were developed for the reports and this resulted in a final set of 93 reports for review. These criteria were:

- formally documented evaluations conducted between 1999-2002 where a metropolitan community health service was a key player in the activity/program
- the report should contain at a minimum:
  - description of the intervention
  - description of the evaluation method
  - report of findings

A review protocol, which drew on the work of Popay et al (1998) and Rychetnik and Fromer (2002) was developed in consultation with the working group. Questions were divided into two groups: 12 questions about the description of the intervention and four questions about the evaluation methodology (Appendix 1). Each question was scored from 1 (not met at all) through to 5 (fully met). The review team was made up from the three researchers (FB, GJ, CH), a practitioner from each community health service and an interstate consultant (DF) with considerable experience in primary health care research and evaluation. Each report was independently reviewed twice: once by the interstate consultant and once by a member of the South Australian review team. Training sessions with the review team were held to maximise consistency and to finalise the review protocol questions.

Short evaluation workshops were held with the staff and managers at each of the participating community health services. The purpose of the workshops was to gain an understanding of the current uses of evaluation within services and the factors that promote or act as barriers to practitioners undertaking evaluation of their work. Six workshops took place between July and September 2003, with 127 participants in total.

Data referring to the characteristics of the evaluation reports and the interventions were summarised to provide totals, percentages and frequencies for each category.
Question scores were analysed by reviewer to check consistency between reviewers. Total and mean scores for each question were calculated by individual reviewer and by the mean score from the two reviewers. Reviewers' comments were transferred to Word and analysed against the question and supplementary questions where applicable and summarised by major themes. Evaluation workshop data were entered into Word. Uses and supports for evaluation were analysed by themes. Barriers were scored for each group and collated along with suggested ideas to address these barriers.

Findings

The findings are presented as a summary of the interventions described in the evaluation reports, the quantitative data from the scoring system, and analysis of scores and comments for groups of questions in the review tool. Finally, findings from the evaluation workshops are summarised

Description of interventions
Over 60% of interventions were for less than six months, while about 27% spanned one year or more. Over half the interventions used a group situation to deliver the program, while most of the remainder were community development type programs. Only 3% of the evaluation reports were concerned with one-to-one care. Over half the interventions involved less than 20 participants. Children and young people or unspecified adults were the two most common age groups targeted. Most interventions were open in terms of participants' gender. About 28% were targeted at women and only about 6% specifically at men. Ethnicity was also generally open with about 13% of programs designed for CALD populations and 3% for ATSI people.

More than half of all interventions focused on physical health. This category encompassed a broad range of health issues and client groups, including a range of

allied health interventions for children with developmental delay and falls prevention programs for older people. Nutrition, physical activity and chronic disease management also featured, Almost one third of interventions were concerned with social issues including childhood sexual abuse, relationship violence and gambling. About 15% of interventions were concerned with mental health issues.

Generally, reports did not state the source of funding unless this was from an external grant or variation to the service agreement with DHS. Similarly, very few reports contained information about the level of funding or resources committed to a program unless it was funded by a grant. Seven of the 18 grant funded programs had used an external evaluator while none of the core funded programs had been evaluated externally.

Scoring on criteria

The total possible score was 160. The range of scores was 57 (36%) to 145 (91%) with a mean score of 89 (56%). Consistency of scoring across reviewers was assessed by looking for differences of two or more points on the score given for each question. Instances where there were differences of two or more ranged from 4.3% to 14.4% of scores, depending on the question. Questions on goals and health determinants showed most consistency of scoring between the two reviewers and those on sustainability and sampling showed most variation. Mean scores across all reports for each question are shown in Table 1.

Table 1. Mean scores for each question across all reports

Question	Mean score (scale 1-5)
Goals	3.46
Description of intervention	3.53
Program logic	2.96
Equity	2.97
Health determinants	2.83
Community participation	2.98
Collaboration & partnerships	2.76
Unintended outcomes	2.55
Expected outcomes	3.27
Long term health outcomes	2.35
Transferability	2.34
Sustainability	2.31
Evaluation methods & justification	2.68
Sampling	2.63
Evaluation context	3.02
Evaluation data quality	2.72

Description of problem and intervention

The question concerning description of goals had one of the highest mean scores. One comment for a high scoring report was:

> *Goals are clearly defined and well staged (i.e. they build upon each other). The problem and its identification is well described. Score 4.5*

A comment for a lower scoring report was:

Unclear what problem is being addressed… Goals not clearly stated and not clear which strategies related to which goals. Score 1.5

Most reports contained a clear description of the program goal and distinct strategies. Problem definition and information about the how the problem came to be identified was less clearly articulated. It may be that this information is contained in program proposal documents which tend to be separate from the evaluation report and so were not part of this systematic review.

Reviewers' comments sometimes noted a lack of detail of what actually occurred during the program. This is likely to be related to the intended audience; it may be assumed that colleagues in the same service have a good knowledge of the programs running or this detailed information may be in the individual service provider's program notes but not transferred to the evaluation report. There was generally little information about service provider skills.

