Collaborative research on breastfeeding in Fiji: narrowing the gap between research and practice

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ORIGINAL PAPERS

Abstract

Public health programme strategies should be based on research data regarding targeted health problems and contexts. A universal problem, however, is that often the results of research that is carried out are not used in programme planning and implementation. As in most countries, resources in Pacific countries for health research are limited and much of the research carried out is not tailored to policy-makers' and programme planners' needs.

It is argued that researchers investigating maternal and child health (MCH) issues should make a judicious choice of research methodologies to ensure:

- that the information generated correlates with the information needs of policy-makers and programme implementors; and
- that the research process contributes to utilization of research results.

In this paper, the rationale for adopting both an ecological and collaborative approach to investigating community health topics is presented. This approach is illustrated through description and analysis of the methodology used in a qualitative study on breastfeeding conducted in urban Suva, Fiji. The discussion includes: who was involved in planning and conducting the research; how priorities for data collection were established; the scope of data collection; how data was collected and analyzed; and how the results of the research were translated into practical recommendations for breastfeeding policy and programmes.

One year after completion of the research, many recommendations have been implemented by stakeholders. The collaborative research approach appears to have both ensured the development of specific and practical recommendations for strengthening breastfeeding promotion, and in engendering on the part of stakeholders a sense of ownership of those recommendations and commitment to implementing them.

This experience suggests that for applied research on various MCH and community health topics, both the ecological and collaborative approaches can be more beneficial than the conventional research methodologies.

Introduction

In the international public health literature there has been increasing discussion of the unacceptable gap between research and practice.[1] Chen and colleagues challenge social scientists to develop innovative approaches to social research which strengthen "research-to-action linkages" (*ibid., p. 211*).

In the MCH field, several features of conventional research methodologies appear to contribute to the research-practice gap. First, the scope of most research is based on reductionist epidemiological and behaviorist models in which data is collected on only a limited number of variables of interest. In MCH research, such variables invariably deal with women's knowledge and practices, in isolation from their psycho-social environments. Secondly, research methods used are usually expert, or researcher-dominated and programme implementors are not substantively involved in the research process. Mosley[2] has identified several constraints associated with such research: study results may not address priority concerns of health sector officials; researchers often have their own agenda; researchers often employ sophisticated methods which mystify the research process and results, often alienating

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programme staff and leading to decreased use of research results.

In this study, the scope of the data collection was holistic, based on an ecological model, and the research process itself was based on a collaborative relationship between a social scientist and breastfeeding programme practitioners. The conceptual underpinnings of the methodology are described below.

Ecological approach

It is increasingly recognized that individuals' health-related practices are determined by both intra-personal and environmental factors.[3] The limitations of individual-focused, behaviourist models largely explains the emergence and widespread interest in more ecological, or systemic, approaches both to the analysis of health-related issues and to the development of interventions.[4] In a social ecological framework, assessment of a given health issue involves both person-focused and environment-focused analyses at multiple levels: intra-personal; family; community; organizational levels. In such analyses interdisciplinary perspectives are sought and multiple data collection methods are used.

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Collaborative research approach

In most applied health research, expert researchers take full responsibility for planning and conducting research. There is often reluctance to involve programme practitioners in research on or evaluation of their own programmes. There is evidence, however, that utilisation of research findings is greater when programme staff and decision-makers are involved in the research process.[5,6]

A discrete body of research does not exist on "collaborative research." Rather, this approach draws on concepts and methods from several different related bodies of literature, all from outside the health field, namely, **organization development**[7], **organizational learning**[8,9,20] **action research**[10,11,12], **process consultation**[13], and **participatory programme evaluation**[5,14].§

In collaborative research, programme stakeholders are intimately involved with a researcher, experienced in social science methods, in developing a research methodology, collecting and analysing data and formulating recommendations for new or ongoing programmes.

