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An e-learning supported Train-the-Trainer program to implement a suicide practice guideline. Rationale, content and dissemination in Dutch mental health care☆

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ABSTRACT

An e-learning supported Train-the-Trainer program was developed to implement the Dutch suicide practice guideline in mental health care. Literature on implementation strategies has been restricted to the final reporting of studies with little opportunity to describe relevant contextual, developmental and supporting work that would allow for a better interpretation of results and enhance the likelihood of successful replication of interventions. Therefore, in this paper we describe the theoretical and empirical background, the material and practical starting points of the program. We monitored the number of professionals that were trained during and after a cluster randomized trial in which the effects of the program have been examined.
Each element of the intervention (Train-the-Trainer element, one day face-to-face training, e-learning) is described in detail. During the trial, 518 professionals were trained by 37 trainers. After the trial over 5000 professionals and 180 gatekeepers were trained. The e-learning module for trainees is currently being implemented among 30 mental health care institutions in The Netherlands.
These results suggest that an e-learning supported Train-the-Trainer program is an efficient way to uptake new interventions by professionals. The face-to-face training was easily replicable so it was easy to adhere to the training protocol. E-learning made the distribution of the training material more viable, although the distribution was limited by problems with ICT facilities. Overall, the intervention was well received by both trainers and trainees. By thoroughly describing the material and by offering all training materials online, we aim at further dissemination of the program.

1. Introduction

A consistent finding in research of health services is the slow uptake of new evidence into clinical practice (Bodenheimer, 1999). To address this problem, clinical practice guidelines in which evidence is transformed into practical recommendations are developed. Despite, difficulties arise in altering daily practice by the provision of guidelines, since adherence to guidelines is not self-evident. The extent of guideline adherence depends on the effectiveness of dissemination and implementation strategies (Davis and Tailor-Vaisey, 1997; Grol and Grimshaw, 2003). Theory-based and tailored implementation approaches are widely developed and studied (Hanbury et al., 2012) but no 'magic bullet' (Oxman and Flottorp, 2001) to improve health care has been found to date. Knowledge of effective implementation strategies is limited, whether from highly controlled studies with limited external validity, or from field studies with no significant effect or small effect sizes. Moreover, patient outcomes are rarely assessed in implementation studies.

In 2012, the Dutch multidisciplinary practice guideline on the assessment and treatment of suicidal behavior (PGSB) (Van Hemert et al., 2012) has been issued. It is assumed that adherence to this guideline by (mental) health care professionals may result in a reduction of fatal and non-fatal suicidal behavior (Bool et al., 2007). So, aiming at reducing the suicide rate in The Netherlands, Dutch (mental) health care institutions face the challenge of applying the guideline in daily practice. Regarding implementation in psychiatry, two systematic reviews (Girlanda et al., 2013; Weinmann et al., 2007) showed a modest effect of implementation of psychiatric guidelines on care and patient outcome, and concluded that there is a need for more studies on the effects of guideline implementation at both a patient and professional level.

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Consequently, we examined the effectiveness of an e-learning supported Train-the-Trainer program (TtT-e) aiming at PGSB-guideline adherence by mental health care professionals. This was studied in a cluster randomized trial (PITSTOP SUICIDE trial) including 45 departments from nine mental health care institutions (MHIs) throughout The Netherlands. The effects of TtT-e have been compared with traditional guideline dissemination (i.e. guideline access via books, internet, reviews in clinical journals and conferences). Outcomes were monitored at the level of mental health care professionals, patient level and institutional level, (De Beurs et al., 2013a, 2013b) and also the cost-effectiveness was evaluated (Dutch Trial Register 3092) As compared with usual implementation strategies, PGSB-dissemination via TtT-e more likely results in guideline adherence of mental health care nurses, and in improved self-perceived knowledge and confidence of professionals of all disciplines (De Beurs et al., 2015). In addition, suicidal patients diagnosed with depression and treated by TtT-e trained professionals more likely reported that suicidal thoughts were discussed with their therapist. As no difference in health care uptake between patients was found, we concluded that our intervention was not cost-effective (De Beurs, 2015). By users, the program is well received and considered suitable for ongoing PGSB-dissemination in mental health care. It turned out to be easily replicable by trained trainers and resulted in modifications of institutional policies toward care for suicidal patients De Groot et al. 2015.

Considering the promising effects of the TtT-e program, we assume that the program will be used in non-research contexts. This underlines the need to elaborate the contextual, developmental and supporting work that allow for a better interpretation of the study findings and may increase the likelihood of successful replication of the program's application in other contexts (Eccles and Mittman, 2006). In this paper we describe the empirical and theoretical resources of the PGSB, which the TtT-e program is based on. We also describe the steps of the TtT-e program's development, aims and competences, outline, practical starting points and the supporting training materials including the supporting e-learning modules. Monitoring of the implementation of new interventions to improve health is a relevant part of implementation processes (Campbell et al., 2000). Therefore, we also present outcomes of a quantitative study on the dissemination of the TtT-e program during and after the PITSTOP SUICIDE trial. We also present figures of how often the supporting e-learning modules were viewed inside the PITSTOP SUICIDE trial.

