



Symposium 1 – 2018 Nordic Implementation Conference

Preparing, improving and evaluating implementation

Danish examples from the Centre for Intervention Research in health promotion and disease prevention

Chair: Rikke Fredenslund Krølner, Strategic leader and scientific coordinator of Centre for Intervention Research

Presenters: Stine Kjær Wehner (PhD student), Lotus Sofie Bast (Post doc), Mette Rasmussen (Associate Professor)

Discussant: Tine Tjørnhøj-Thomsen, Professor in qualitative and ethnographic health research and scientific expert within Centre for Intervention Research

Background

The Centre for Intervention Research was established to provide a more robust scientific foundation for interventions in Danish municipalities. The Centre generates high quality evidence of effective public health interventions as well as a practice-oriented knowledge of implementation processes. The Centre conducts real world interventions which conform to the high scientific standards while being relevant and useful to policy-makers and practitioners in public health. To ensure practical applicability and sustainability of the interventions we design studies with a strong conceptual foundation in collaboration with practitioners and implementation research is highly prioritized.

Objectives

1. To present the use of implementation research in the different phases of intervention research from design, to implementation and evaluation of interventions
2. To present different methodological approaches to implementation research
3. Based on the presentations and experiences within the audience, to discuss
 - a. ways to involve participants and potential intervention providers in design and implementation of interventions in the real world setting and
 - b. methodological issues of conducting implementation research

Structure

The symposium will include three presentations, providing examples of implementation research at the Centre for Intervention Research. We will present

- a capacity analysis from an overweight and obesity preventive programme addressing infancy by using the existing structure of home health visitors across Danish municipalities.
- a qualitative formative process evaluation of the implementation of a high-school based intervention to promote physical activity, sense of community and wellbeing.
- a quantitative evaluation of implementation fidelity in a school-based smoking prevention trial.

Details are provided below.



Presentation 1: Improving implementation of health promoting interventions in high schools: a formative evaluation (Stine Kjær Wehner)

Background

It is challenging to implement health promoting initiatives in high school, as health is not the primary task. To improve implementation, it is important to involve intervention providers and receivers in intervention development. Formative evaluation may be used to capture feedback from students and teachers to improve the intervention design continually during the implementation process.

Project aim

The aim was to conduct a formative evaluation of the Young & Active intervention component (Y & A) in the Danish multi-component cluster-randomized Healthy High School trial to investigate if adjustments were needed to enhance implementation and sustainability. Y & A aims to promote physical activity (PA), sense of community and well-being and consists of a 3-hour workshop where university students inspire first-year high school students to develop and implement new PA-initiatives. The high school students are responsible for implementing their ideas afterwards supported by teachers.

Project methods

As students and teachers are both intervention receivers and providers of Y & A, their reception and perception of the intervention is crucial for the implementation process. The study combined qualitative methods: participant observation of workshops, an oral evaluation among all students by the end of the workshops, focus groups with students and teachers and systematic feedback from workshop facilitators. Observation- and interview guides were inspired by Linnan & Steckler's process evaluation concepts of context and dose received as well as concepts of acceptability and appreciation.

Project results

The following factors seem important for successful implementation of Y & A: timing and duration of the workshop, communication of the purpose of the workshop and support from teachers and 2nd- and 3rd-year students. The findings have informed the following adjustments of Y & A: the schools decide themselves the optimal timing of the workshop, clearer communication of the purpose by the facilitators, division of the workshop into two days of 1 1/2 hours each, day 1: Idea generation, day 2: realization of ideas, greater involvement of teachers and 2nd- and 3rd-year students especially at day 2.

Preliminary or final conclusions/discussion

Adjusting the intervention design in collaboration with participating students and teachers is expected to enhance the implementation, sustainability and relevance of the intervention.



Presentation 2: Implementation fidelity of a school based smoking preventive intervention - the X:IT study (Lotus Sofie Bast)

Background

Many school based interventions are not implemented as well as we could wish for, which makes it difficult to draw conclusions about the actual intervention effectiveness. A thorough examination of the implementation will help guide the interpretation of intervention results as well as point out focus areas of special importance for implementation success.

Project aim

X:IT is a school based smoking preventive intervention developed and implemented by the Danish Cancer Society. Centre for Intervention Research evaluated X:IT in a large RCT with 94 schools. The overall aim of X:IT was to reduce the prevalence of adolescent smoking with 25 % by the end of the study period. The aim of the present study was to develop a measure for the overall school-level implementation, and to assess the association to smoking prevalence and characteristics of schools with different degrees of implementation.

Project methods

Implementation was measured by aspects of adherence, dose, quality of delivery and participant responsiveness (Dusenbury et al. 2003), through questionnaires to pupils and school coordinators. We developed a school-wise implementation index differentiating schools into groups of high, medium or low implementation, and assessed the association between implementation and smoking preventive effect. Further, we examined characteristics of schools in the three implementation groups.

Project results

About one fourth of the intervention schools succeeded in implementing all three main intervention components with high implementation fidelity after the first year of study. In this group of schools the odds ratio for smoking was 0.44 (95 % CI: 0.32-0.68) compared to schools with standard smoking preventive activities. Schools that succeeded with implementation was characterised by having higher levels of administrative leadership, good school climate, higher degrees of mission-policy alignment, prior expertise with prevention, positive school culture and classroom climate.

Preliminary or final conclusions/discussion

X:IT was implemented differently across participating schools. The lowest prevalence of smoking was found in schools with high implementation. School characteristics differed according to implementation degree. To prevent more adolescents from starting to smoke in the future, there is a need to focus on obtaining good implementation, pay more attention to schools with weak leadership, negative school climate and no prior expertise with preventive activities.



Presentation 3: Developing an obesity preventive program addressing infancy: An organizational capacity assessment (Mette Rasmussen)

Background

Childhood overweight and obesity is a major public health challenge, and it is increasingly being recognized that prevention needs to start already during infancy. Danish home health visitors cover almost all families with a new-born. This leaves a huge intervention potential for early prevention. However, knowledge on the capacity and readiness to intervene within the system is needed.

Project aim

The overall aim of the Healthy Childhood Study is to develop and test a primary overweight and obesity preventive programme within the existing structure of home health visitors across Danish municipalities. The aim of the present study is to assess levels and variations in capacity and readiness for implementing and sustaining such a programme among health visitors and Danish municipalities.

Project methods

Capacity and readiness are estimated via individual telephone interviews with home health visitors from twenty Danish municipalities. Interviews are conducted during fall 2017. The interview guide is developed based upon the conceptual model on organizational readiness for change by Lehman et al. (2002).

Project results

Preliminary findings support a need and interest in prioritizing primary, early obesity prevention. Capacity and readiness may increase if the program focuses on how to support families in establishing and maintaining overweight related healthy lifestyles as this is in line with the guideline by the Danish Health Authorities. Barriers for future programme implementation relate to 1) lack of management and/or political support, 2) lack of time and resources, and 3) an inevitably need to address social and relational issues before addressing child obesity risk factors within the family.

Preliminary or final conclusions/discussion

Knowledge of the levels and variations in capacity and readiness for implementing and sustaining early overweight and obesity prevention within the structure of the home health visitors across Danish municipalities will increase our possibilities for developing a program that fits the context, thereby increasing the chance for successful implementation and prolonged sustainability.