Research context: breastfeeding policy and programmes in Fiji

In Fijian society, amongst both Indo-Fijian and Indigenous Fijian women, breastfeeding is valued and widely practiced. According to the 1993 Fiji National Nutrition Survey[19] 95% of Fijian women initiate breastfeeding after birth. However, while 80% of Fijian women breastfeed their babies for three months, there is a sharp decline in the number of women who breastfeed four to six months (47%).

According to WHO guidelines[21] exclusive breastfeeding implies that only breastmilk is given. Other foods, including water, are not given to a child during the first 4-6 months of life.

In keeping with global policy guidelines developed by WHO (1993) and UNICEF, the Ministry of Health (MOH) is promoting exclusive breastfeeding of infants from birth to 4-6 months. In 1992 the Baby-Friendly Hospital Initiative was launched in Fiji to encourage hospitals to adopt practices which promote exclusive breastfeeding.

A number of training activities, supported by UNICEF and WHO, have been carried out with hospital staff to educate them on the facts and practices related to exclusive breastfeeding. In 1994, the MOH approved official policy guidelines for the promotion of exclusive breastfeeding and a Breastfeeding Sub-Committee was established to ensure coordination of breastfeeding activities in the country. The past few years, progress has been made throughout Fiji, primarily in hospital settings, in developing strategies to promote exclusive breastfeeding. Outside of the hospital setting the promotion of exclusive breastfeeding has not yet been extensively carried out.

In 1997, the MOH decided that a study should be undertaken in the Suva area to assess the breastfeeding-related knowledge and practices both of women and health providers to determine how to further strengthen breastfeeding promotion activities. In initial discussions at the MOH it was decided that qualitative methods should be used in the study in order to obtain an in depth understanding of current breastfeeding attitudes and practices. The research reported on here was undertaken in response to that request, with support from the MOH and UNICEF.

§ *See Ref. 15 for further discussion of the key concepts and methods from each of these fields.*

Table 1. Phases, steps and responsibility in the collaborative research process

Phases and steps in research process	Persons responsible
Phase I: Develop stakeholder support for the study	
Step I: Define study goal & general objectives	UNICEF, Study Coordinator (SC)
Step 2: Elicit support from MOH officials & other key breastfeeding stakeholders	SC and UNICEF
Step 3: Elicit information priorities from breastfeeding stakeholders	SC and UNICEF, MCH officials from MOH, hospital nurses (HN), community health nurses (CHN), MOH dieticians, NGOs, UNICEF
Step 4: Choose research team members	MCH officials from MOH
Phase II: Develop study methodology	
Step 5: Define specific study objectives	SC & core research team (7 members)
Step 6: Specify criteria for each category of interviewees	SC & core research team
Step 7: Develop interview guides	SC & core research team
Step 8: Train practitioner-researcher team members to conduct interviews	SC
Phase III: Data collection and analysis	
Step 9: Conduct interviews	SC & core research team
Step I0: Data analysis	SC & core research team
Step II: Summarize findings	SC with revisions by core research team
Phase IV: Stakeholders develop study recommendations	
Step I2: Present key study findings to stakeholders	SC & core research team
Step 13: Involve stakeholders in development of study recommendations	30 breastfeeding stakeholders from MOH, NGOs and university.
Phase V: Dissemination and discussion of study results	
Step I4: Prepare study report	SC
Step I5: Prepare summary report	UNICEF
Step I6: Develop detailed plan for dissemination and discussion of results	Not done

Abbreviations: SC (Study Coordinator), MCH (Maternal Child Health), NGO (Non-governmental organisations), MOH (Ministry of Health)

Key features of the study methodology

A collaborative research approach was proposed by the study consultant-coordinator (*the first author*) to ensure the relevance of the information generated for policy and programme planners, and to increase the chances that study results would be used. A systems, or ecological, framework was adopted based on the breastfeeding sub-committee's recommendation that the study look not only at women's breastfeeding knowledge and practices, but also at the roles of health sector staff involved in MCH services.

