

PROGRAMME PAPER

Keeping Kids Smokefree: lessons learned on community participationN. Charlier¹, M. Glover^{2*} and J. Robertson³**Abstract**

Community participation in program decision-making and implementation is an ideal that community and academic stakeholders aspire to in participatory research. This ideal, however, can be difficult to achieve. We describe lessons learned about community participation from a quasi-experimental trial aimed at reducing the uptake of smoking among pre-adolescents in a community with a high percentage of Māori and Pacific Island people. The intervention involves students, parents, school teachers and management, extended families and members of the wider community. A total of approximately 4000 students (and their parents) of four urban Auckland schools were enrolled in the study over 3 years. The intervention is carried out through collaborations between public health professionals, academic institutions and school personnel. In order to enhance community participation, we conclude that (i) time commitment is needed to establish long-term ongoing relationships through face-to-face communication, (ii) research team members should ideally share similar cultural and ethnic backgrounds to the target audience and have in-depth understanding of and

experience in the community milieu and (iii) collaborative partnerships between academic institutions and public health services are necessary to create strength and cohesion, and assist with clear articulation of the research project mission and objectives.

Introduction

Projects lacking mechanisms for involving community members are likely to be less successful than those in which community representatives are active participants [1]. The challenges of community participation are amplified when the particular health issue or research question is not prominent in the consciousness of the targeted community. Community participation is discussed extensively in the literature; however, much of the literature provides theoretical models rather than evaluation of actual participation by community members, practical approaches taken and challenges experienced in a health promotion project [2, 3]. Only a few studies go beyond theory to practice. For example, a process evaluation of 'Breathing Space', a community-based initiative that aimed to tackle smoking in a low-income area in Scotland, reported on relationships—and their implications—of user perceptions on program development, implementation and continuity [4, 5]. The lack of studies discussing hands-on experience results in poor understanding of community participation and other factors affecting program implementation, and their relationship to program outcomes [6]. This paper discusses the process of gaining community participation in

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a school-based project, the difficulties experienced with engaging community stakeholders and adaptations made by the project team. Community, in this context, is defined as the students, family, teachers, health, cultural, religious and social service providers and local businesses geographically located or working within the suburbs served by the schools. A number of recommendations are made to community health researchers in order to maximize participation of community stakeholders in school-based tobacco control interventions.

Community participation

Few studies have been able to measure the health benefits of community participation. However, individuals do have a better chance of achieving their health goals if they can participate with other people who are affected by the same or similar circumstances to build interpersonal trust and trust in public institutions [7] or increase a sense of personal control in their lives [8]. Community participation builds the interaction of people so that they can address a broad range of common needs by sharing their ideas and experiences [9]. In practice, participation is essentially representation of the majority by a few members of the community. This is because it is not usually possible for everyone to participate in, for example, meetings or workshops. Representation may be through an elected individual of the community who attends a meeting or writes a submission to a committee. But the diversity of individuals and groups within a community can create problems with regard to the selection of representation by its members. Without addressing the redistribution of power, both within and beyond the community, participation can become empty and frustrating for those whose involvement is passive or what Arnstein [10] called 'non-participation'. Non-participation allows those who hold power, those in authority, to claim that all sides were considered whilst only a few benefit, thus helping to maintain the status quo to their advantage.

Smoking and health

Tobacco smoking is the biggest modifiable risk to health worldwide causing 4.9 million deaths a year

[11]. In New Zealand, tobacco smoking is the biggest killer and contributor to inequity in health between Māori, Pacific Island people and the rest of the population. Māori, the indigenous people of New Zealand, and Pacific Island people make up 15.3% and 7.1% of the population, respectively [12]. Tobacco smoking prevalence is high among young people and is disproportionately higher among Māori (45.4%), Pacific Island people (31.4%) and people of lower socio-economic status (SES) [13]. Novel ways of reducing smoking prevalence must be trialled if we are to reduce smoking among Māori, slow the increase in smoking among Pacific Island people and further reduce the overall New Zealand smoking prevalence rate of 21% [13]. Since most smokers begin smoking during adolescence, interventions to reduce smoking initiation need to focus on adolescents or even pre-adolescents. An obvious route to this population is schools. Successful school health promotion programs have been described in the literature (e.g. [14, 15]).

