Reviewer's report

Title: Implementing Effective Educational Interventions in Complex Mental Health Systems

Version: 1 Date: 13 August 2007

Reviewer: Miranda G Laurant

Reviewer's report:

General
Interesting topic. Often it remains unclear why an intervention is effective in one situation, but is not in another situation. Insight into the 'black box' could help to identify elements which contribute to the effectiveness of the intervention.

However, two different training programmes are compared, instead of the same training programme after adjustment based on experiences and evidence from implementation research. Furthermore, it’s a qualitative analysis of elements that might affect implementation of a training programme. Both points weaken the strength of the conclusions that can be drawn. Nevertheless, the paper contributes to implementation knowledge. The findings are not new, but it gives readers an idea how ‘theoretically based principles’ can be translated in concrete interventions.

-------------------------------------------------------------------------------

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

Abstract:
The abstract suggest that insight into the 'black box' of an unsuccessful educational intervention combined with evidence from implementation research helped to develop and implement a successful educational intervention. The last paragraph of the 'Background' state, however, that they conducted two training programmes, and afterwards analyzed the 'black box' to find out why one training programme was successful and the other wasn't.

Main text:
Background. The second paragraph leads to confusion. Reading the 'results' and 'abstract', the authors first conducted the first training and based on negative findings, they adjusted the implementation strategy of the second training programme based on their experience with the first training and the elements of an implementation model. The second paragraph, however, suggests that the two training programmes were conducted and afterwards the implementation model was used to identify elements of success. I guess the first is true, and used that as starting point for my comments. Obvious the second paragraph must be re-written so it is in line with abstract, methods and results.
For the structure of the paper, add 'Method' as heading.

I miss a description of the design. The second paragraph ‘Setting’ could be used with some modifications to describe the design of the study. For example “In 2001, …….to attests to efficacy and effectiveness of group treatment modalities. A group therapy skills training was developed and implemented with the aim to…… etc. Despite expectations the training had not resulted in increased use of group therapy. Later, in 2003, …..The training programme was developed and implemented with the aim to… etc. To enlarge the chance of successful translation of knowledge into routine care, the experiences with the first training programme and implementation model by Fixsen et al were used to modify the second training programme. In this paper we compare and contrast the two interventions in order to highlight those intervention elements most critical to success.”

2nd paragraph ‘setting’:
"...yet an assessment of 136 mental health providers..." Out of 1000 providers (1st paragraph)? The training included 136 providers, so is the outcome of assessment not an outcome of pre-measurement? Is it valid to extrapolate this outcome to all providers?

Add heading 'Results' after aim of the paper.

Give a brief to-the-point description of the relevant elements of both training programmes and the implementation strategy. The aim of the paper is not to report on effectiveness of the two programs, but to identify which elements of the intervention and implementation strategy contribute to the effectiveness. I would expect more emphasize on the content and implementation strategy, instead of on research design and outcomes. The outcomes of process evaluation are, however, important for the identification of barriers and facilitators and should remain included. The authors are recommended to replace the outcomes of process evaluation to ‘Implementation lessons’, as it explains the importance of some components and why the intervention wasn’t successful. For example “Trainees at one site felt that they were forced to participate in the training but were not interested in doing so” (page 7). This expresses the ‘motivation of trainees’ (see page 13).

After the description of the two training programmes, I would expect a paragraph “Implementation lessons” (instead of ‘a different approach needed) in which the two training interventions are analyzed against the implementation model in order to highlight those intervention elements most critical to success. The elements reported in the first three paragraphs ‘different approach needed’ should be incorporated in the different components of the implementation model.

Program evaluation

I have doubts whether or not the decision on succesfullness of the training programmes is made correctly, as the effect measures of both training programs are different. For the first training the actual percentage of patients receiving
group treatment or use of group format were used as effect measure. Whereas for the second training the extent to which each site met their site-specific initial implementation goals was used as effect measure. If I understand it correctly these goals are not formulated at the patient level, but for example ‘train at least 5 clinicians’. Difference in outcomes makes it difficult to compare the success of these two interventions.

Furthermore, although the percentage of patients receiving group treatment did not increase, the authors didn’t assess whether or not the quality of group therapy increased which might be the case as self-efficacy of the trainees increased. Is it possible to say something about the quality of group therapy? Why is this not considered?

Discussion
The discussion is limited to top-down versus bottom-up approach. I miss the limitations of the study. See also above, are the outcomes appropriate to measure successful implementation? Was the first training programme also adopted according to the implementation model in order to improve group therapy? Why not? If so, was it successful? This would have been a stronger comparison in order to identify elements of success.

What elements really matter? Which elements determine succes? Comparison to other studies which report on the effects of educational intervention, why are facilitators so important?

Conclusion
A training programme can be effective: e.g. improve knowledge, skills, etc. But it can be ineffective as clinicians do not know how to incorporate this in routine practice; the implementation fails.

The authors state that in order to achieve successful translation into routine care, facilitators are needed. I think they can’t draw this conclusion (last sentence); it’s too specific. The second programme was successful, but in this programme different elements were included which weren’t included in the first training programme. Basically, the first programme lacked an implementation plan (including facilitators, identification barriers and facilitators, etc.) whereas the second programme was based on an implementation model.

---

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

---

Discretionary Revisions (which the author can choose to ignore)

The authors use various abbreviations, and although these are fully described the first time a reader who is not familiar with the terms have to go back to see who or what organisation is involved. In some cases it would help if the authors
do not use the abbreviations but refer to the person or organisation (without using formal abbreviations) who is involved. For example last line 1st paragraph "This centre works closely with the network manager and the advisory counsil to identify..." Instead of "The SC-MIRECC works closely with the MHPL and the MHPLAC to identify..."

Another example, it is more clear what the authors mean by saying (1st line paragraph "Group Therapy Skills Training"): "Key characteristics of the ten mental health service facilities in the region...." instead of "Key characteristics of the ten VISN 16 facilities ....."

**What next?:** Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.