Key features of the study methodology were:

- analysis of both intra-personal and contextual factors related to breastfeeding;
- a focus on practical concerns of breastfeeding programme staff;
- demystification of the research process;
- close collaboration between a social science health researcher and a team of breastfeeding programme practictioners during the entire research process;
- involvement of other breastfeeding stakeholders at critical points in the research process; and
- development of detailed recommendations for breastfeeding policy and programmes based on research results.

Steps in the research process

A series of 5 phases, each with several sub-steps, were followed in conducting the study. These steps draw on Patton's[5] work on collaborative evaluation. The phases and steps are found in Table 1. In the following section, an overview of each phase is provided, followed by an explanation of the *process* followed in each step and the *outcomes* of that process.

Phase I: Develop stakeholder support for the study

In a collaborative research approach, support for the research from key stakeholders should be developed at the outset by involving them at the initial planning stages. Their expectations and priorities for the research should be elicited and as much as possible incorporated into the methodology.

The systems, or ecological, approach adopted in the study implied that information should be collected in a variety of settings from different categories of people who are involved directly or indirectly in infant feeding.

Step I. Define study goal and general objectives

An initial step was to define an overall goal and general objectives for the study. Based on earlier discussions by the breastfeeding sub-committee, a draft goal and objectives were formulated. These were presented and discussed in the initial planning meeting with key MOH officials and other important breastfeeding stakeholders (Step 2).

Step 2. Elicit support from MOH officials and other key breastfeeding stakeholders

An initial meeting was held at the MOH with senior MCH officials. Other key breastfeeding stakeholders also attended namely, officials from the hospital, hospital nurses, community health nurses, nutritionists, representatives of community women's organizations and UNICEF. The purpose of the meeting was to explain the rationale for and phases in the proposed collaborative research approach and to discuss MOH expectations of the study.

The draft goal for the study was presented and based on the discussion it was modified to some extent. The agreed upon *goal* was: *to understand the knowledge, attitudes and practices of health personnel and of mothers/families related to breastfeeding and complementary feeding of infants in order to develop recommendations to strengthen breastfeeding promotion at community and health facility levels.*

For each of the categories of anticipated interviewees a general *objective* was formulated, for example, the following was formulated for the family level: *to understand the attitudes, practices and other factors related to breastfeeding and complementary feeding at the family level which influence the practices of mothers who work both inside and outside the home.*

Both the *goal* and *objectives* reflect an ecological orientation in which contextual factors related to breastfeeding are addressed.

Step 3. Elicit information priorities from breastfeeding stakeholders

Based upon the agreed upon goal and objectives for the study, participants were asked what type of information they thought should be collected. The suggestions of the various participants were discussed and a consensus was sought regarding the priority parameters to be investigated. As these items were agreed upon, they were recorded on the wall on a large piece of flipchart paper in a *thematic map* of "Breastfeeding in Suva." In keeping with a systems approach, the map was a simple tool for visualizing the multiple factors and actors which influence infant feeding and the interrelationships between them. The map would serve as a guide for the research team in further defining the research methodology. As development of the methodology proceeded, additional elements were later added to the thematic map.

The systems, or ecological, approach adopted in the study implied that information should be collected in a variety of settings from different categories of people who are involved directly or indirectly in infant feeding. With the stakeholders, priority categories of interviewees were identified - namely: women with infants; hospital personnel; health centre staff; private doctors; and community women's organizations.

Step 4. Choose research team members

In the initial MOH meeting there was strong support for the proposed collaborative research approach. In a collaborative study on breastfeeding, the core research team should be composed of individuals involved in different facets of breastfeeding promotion. The rationale for constituting a multi-disciplinary group is that individuals with different training and responsibilities have different perspectives which should all be taken into account in defining study content, in conducting interviews and in interpreting information collected. Meeting participants subsequently identified individuals with different professional, organizational and ethnic affiliations to constitute the multidisciplinary research team.