The Keeping Kids Smokefree Project

Keeping Kids Smokefree (KKS) is a quasi-experimental trial (non-random comparison of an intervention population with a matched control population) being undertaken by the University of Auckland's Tobacco Control Research Centre (<http://www.keepingkidssmokefree.org.nz/>). KKS aims to change parents' smoking behaviour and attitudes in order to reduce uptake of smoking by their intermediate school (Year 7/mainly aged 11 and Year 8/mainly aged 12) children. The intervention involves students, parents, families and members of the intervention community, teachers and principals. Approximately 4000 students (and their parents) of four South Auckland schools were enrolled in the study over 3 years (2007–09). Participating schools were selected based on the following criteria: sufficient numbers of students to enable quantitative comparison (1200/annum/group); schools serving higher proportions of Māori, Pacific and lower SES students, and geographical location, that is, adjacent pairs of intervention and control schools located in a community with existing health providers that had already identified

reducing smoking as a priority. The intervention comprises five components: (i) promoting quit attempts among parents and teachers, (ii) health education for parents on how to reduce the chance their children will start smoking, (iii) reducing the sale and social supply of tobacco products to minors, (iv) student involvement in the production of programme materials and (v) health promotion events for students' families.

Methods

An independently funded process evaluation was undertaken to assess community involvement in KKS. Community involvement is defined as stakeholder participation in shaping and contributing to the content and delivery of the intervention. Community involvement was required across all components to various degrees to, for example, determine the content of the events for families or advise on effective strategies for reaching parents.

Data for analysis came from (i) process evaluation tasks carried out by an earlier evaluator who assessed the formative stages of the intervention to inform the future direction of the project and assess threats to the validity of the research design, (ii) in-depth interviews with key program staff and (iii) study documentation including KKS team reports of focus groups with students, teachers and parents.

Review of documents

Process evaluation reports and documents including minutes of the KKS study team meetings, intervention field reports, the research proposal, powerpoint presentations (delivered to key stakeholders), focus group and interview reports and intervention materials—produced to support and accomplish all five components—were read to identify content regarding community and stakeholder involvement, including barriers, risks, facilitating factors and recommendations.

Focus groups

Focus groups, which provide people with a structured opportunity to speak freely on issues pertinent to the

research, were run during process evaluation with a convenience sample of students of both intervention schools (mixed gender and ethnicity) and school staff by ethnically matched KKS staff. Students and school staff were asked for their opinions on participation in component 4 and 5 of the intervention.

Furthermore, four focus groups were held with KKS key program stakeholders [including the health service providers Action on Smoking and Health (ASH), Auckland Regional Public Health Service (ARPHS) and Raukura Hauora o Tainui (RHoT)] and members of the KKS intervention and research teams utilizing a semi-structured interview schedule. Topics covered included strengths, challenges, opportunities, threats to success and potential improvements. Analysis of the focus groups and interviews involved identifying and summarizing the predominant themes under each category identified above, including any concerns of the participants. The evaluators' personal interpretations and reflection on the gathered data were included. The sample for these focus groups was chosen based on their relationship to and knowledge of KKS.

Interviews

Individual interviews were held with six program stakeholders and members of the KKS teams during process evaluation to further explore each of the five interview areas mentioned above. The interview sample was chosen based on high involvement in KKS, that is, overall responsibility to the success of the project, history of working on KKS and specialist subject knowledge.

In addition, following review of the documents and the process evaluation report, further interviews with key stakeholders were held by the independent evaluator to explore additional respondents' understandings and experiences of the intervention.

Findings

Barriers, recommendations and facilitators of community participation are discussed in two phases of the intervention: the planning phase and the

implementation phase, consisting of 2 years of the intervention.

