Review

A systematic review and meta-analysis of face-to-face communication of tailored health messages: Implications for practice

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A B S T R A C T

Objective: To conduct a systematic review of the effect of face-to-face delivered tailored health messages on patient behavior and applications for practice.
Design: A systematic literature review and meta-analysis.
Methods: Systematic searches of a number of electronic databases were conducted and criteria for selection of studies were specified.
Results: 6 experimental studies published between 2003 and 2009 were included. The studies were all randomized controlled trials to evaluate the effectiveness of a face-to-face tailored messaging intervention. There were variation in their research design and methods used to randomize. All participants were aged at least 18 years. All of the studies reported positive changes in participants' health behavior with varying degrees of effect size and duration. A meta-analysis of the available data also confirmed an overall positive effect of tailored messaging on participants' health behaviors.
Conclusion: The systematic review and the meta-analysis demonstrate a significant and positive effective of face-to-face tailored messaging upon participants' health behaviors.
Practice implications: Health practitioners should be encouraged to allot time in their work routines to discover their patients' psycho-social characteristics and felt needs in order that they can provide a tailored health message to enable the patient to adopt health-promoting regimes into their lifestyle.

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Contents

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1. Introduction

A core task of every health practitioner is the provision of effective health education [1]. Primary care settings provide a unique platform for the transfer of health messages to the public in general and patients in particular [2]. These messages have the potential to alter health behavior and ultimately health outcomes. Research evidence confirms a strong link between effective clinician–patient communication and improved health outcomes in patients [3–5], including the adoption and maintenance of healthy behaviors.

Nevertheless, achieving patient compliance, and eventually concordance, remains a challenge in most areas of health promotion. To address this challenge effectively, health practitioners need to be credible communicators providing clear and unambiguous messages about health [1], which are sensitive to their individual circumstances [6,7]. Patient-centred approaches utilize collaboration between clinicians and patients to develop and deliver effective health promotion messages [8]. They are effective in achieving healthy outcomes, while also improving efficiency of care delivered by practitioners [7].

Of particular interest in the primary care field are the health education interventions collectively known as tailored health messages. These are defined by the research group as the delivery of health education, through the assessment of participants' personalized health profile based upon behavior change models. Therefore tailored health messages are patient-centred and are a collaborative means of improving motivation and compliance with recommended health behaviors [9]. The tailoring of health messages is used to capitalize on synergy effects gained by combining behavior change models and patient-centred communication in order to provide bespoke health education [10,11]. Tailored messaging works on the premise that addressing an individual's specific concerns is more likely to stimulate change than informing patients about general health risks [12]. Indeed, compared to non-tailored materials, tailored messages are more likely to be perceived as personally relevant [13,14].

A clinician's assessment of the patients' psycho-social characteristics and their perceived needs are essential components of a tailored messages approach [15]. Eliciting a patient's main concern is crucial when engaging and developing a meaningful dialogue to enable behavior change [16], particularly as patients' circumstances, including health needs, are often context-related and time-limited [6].

The process of patient assessment and the development of effective health messages is aided by a range of evidence based behavioral change techniques and models, which focus on identifying and influencing patients' beliefs, goals or readiness to change [17]. Behavioral change models ideally guide the development of tailored messages from patient assessment in the initial stages of developing tailored message through to maximizing either (or both) a patient's readiness to change or their motivation to maintain healthy behaviors. Widely used behavior change models include the Stages of Change approach [18], self-efficacy interventions [19], Implementation Intervention [20], the Health Belief Model, and Motivational Interviewing [21]. Each model has the potential to provide useful information for a patient-centred communication style.

The Trans-Theoretical Model (Stages of Change) is based on the idea that behavior change progresses through various stages of change readiness and implementation [18]. Exploring the readiness for change in individual patients will inform the content and style of the health messages conveyed. Self-efficacy interventions, are based on Bandura's Social Cognitive Theory [19]. They are aimed at helping patients to define health behaviors, which are perceived to be controllable and easy to change and therefore more likely to be exhibited [22]. Implementation intention is a strategy linking situational cues with healthy behavioral responses [20]. The cues function as triggers to increase the likelihood of initiating the adoption of health behaviors. The Health Belief Model [23] considers the interactions of a range of influences on explaining or predicting behaviors. These influences include barriers and facilitators to healthy behaviors, situational cues, self-efficacy, perceived susceptibilities to or severity of a health threat. Motivational Interviewing [21] entails directly working with a patient's intrinsic motivations to foster behavior change through exploring and resolving ambivalence.

These behavior change models are effective independently, yet, interventions based on a combination of models and techniques have proven to be particularly effective [17,24,25]. There is a strong evidence base about the link between clinician–patient communication and improved health outcomes [3–5]. A considerable evidence base also supports various uses of tailored messages [26]. Until now, however, the effectiveness of face-to-face delivered tailored messages on patients' health behavior had not been reviewed. There is also insufficient evidence pertaining to the efficacy of tailored messages alone vs. the use of tailored messages combined with follow-up interventions. The objective of this systematic review is to present an overview and synthesis of the effect of face-to-face delivered tailored health messages, with and without follow-up, on patient behavior and its application for practice.

2. Methods

2.1. Data sources and search strategy

Systematic searches of the following electronic databases were conducted: OVID, MEDLINE (1950 to April 2010), EMBASE (1988 to April 2010), PsycINFO (1806 to April 2010) and the Cochrane Central Register of Controlled Trials (CENTRAL). Search strategies for MEDLINE, EMBASE and PsycINFO consisted of relevant MeSH terms, which were adapted for the respective databases and are available on request. The Cochrane Register for Clinical Trials was searched using text words 'tailored messages'. Only English papers were included (Table 1).