The role of the study coordinator was to provide a methodological framework for the study, to facilitate the

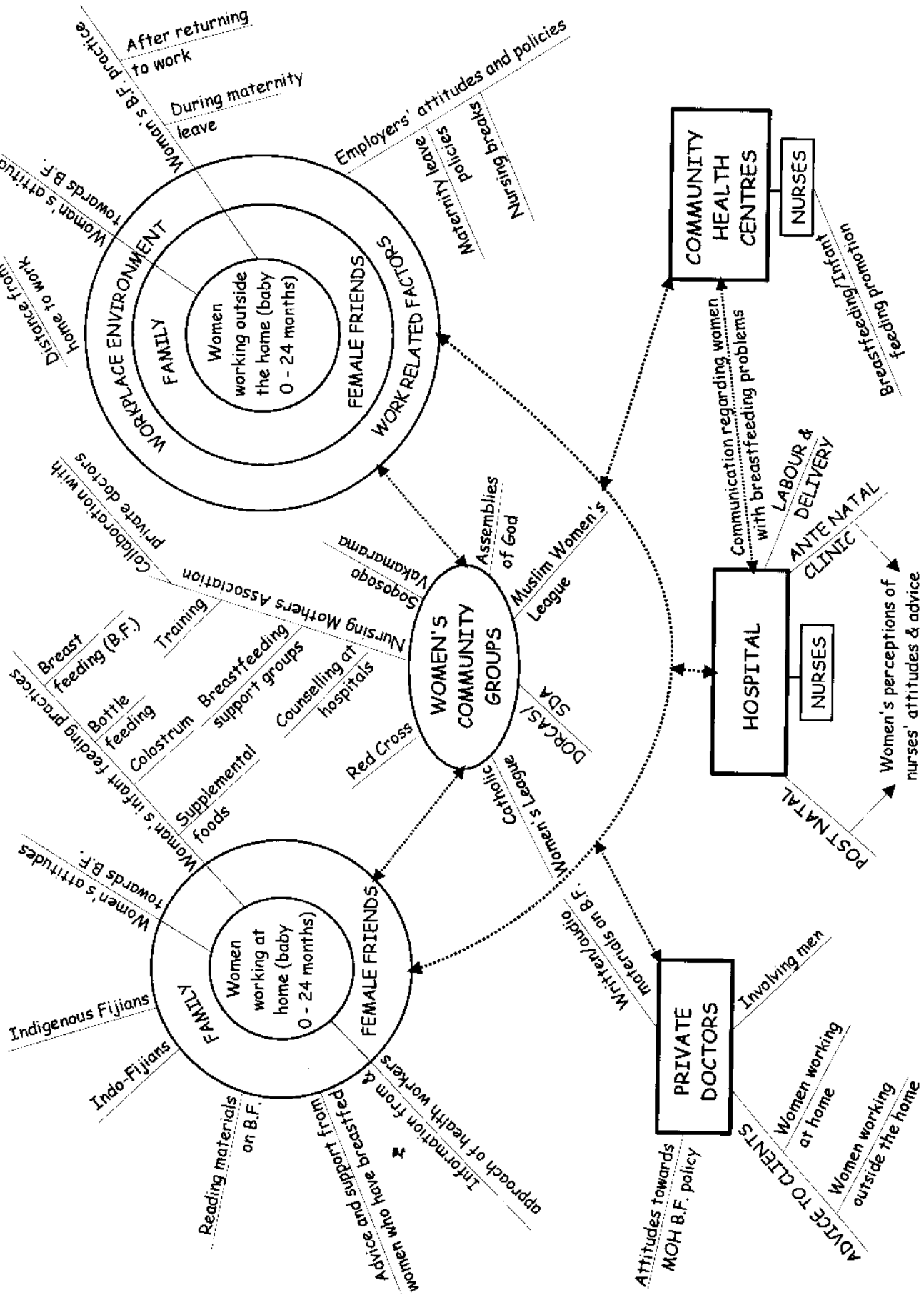

Figure 1. Thematic map of infant feeding / breastfeeding in Suva. Factors which influence women's practices.

involvement of all research team members in the process and to participate as an active member of the research team.