Planning phase

KKS is underpinned by the values and principles of community development, including shared participatory decision-making. Therefore, in the planning phase, the researchers consulted local health promotion and smoking cessation providers via the Counties Manukau Auahi Kore (Smokefree) (CMAK) group. CMAK was a collection of providers (i.e. ASH, ARPHS, RHoT, a local Māori health provider of a Māori smoking cessation service, Counties Manukau Sport among others) working toward promoting health to achieve the overall goal of being smokefree within the intervention area. The schools were recruited once funding had been secured. The formation of an Intervention Overseers Group (IOG) was planned, consisting of representatives of the university research and intervention team, the health provider institutions ASH, ARPHS and RHoT, school representatives (principals and/or Board and/or staff) and parent and student representatives. The rationale was to involve a broad base of participants in shaping, commenting on, critiquing and helping to guide the intervention. The existence of an IOG would provide opportunities to ensure buy-in from community figures and to ensure successful implementation and sustainability of the KKS program. However, community participation via the proposed structure was difficult to obtain. One principal thought that KKS would provide an opportunity for the school to increase its interaction with parents, but she turned down the idea of the IOG because of absence of current parental involvement. Furthermore, school principals appeared to be too occupied with other (school-related) tasks. As a result, the IOG was not formed and the desired relationships with teachers, parents and children was curtailed.

According to Kolbe [16], creating public health collaborations with schools is challenging for many reasons, including the numerous academic and non-academic demands placed on schools. However, other underlying reasons may influence the willingness to participate. The intervention schools are dec-

ile 1 and 2 schools (decile 1: the 10% of schools with the highest proportion of students from low SES). Principals may believe that there are other more important priorities to engage in. Limited resources are left to spend on projects attending to issues of relatively less importance [17]. In addition, personal and professional relationships with other members of the IOG may affect willingness to participate. Furthermore, prior experiences with school-based research projects (for instance, time commitment in proportion to returns) may have an impact on engagement decisions. Participants may also resist embracing a tobacco smoking reduction project if they are smokers and not interested in smoking cessation [18, 19]. KKS staff reported that at one school, the management liaising with KKS were current smokers with no intention of changing their smoking within the timeframe of the project. Due to perception of the project as a personal affront, participation could therefore be rejected.

Implementation phase

Building trust through face-to-face communication

Since formation of an IOG was rejected, efforts were made on a personal face-to-face level with Deputy Principals (DPs), assigned to liaise with KKS. For example, the principals' representatives were asked about their opinions, thoughts and ideas on the content and organization of the art competitions and family fun days. By working closely with them, KKS was able to identify which intervention ideas would resonate well with the children and parents. However, although the principals agreed on support for the project, there was little active support from the teachers. In the initial phase of the project, a fracture between school management and teachers was observed by KKS staff at one school. It transpired that some teachers felt uninformed by their management and therefore experienced KKS as a burden imposed on them by management. Furthermore, in the initial phase, KKS intervention workers updated teachers about the project by posting flyers or newsletters in their letterboxes at school. This approach was used to

announce a ‘cold turkey’ competition for staff who smoke. In one school, the flyers were ignored as the teachers viewed it as being subjected to the project without their input.

The focus groups with teachers confirmed that personal face-to-face communication is the more appropriate and preferred communication mechanism to encourage engagement. Meeting teachers at school, without disturbing their normal activities and in a timely fashion was recommended. KKS staff found that attending morning teas and staff lunches was a successful strategy for reaching teachers, as this is the existing forum where teachers congregate and discuss school-related topics. The focus groups with teachers allowed them to provide feedback on the intervention and recommendations for future strategies. For instance, providing suitable materials for teachers, such as teaching and learning resources on smoking and health that are aligned with national education curriculum standards, would have helped gain the support and enthusiasm of teachers. Following the success of these focus groups, it was suggested by some respondents that regular ‘check-ins’ with teachers is crucial to ascertain their experience of the project and how to improve processes to meet their needs. Collaborations with teachers improved in the second year due to an increase in trust toward the KKS team. For example, the organization of the family day in one school was led by one of the teachers, supported by a KKS intervention worker.