Program logic and health determinants
In terms of describing the program logic and linking this to health outcomes, this was generally not well done. Evaluation reports needed to make fewer assumptions about the readership and be more explicit in identifying and articulating the rationale and program logic. Similarly, with discussion on macro level health determinants, there was a variety of understandings among reviewers and their interpretation of reports. Health determinants were described on a continuum. For some, any reference to looking one step back from the main intervention was considered a move 'upstream'. A few reports were said to tackle, or at least discuss, underlying causal issues. This criterion was one of the few where evaluation reports were stated to analyse an issue that was beyond the intervention itself.

Primary health care principles
Questions on equity, community participation and collaborative partnerships were included in the review tool. Generally, reports appeared less comprehensive in covering these broader issues. Again, this may be linked to the intended audience and use of the type of evaluations included in this systematic review.

Reports and comments revealed various understandings of equity. In many reports this was not considered at all, even though the program may have been designed with equity issues in mind. For others, equity was described in terms of interventions for disadvantaged groups or geographical areas. While most interventions appeared to have an equity component, this was not always a feature of the evaluation.

Approximately one-third of reviewer comments stated that ccommunity participation was not discussed within the evaluation report. Community participation was mainly described as providing feedback to the evaluation or as recipients of a service. Only a few reports appeared to describe community participation in terms of more empowering planning, consultation and review processes, or to comment on the effectiveness of this. Where community participation was measured, it was by attendance numbers.

About 28% of comments noted that collaboration and multi-sector partnerships were not addressed in the report. However, many comments were positive, indicating that

the evaluation described the extent and effectiveness of collaboration. Other comments noted a lack of detail, for example, no description of respective roles of collaborative agencies, or gaps in partnerships.

Intermediate and long term outcomes
Reviewers were generally positive about reporting of intermediate outcomes, although there were some concerns about the validity of data and findings. Some reviewers provided a critique of the outcomes evaluation in terms of data quality or unclear objectives to evaluate against.

Longer-term outcomes were not discussed, according to over half the reviewers. There were some differences in interpretation of long term health outcomes with some reviewers referring to health service improvements or skills, knowledge and behavior changes in participants. These outcomes, while having the potential to lead to health outcomes changes, are more properly described as steps towards this. Only a very small number of reports drew on research to support the links between the intermediate outcomes of the program and longer-term health outcomes.

Over half the comments indicated that unexpected outcomes were not addressed. A small number of evaluations were reported to discuss unexpected outcomes or unexpected changes that were made within the implementation.

Transferability and sustainability
Nearly 40% of reviewer comments noted there was no discussion of transferability in the evaluation reports. One-third of comments indicated that there was sufficient information for others to replicate the program. Only 10% of comments reported a discussion of transferability to other settings or populations. Nearly 60% of review comments noted that sustainability issues were not addressed, while one-third said there was some discussion.

Evaluation methodology
One-third of reports described only one method used in the evaluation. Another third used three or more methods. Feedback sheets were most frequently used followed by surveys and observation/reflection by the service provider.

Overall, the reports described the intervention more comprehensively than the evaluation methods and approach. Reviewers noted that there was often insufficient information about the evaluation and the methods used. When the method was described it was seldom justified nor were the limitations of the chosen method acknowledged. In terms of sampling for the evaluation, reports were best at describing the sample and less clear about representativeness and response rates. Most evaluation involved all program participants, or at least, all those that attended when data collection took place. This is appropriate for small programs. There seemed to be little attempt to record or follow up non-responders, perhaps due to resource constraints.

Evaluation workshops
Most of the current uses for evaluation were said to be for planning, accountability, and validation and promotion of community health programs. Respondents noted that access to skills training, expertise and support; a culture of evaluation; and seeing evaluation used to make a difference would enhance evaluation effort. Barriers to

evaluation, identified in all workshops, centred on lack of time and resources and whether the findings of evaluation were used in decision-making. However, further discussion revealed a number of other underlying issues and concerns, for example, understanding that evaluation would add value a service, particularly when immediate client needs were more pressing, and the need for a culture of learning and reflection. Typical comments were:

.

We are under pressure to "do" rather than reflect/analyse

Evaluation needs to be normalised, seen part of the culture, not a threat

Discussion

This systematic review has allowed a detailed consideration of 93 evaluations conducted in metropolitan community health services in Adelaide. This is the first time that community health evaluations in Australia have been systematically collected and studied. The study has revealed a large amount of varied and innovative activity within community health services and a similarly large and varied evaluation practice. The identification and sharing of knowledge about the many programs occurring in metropolitan Adelaide CHS was an unexpected benefit of the review and of using community health practitioners as reviewers. Reviewers were able to read about programs and activities in other regions and services, and this information is now available more widely. Reviewers were generally impressed with the number, quality and innovation of programs.