The core research team was made up of seven women: a dietician from the MOH; one hospital nurse, who is also a lactation counselor; a community health nurse; a doctor from the health promotion centre; one member of an NGO involved in developing breastfeeding support groups; one researcher from the Food and Nutrition Committee; and the study coordinator. The multi-disciplinary team was to be involved over a four-week period in developing the study methodology, in data collection and analysis.

Phase II. Develop study methodology

Based on the broad priorities for the study defined with MOH officials in Step I, the core research team was involved in further developing the study methodology. In a collaborative research approach, involvement of practitioners in the development of the methodology can contribute to the relevance of the research, to their sense of ownership of the research and to their individual and collective learning. At this stage, an explicit effort was made to demystify and simplify the methodology development process in order to maintain the interest and motivation.

Step 5. Define specific study objectives

Based on the study goal, the general objectives and the elements included in the initial thematic map (developed in Step 3), the specific study objectives were defined for each category of interviewees. Through a series of working sessions, each of the team members contributed to formulation of the objectives based on her own experience and interests as a health professional, and in most cases, as a woman with breastfeeding experience. During deliberations with the research team members, additional elements were integrated into the thematic map and corresponding study objectives were formulated. (See Figure 1)

Step 6. Specify criteria for each category of interviewees

The team members defined criteria for the interviewees: Indo-Fijian and Indigenous Fijian women working at home with children aged I to 24 months; Indo-Fijian and Indigenous Fijian women working outside the home with children aged I to 24 months; hospital nurses in the antenatal clinic and post-natal wards; community health centre nurses; hospital obstetricians and pediatricians; private general practitioners and pediatricians; and representatives of community women's organizations. For each category of interviewees a convenience sample[16] was identified.

Step 7. Develop interview guides

For each category of interviewees a semi-structured interview guide, composed primarily of open-ended questions, was developed based on the specific objectives. The guides were to be used either in individual or group interviews, depending on the category of interviewees.

Step 8. Train practitioner-researcher team members to conduct interviews

A critical step involved preparing the study team members to conduct the semi-structured, in depth interviews. In in-depth interviewing, the quality of the data collected depends to a great extent on the ability of interviewers to establish rapport with interviewees and encourage them to share their opinions. The intensive two-day training session, organized by the study coordinator, dealt not only with the technical aspects of the data collection but also with their attitudes toward breastfeeding and interpersonal communication skills.

The more technical aspects of the training dealt with: the differences between quantitative and qualitative inquiry; review of specific study objectives; steps in conducting in depth interviews; active listening skills; probing questioning skills; use of interview guides; note-taking; and the calendar and roles of team members during the data collection phase.

The attitudinal component of the training was particularly important. The fact that all research team members were fervent promoters of exclusive breastfeeding constituted potential interviewer bias. To overcome this, the attitudinal component of the training aimed to encourage team members to adopt both a holistic and objective view of the multiple intra-personal and environmental factors that influence a woman's infant feeding practices.

The attitudinal objective was dealt with through a series of experiential learning activities[17], including case studies and role plays, which have been shown to be effective in attitudinal change efforts[22]. The exercises required team members to analyze the constraints to breastfeeding encountered by women in real-life situations. At the outset, there was some resistance to adopting a more holistic and *emic*‡ perspective on the various infant feeding strategies adopted by women in different family and work contexts. As the training proceeded, team members broadened their perspective and their ability to empathize with attitudes and approaches to infant feeding which differed from their own.

‡ Anthropologists point out the difference between the *emic*, or subjective perspective of an individual or group on their own values or experience and the *etic* or outsiders' perspective on that same reality. The aim of qualitative research is to understand the *emic* perspective. In order to collect accurate information on interviewees' *emic* perspective, interviewers are required to temporarily relinquish their own values and perspective on the issue being researched.

Phase III: Data collection and analysis

In qualitative research, such as this, data collection and analysis should be carried out simultaneously.