A potential risk to the continuity of an intervention run over several years is turnover of school management and staff. In the second year of the intervention, management changed at one of the schools. Although this event could have been a risk for the intervention, it resulted in a smooth transition and positive change. The new principal, a non-smoker, was wholly supportive of KKS. Furthermore, he extended the 24-hours/7-days smoke-free grounds policy and banned staff from smoking directly in front of the school boundary.

Facilitating health provider participation

Consistent with community development principles, KKS adopted an approach of building inter-

connections between health providers and the target audience (parents) and school staff. For example, RHoT works in the area of the two intervention schools and had existing relationships with families and other important networks, but they had experienced difficulties in reaching smokers in the community. They applauded KKS for facilitating their access to parents and school staff.

We received a lot of referrals through the KKS project. We got approximately 80 referrals, which resulted in 30 new clients. We didn’t need to do all the background work to get these clients, which helped us out.

On the KKS family fun days, health providers, such as ASH, RHoT, Counties Manukau Sport and the Heart Foundation, were invited to participate and promote their messages to school staff, parents and other family members. The initiative gave local providers the opportunity to get acquainted and to work together more closely. Besides this, external providers may experience a sense of ownership, and therefore, collaborative initiatives may have a positive impact on project engagement and continuity of collaboration after the intervention is finished.

Program ownership and staff consistency

Throughout interviews and the focus group with KKS staff, respondents noted that staff turnover and attrition within the external health providers disrupted continuity of the intervention and undermined its overall progress as shown in the quote below by one KKS intervention worker:

The turnover of staff has been significant and frequent. New people have come up to speed and then left also. This has contributed significantly to timing barriers and the process got changed and dropped with different people involved.

Since the initial phase of the project, the number of individuals associated with the conceptualization and design of KKS decreased considerably. The

CMAK group was disbanded before KKS actually started and there was repeated staff turnover within health providers such as ASH, ARPHS and RHoT. Turnover and attrition can be ascribed to several factors, of which the most important is organizational change within the health provider service.

Efforts were made to overcome the problems of attrition and resulting lack of participation. At the beginning of the first year of the intervention and at the end of the second year, a meeting with the original CMAK members and new stakeholders was set up to obtain feedback on KKS, to provide an opportunity to engage with the project, to build closer relationships and to promote programme materials and upcoming KKS events. However, during the focus groups some external providers expressed a lack of control over ‘their piece of the pie’. For these providers (who specialize in tobacco control), the feelings of lack of control gave them the impression that there was a lack of trust in their ability (from the KKS team) to produce reliable and successful results. One contributing factor was staff turnover rates. New employees had been expected to continue with KKS task components halfway through its implementation, however with confusion and lack of clarity on the project brief. In addition, new employees had new ideas that at times conflicted with the objectives of KKS, for example, they wanted to focus on students rather than parents.

To assist with clarification on project components for new employees, we recommend drawing up a formal contract or a Memorandum of Understanding with all providers at the beginning of a project to ensure a shared understanding of the contribution of all parties. This recommendation was further supported by one new employee who said: ‘From my experience, there may have been merit in formalizing a partnership between [provider] and the project. I did not get a sense that the decision makers at [provider] had a full appreciation of what the relationship involved or the value of the project’. In addition, a written brief on the project’s intervention components would be a useful baseline document to assist in clarifying expectations and desired outcomes. Project briefs for intervention components as part of an orienta-

tion package would also help mitigate the risks and down-time involved with staff turnover.