The study has shown that the quality of the evaluations is generally good but that there is some scope to improve comprehensiveness and to increase the usefulness of the evaluations for reporting and planning purposes. Almost all the reports were written with an internal audience and local organisational learning in mind, rather than for more formal purposes of theory development, external publication and systematic review. There appears to be a pattern in the reports of insufficient detail for an outside reader. Most of the reviewer's concerns reflect this mismatch between the purpose of the report and requirements for a systematic review.

In terms of justification of the program and identification and definitions of issues addressed, this is more likely to appear in a program proposal document. Community health practitioners often write evaluation reports at the end of an intervention, so how and why the program came about may not appear relevant at that stage. For the purpose of systematic review, the proposal planning and evaluation documents need to be collated.

Given that many community health interventions target one step in a complex, long term process of health enhancement, an explanation of the program logic and where the intervention fits in the broader health outcome framework is essential in judging its worth and effectiveness. Again, this information may be contained in the proposal document but needs to be also included in the evaluation report. Other possible reasons for not articulating the links to longer-term outcomes are: an assumption that these are understood, insufficient time and resources to write up programs in detail, lack of familiarity with research findings, or a paucity of research in the field of practice. While it is important to acknowledge that community health interventions

rarely have the capacity to influence longer-term health outcomes directly, the case needs to be made so that the sector is supported and resourced adequately.

While we assume that programs were usually designed with primary health care principles in mind, this is often not reflected in the evaluation. Practitioners in the community health sector may take these principles as given, since issues like equity and community participation are enshrined in organisational strategic plans. However, achievement of these practice principles are not often explicitly included as part of the evaluation.

Evaluations rarely contained comprehensive discussion of the transferability and sustainability of programs. This suggests that transferability and sustainability are considered beyond the scope of the every day work of community health service programs and their evaluation. To build up a body of evidence for programs, it will be important to encourage practitioners to look beyond the immediate assessment of programs to these broader issues

Conclusion

Community health services are providing many innovative community-based programs for a wide variety of needs and issues. They work with some of the most disadvantaged people in society who are experiencing complex health and social problems. Enormous effort is dedicated to evaluation by practitioners who often lack time, support and skills in this area. A supportive organisational and system culture that values and uses evaluation is likely to be the most effective way to enhance evaluation in the sector.

This exercise demonstrated that there is value in conducting a systematic review of community health evaluations. It highlighted areas in which evaluation reports produced by the community health sector could be improved and strengthened in order to contribute to the broader mission of community health to practice comprehensive primary health care. The reports were mainly intended for an internal audience and used qualitative methods. Systematic review processes for community health need to take account of the diversity of issues being addressed and the population groups using the services. There is a growing literature on the evaluation of qualitative approaches and this exercise demonstrated that it is possible to review such evaluations in a systematic manner. This study provides a base for further development of systematic review of community health interventions.

Appendix 1: Review Questions

1. Questions asked about the description of the intervention

1.1 Does the evaluation provide a clear description of the program goals/ aims/ expected outcomes?
1.2 Does the evaluation provide a clear description of the intervention/program and the processes used in it?
1.3 Does the evaluation provide a program logic?
1.4 Does the evaluation consider equity issues?
1.5 Does the evaluation include macro and micro aspects of health determinants?

1.6 Does the evaluation discuss to what extent and how effectively the intervention involves community participants?
1.7 Does the evaluation discuss to what extent and how effectively the intervention involves other groups and agencies?
1.8 Does the evaluation document unintended aspects of the intervention?
1.9 Does the evaluation report on achievement of program objectives/expected outcomes?
1.10 Does the evaluation discuss the likelihood of achieving longer term health outcomes?
1.11 Does the evaluation report on transferability of the intervention?
1.12 Does the evaluation report on sustainability of the outcomes?

2. Questions asked about the evaluation methodology
2.1. Does the evaluation provide a sound justification for the evaluation method and acknowledgement of limitations of the method chosen?
2.2 Does the evaluation use a representative sampling method for those consulted as part of the evaluation?
2.3 Does the evaluation provide an adequate description of the context of intervention?
2.4 Does the evaluation provide evidence of data quality?

References

Baum, F Duffy, J and Jolley G eds. 2003, Investing in community health – finding the evidence for effectiveness, SACHRU, Adelaide.

Department of Human Services, Metropolitan Division 2001, Final Report: Metropolitan Community Health Services Review, Government of South Australia, Adelaide.

Lapsley, H 2000, "Quality measures in Australian health care" Chapter 16 in Bloom, A.(ed.) *Health Reform in Australia and New Zealand*, Melbourne: Oxford University Press.

Popay, J Rogers, A and Williams, G 1998, "Rationale and Standards for the Systematic Review of Qualitative Literature in Health Services Research." *Qualitative Health Research* 8(3): 341-351.

Rychetnik, L and Frommer, M 2002, *A Proposed Schema for Evaluating Evidence on Public Health Interventions Version 4*. National Public Health Partnership.