Step 9. Conduct interviews

During an eight day period pairs of team members conducted the group and individual interviews with the different categories of interviewees. The following numbers of people were interviewed in each category of interviewees:

- Indigenous Fijian women working at home 36
- Indo-Fijian women working at home 33
- Women working outside the home 65
- Community health nurses 7
- Hospital nurses 23
- Hospital doctors 6
- Private doctors 6
- Community organizations 9

Step 10. Data analysis

Analysis of qualitative data is a cognitively challenging, time-consuming and fascinating process. While computer programmes for qualitative data analysis are available, the study coordinator opted for manual analysis of the data for two reasons. First, an unwritten objective of the study was to demystify the research process in order to fully involve programme practitioners in all phases of the research and in so doing to provide them with an approach which they could potentially use later on their own. Secondly, computer analysis would detract from the valuable collective learning which goes on during group analysis of qualitative data.

A widespread problem is that research results are not systematically communicated to the individuals and institutions to whom they can be of use.

To structure the data analysis process, a simplified approach to *content analysis* was used[16]. In the inductive analysis process group members presented and discussed respondents' answers, and identified the response categories which emerged from the data. This process required team members to step out of their own *etic* or outsidre's perspective in order to reconstruct the *emic* perspective. In so doing, they were progressively able to identify with interviewees' values and practices.

Through the interviewing and data analysis process the study coordinator observed a gradual change of perspective on the part of all of the research team members. At the beginning of the study, many team members felt that information on exclusive breastfeeding should be sufficient for women to adopt this practice. Through analysis of the information collected both on women's attitudes and practices and on their family and work environments, team members progressively adopted a more holistic understanding of the multiplicity of factors which influence infant feeding practices. For example, through analysis of the data collected from women working outside the home, they identified numerous factors which impede such women from exclusively breastfeed once they return to work.

Step 11. Summarize findings

Based on analysis of the interview data, a summary of the findings was prepared for each category of interviewees. Given time constraints, the study coordinator assumed primary responsibility for drafting these summaries. They were reviewed and revised by the research team members.

Phase III: Development of recommendations by breastfeeding stakeholders

In most MCH research projects researchers formulate recommendations themselves based on their findings. Several constraints are associated with researcher-formulated recommendations: they may be unfeasible, misunderstood or not acceptable to programme staff; they may be very general and not provide specific suggestions on how to improve future programmes; programme stakeholders may disregard them. In a collaborative research approach such constraints can be largely overcome by involving programme stakeholders, along with researchers, in the development of recommendations based on research findings.

In the breastfeeding study, a group of 30 people, including core research team members, and representatives of all major MOH and NGO breastfeeding stakeholders were involved in an intensive two-day meeting to discuss study findings and formulate their own recommendations.

Step 12. Present key study findings to stakeholders

At the outset of the stakeholder working session, the thematic map of breastfeeding was presented and an overview of the study findings was presented in relation to this map. In preparation for the meeting, succinct "key findings" had been extracted from each of the summary findings developed in Step 12. A special effort was made to formulate these findings in a clear, concise way so that they would be self-explanatory for consideration by the stakeholder working groups.

Step 13. Involve stakeholders in development of study recommendations

Provided with copies of the key findings, participants were divided into six working groups, each to deal with one portion of the study results. The groups were expected to discuss the key findings of the report and to develop

Table 2. Study findings and recommendations: for working women

Key findings	Recommendations
1. All working women interviewed had positive attitudes towards breastfeeding. However, the majority are not able to exclusively breastfeed due to constraints in their work settings. Few women exclusively breastfeed when they return to work. Most partially breastfeed when they return to work and introduce bottle feeding.	More effort needs to be made to ensure that women's work environments support their efforts to exclusively breastfeed. Such efforts should include workshops with employers to explain the benefits of supporting breastfeeding, nursing breaks, creches and child care facilities in the workplace.
2. Working women have little access to written materials on how to combine breastfeeding with working outside the home. Information on how to use Expressed Breast Milk (EBM) is not widely available.	Simple educational materials should be developed specifically addressing the needs of working women who are breastfeeding, including EBM. These should be disseminated at the hospital, health centres and in the workplaces.

recommendations for each key finding related either to breastfeeding policy, training, service delivery or promotion in community and workplace settings.