Facilitating factors

The KKS intervention and research teams, during their focus group and individual interviews, established that the skills of the intervention team are critical to the success of a school-based research intervention. Furthermore, having experience both academically and in community participation assisted with the translation of evidence-based practice into a community context. Most often, academic needs and community needs are different in health intervention programs, for example, achieving academically and scientifically robust research and getting children to attend school, respectively. One KKS team member stated that ‘One of the best skill bases we had was the ability to liaise between community and academia’. One respondent employed by a community health organization mentioned that social determinants impact on the ability of a project to have impact and positive outcomes. For example, the respondent cited ‘education, housing, employment, basic health’ as issues that may need to be given priority over smoking. Having a strong connection to and understanding of the community’s daily life and concerns is important to facilitate bridging the gap between academic expectations and community readiness. Consistent with literature [20–22], matching ethnicity and cultural background of intervention staff helps to ensure easier access to the target audience and reduced language and cultural barriers. Building on the knowledge, experiences and personal relationships gained from previous work in the community can enhance the implementation of a project. Two respondents, both from organizations who work locally and are part of the KKS key stakeholder group, and the KKS team emphasized that this kind of project could not succeed without team members with a history of engagement and whom are well-respected in the community. Another key success factor for the project is the consistency of the intervention team. The community has seen the same key people fronting the project throughout the timeline of the intervention. Consistency has

enabled robust relationships to be developed with community stakeholders and school staff.

Conclusion

In this study, we have evaluated the process of gaining community participation in a school-based project. Key success factors in the intervention process were identified and factors that either promote or constrain community participation in the intervention were discussed. One limitation is that the opinion of principals and DPs was not obtained due to ill-health and/or their busy schedules.

As demonstrated by other research studies on public health interventions [21, 23], our evaluation supports that academics can work in partnership with community health organizations to conduct a school-based smokefree intervention as long as both parties are committed to building a collaborative partnership. Interventions should build on existing relationships between health providers and the target audience. Interventions can also open new doors by facilitating contact between the community and health providers. Creating genuine partnerships between communities, health providers and researchers increases the potential for ongoing, sustainable health promotion strategies to be developed.

Language and cultural differences can contribute to misunderstandings and false interpretations [24]. Therefore, it is recommended that research team members share similar cultural and ethnic backgrounds to the target audience and have in-depth understanding of and experience in the community milieu. Furthermore, public health practitioners who wish to work with schools need to develop an understanding of the school environment and how the educational system is structured. Schools are best approached through appropriate channels, such as the principal, Board of Trustees or an individual school health coordinator. These sources understand the current school policy environment and can provide pertinent information, advice and routes of communication.

Finally, our findings suggest a number of considerations related to community stakeholders' participation in a school-based setting. First, as discussed

extensively in literature, community participation in decision-making and implementation of a program is an ideal that community and academic stakeholders aspire to in participatory research. However, in pursuing this ideal, there is a high risk of burdening the school community with extra tasks that interfere with their daily routine and priorities. Second, failure to establish the planned IOG raises a question mark over whether or not this will impact on the effectiveness of the intervention. If principals had accepted the suggestion of the IOG formation, they would have been involved in the fine-tuning of the intervention design and thus contributed to the outcomes of the intervention. Third, the intervention was aimed at parents, and therefore, project materials were designed for parents and their children. In a school-based setting, having an experienced teacher in the intervention team (or the IOG) would help with designing suitable teaching and learning resources for teachers to use in their classroom.

Incorporation of our recommendations would require that more than 6 months project set-up time (as KKS had) is required. It is likely that some of the difficulties engaging school management and staff experienced by KKS may have been mitigated if more time had been put in to developing relationships before the start of the intervention. Despite the significant time investment, we would encourage practitioners to consider schools as a potential venue for public health improvement, especially when they are directly affected by public health policies such as smokefree environments laws. Providing an intervention that reaches into homes via schools has potential to personalize and thus reinforce population-level interventions such as mass-media campaigns promoting quitting. This is likely to be especially important for marginalized communities who typically are not reflected in radio and television advertisements and thus they may not see the campaigns as speaking to them.

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Conflict of interest statement

None declared.

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