2. The empirical and theoretical framework of the TtT-e program

2.1. Development of the PGSB: empirical resources

The TtT-e program is designed on the base of the PGSB of which the development has been commissioned by the Dutch Ministry of Health, Welfare & Sports (VWS) in 2009. The development was carried out by representatives of the Netherlands Psychiatric Association (NVvP), the Dutch Association of Psychologists (NIP) and the Dutch Nurses' Association (V&VN). The process was funded by The Netherlands Organization for Health Research and Development (ZON-MW) and supported by the National Institute of Mental Health and Addiction in The Netherlands (Trimbos Institute). The EBRO (Evidence-based Richtlijn Ontwikkeling)-method (Van Everdingen et al., 2004), which is based on the AGREE-method (AGREE Collaboration, 2003) served as guidance during the writing process. The EBRO-method emphasizes the evidence-based character of guidelines by translating practice-based issues into concrete questions, for instance: How often should the suicidal condition be assessed? What should be recorded in a safety plan? Questions are countered by a summary of the available evidence.

International suicide guidelines such as the suicide guideline of the American Psychiatric Association (2003), the New Zealand Guideline Group (2003), the National Institute for Clinical Excellence (NICE) (2004), the Royal Australian and New Zealand College of Psychiatrists (2004) and the Royal College of Psychiatrists (2004, 2010) in addition to extensive reviews of the Scottish Government Social Research Group (2008a, 2008b) served as starting points for literature searches. Conclusions were formulated in a four-fold classification of the level of evidence ranging from level 1 (strong evidence, highly recommended or dissuaded) to level 4 (reflecting experts opinions). If applicable, conclusions are followed by a paragraph with additional considerations that are relevant for the interpretation of the evidence. Finally, recommendations were worded in terms of (professional) behavior. Recommendation vary across a continuum. The strength of recommendations matches with the level of the evidence. To readers, the strength of the recommendation is recognized by standard wordings that are applied for the different levels of strength.

2.2. Theoretical and practical framework for the assessment of suicidal behavior

In the PGSB, an integrated model of stress–diathesis (Goldney, 2008) and entrapment (Williams et al., 2005) is used to explain the onset and maintenance of suicidal conditions. The integrated model depicts suicidal behavior as the outcome of a process influenced by the interaction of biological, psychological, environmental and situational factors (Wasserman et al., 2012); the interaction that may lead to the perception of being trapped (entrapment). Entrapment leads to feelings of hopelessness and is proposed to be the specific condition in which suicidal behavior arises. For systematic investigation of the suicidal condition, it is recommended to apply the Chronological Assessment of Suicidal Events (CASE)-interview (Shea, 1998). Subsequently, biological, psychological, environmental and situational are weighted to identify risk and protection factors for suicide of the patient. This results in a structure diagnosis of the suicidal behavior. Finally, treatment strategy is determined, including a safety plan and policy on continuity of care (Van Hemert et al., 2012).

3. Empirical considerations of an e-learning supported Train-the-Trainer approach to enhance PGSB adherence

3.1. Training of mental health care workers in suicide risk management

Likely effective interventions to reduce suicidal behaviors are mental health practitioner and gatekeeper education (Mann et al., 2005; While et al., 2012) aiming at early recognition and treatment of suicidal behavior and/or underlying psychiatric morbidity (Tompkins and Witt, 2009). Gatekeepers are professionals outside mental health care services who may get in touch with persons at risk for suicide and who can refer these persons to mental health care (such as general practitioners, teachers, clergies, social workers etc). This type of training has shown to improve knowledge, skills, and attitudes toward suicidal behavior (Isaac et al., 2009) of school staff (King and Smith, 2000), students (Stuart et al., 2003; Joffe, 2008), members of an Aboriginal community (Capp et al., 2001), youth workers (Chagnon et al., 2007), US Veterans Affairs workers (Matthieu et al., 2008), construction workers (Gullestrup et al., 2011) and mental health care workers (Appleby et al., 2000; Oordt et al., 2009). Professional and gatekeeper training in diagnosis and treatment of depressive disorders has been shown to result in a reduction of suicide rates when delivered to general practitioners (Rutz et al., 1992; Hegerl et al., 2010; Szanto et al., 2007; Wyman et al., 2008; Matthieu et al., 2008) and US Air Force personnel (Knox et al., 2003), and in a reduction of self-destructive acts in American Aboriginal adolescents (May et al., 2005).

3.2. Theoretical and empirical considerations of a Train-the-Trainer approach

A Train-the-Trainer model of small interactive educational training is based on Adult Learning Theory (Knowles, 1980), which states that