Virtually all of the stakeholders who were present participated enthusiastically in the task. The study coordinator carefully monitored each group's work and encouraged them to develop clear and practical recommendations. On the second day of the meeting, each group was asked to share the key study findings from their portion of the report along with their recommendations. Based on discussion in the plenary group, recommendations were either accepted or amended. The role of the study coordinator was to facilitate the large group discussion in order to arrive at consensus recommendations. Some examples of key findings and recommendations are shown in Table 2.

The feedback from meeting participants was that the session was very informative and they supported the involvement of stakeholders in developing recommendations for their own programmes and activities.

Phase V: Dissemination and discussion of results

A widespread problem is that research results are not systematically communicated to the individuals and institutions to whom they can be of use. For this last and critical phase, a plan should be drawn up to disseminate and discuss study findings with all programme stakeholders.

Step 14. Prepare study report

Preparation of the written study report is obviously important. It is equally important that the report be written in simple, rather than academic ,language. Every effort was made to write the breastfeeding study report in clear and simple English in order to ensure understanding by programme practitioners. To facilitate use by practitioners, the key findings and recommendations were presented in a series of tables. The full research report was distributed to a small number of key breastfeeding stakeholders.

Step 15. Prepare summary report

In other to disseminate study findings to a larger number of stakeholders, a 5-page summary of the report was prepared. These were distributed to all stakeholders who had been involved in the research process.

Step 16. Develop detailed plan for wide dissemination and discussion of results

It was anticipated that the summary report could be disseminated to a large number of breastfeeding stakeholders in hospitals, community health centers and NGOs who were not involved in the research process. Unfortunately a detailed plan for such dissemination and discussion of the key results and recommendations did not take place.

One year later

One year after completion of the study, based on follow-up interviews with breastfeeding programme stakeholders there is evidence that efforts have been made by some of those involved in the research to implement study recommendations in different settings: at the hospital, in community health centres (CHC) and with NGOs involved in community breastfeeding promotion.

At the hospital in Suva, hospital supervisors have put increased emphasis on the importance of nurses' interpersonal communication skills. . According to NGO volunteers, they have observed significant improvements in nurses' overall attitudes in counseling women. In the community health centres (CHC) several study recommendations have been implemented. There has been increased discussion of the importance of exclusive breastfeeding by supervisors during periodic meetings with community health nurses. Once a week group education and sharing sessions are now organized at all CHCs with new mothers coming to the clinic for their first post-natal visit to discuss breastfeeding and other topics. A creche has been established at the Suva Health Centre for breastfeeding health centre staff and a small breastfeeding resource library has been placed there.

Some community health nurses have received training on exclusive breastfeeding and plans have been made to train the remaining nurses in 1999. During supervision visits by both MCH and nutrition staff to CHCs greater emphasis is being given to the need to promote exclusive breastfeeding.[19] Dieticians are developing a system to periodically analyze trends in breastfeeding practices based on CHC data. For women who experience difficulties exclusively breastfeeding, supervisors are encouraging CHC staff to inquire about clients' work and home situations in a holistic way in order to understand contextual constraints and advise them accordingly.

Several training sessions on exclusive breastfeeding have been conducted with NGOs involved in community work. As a result of this training new volunteers have been recruited to work with breastfeeding support groups under the auspices of the local Nursing Mothers Association.

... there was a considerable delay in distributing the study report to all breastfeeding programme stakeholders; and the methodology did not sufficiently involve key MCH decision-makers in the MOH and consequently, they have not had a strong commitment to implementing study recommendations.

In addition to evidence that many study recommendations are being implemented, several core study team members report that they are using or plan to use elements of the qualitative research approach learned in the breastfeeding study in their own work.

Although many recommendations have been implemented, many others have not yet been addressed, particularly at the policy level and in women's work settings.

Discussion

The purpose of this paper was to present the rationale for the use of both an ecological and collaborative approach to investigating a MCH topic and to illustrate the use of the approach in a qualitative study on breastfeeding in Fiji. The importance of each step in the collaborative research process was explained, the process used was described and the outcome of each step was presented. It was not the intent of this paper to report on the findings of the study.

The methodological approach adopted in the study differs from most studies carried out on MCH topics in significant ways. First, the ecological, or systems, approach involved data collection on the various actors and factors which influence breastfeeding in Suva. This approach is in keeping with recent health promotion models which emphasize the need to move from analysis of individual behavior to analysis of the relationships between individuals and their social and physical environments[4] as a basis for developing relevant interventions. In this study data collection focused not only on women's intrapersonal beliefs and practices, typically the focus of research on MCH topics[18], but also on the multiple factors in the home, community and workplace contexts which determine women's beliefs and practices. The study results provide a holistic view of the factors which influence women's breastfeeding practices in Suva and the basis for comprehensive strategies to intensify current breastfeeding promotion efforts.

Secondly, through the collaborative, or participatory, approach various breastfeeding stakeholders were involved in planning and carrying out the research. Primary responsibility for conducting the study was given to a multidisciplinary team of breastfeeding programme practitioners. Their work was coordinated by a social scientist specialized in qualitative health research, whose role was that of "facilitator" and "capacity-builder." At critical points in the research process a larger group of stakeholders were also involved. Several benefits of the collaborative approach were identified: the study focused on the priority concerns of individuals and organizations involved in breastfeeding promotion in Suva; research team members expanded their understanding of the multiple factors which either favor or contrain breastfeeding practices; team members strengthened their skills in planning and conducting qualitative research; through their involvement, stakeholders developed a sense of ownership of the study; and stakeholder-formulated recommendations are specific and relevant to the local Fijian context.

An aspect of the research methodology which is rarely discussed in detail in reports on collaborative qualitative research, was the type of training provided to research team members (Step 8) prior to conducting the in depth interviews. Where training is done, it often focuses on the technical aspects of instrument use and information recording. In this study, the attitudinal component of the training was particularly important in attempting to overcome the inherent bias of interviewers who were at the same time fervent breastfeeding promotors. A series of carefully-designed exercises were used to help team members adopt both a holistic and objective view of the multiple intrapersonal and environmental factors which influence a woman's infant feeding practices, to relinquish their *etic* perspective in search of interviewees' *emic* perspective. In future collaborative research activities more attention needs to be given to the attitudinal component of practitioner-researcher training to ensure interviewer effectiveness and objectivity.

Evidence of the utilisation of some of the research results is positive and appears to be related to the collaborative methodology through which some breastfeeding stakeholders developed a sense of ownership of the study recommendations and commitment to implementing them. Several constraints to greater utilization of the research results are also identified: there was a considerable delay in distributing the study report to all breastfeeding programme stakeholders; and the methodology did not sufficiently involve key MCH decision-makers in the MOH and consequently, they have not had a strong commitment to implementing study recommendations.

As in many other research experiences, at the conclusion of the study the focus was on producing the study reports (Steps 14 & 15). In retrospect, a flaw in the methodology was that Step 16 was not addressed. A detailed plan with an accompanying budget for dissemination of key study findings and recommendations was not developed. In the future, those involved in funding and planning applied research activities should incorporate this last critical step and allocate some resources to cover the cost of such activities. Although the study was conducted exclusively in Suva, many of the findings and recommendations would be of interest to those involved in breastfeeding promotion throughout the country.

The outcome of this research demonstates the relevance of ecological and collaborative research methods to investigate MCH topics in the Pacific region. The authors believe that these methods, which have been used in other areas of the world[15] should be more widely adopted in the region in applied research activities which aim to inform policy and programme development. Organizations funding applied health research in the region should encourage the use of these methods where appropriate. In health training schools, courses on research methods should include these approaches in order to give health professionals the confidence and tools to carry out simple and practical studies which can serve as a basis for evidence-based policy and programme development.

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