Using theory to improve communication: designing a communication skills training package for medicine counter assistants

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Introduction

There is growing emphasis on the benefits of using theory to design and target interventions appropriately (1). In this short report, we describe how psychological theory was used to design and evaluate a communication skills training package for medicine counter assistants (MCAs).

Sub-optimal communication between medicine counter assistants (MCAs) and customers has been identified as a major cause of inappropriate supply of non-prescription medicines (2). In particular, appropriate supply entails a very specific level of information exchange that requires effective questioning, information provision and advice
giving on the part of the MCA. There is evidence from medical consultations that theory-based training in specified communication skills has measurable benefits in terms of changing professional behaviour (3). We therefore designed and conducted a pilot study to assess the feasibility and effect of providing communication skills training to medicine counter assistants. However, little is known about the mechanisms by which communication skills training changes behaviour. We hypothesised that basing our intervention on psychological theories of behaviour change would provide information about the impact of training on attitudes, beliefs and behavioural intention. These in turn might provide information about the mediators of behaviour change, which could help to identify ways in which training interventions could be further enhanced.

In this pilot study, strategies for guiding individuals through change were adopted from cognitive-behavioural theory (4). For example, Socratic questioning, a method for exploring statements in breadth and depth by seeking clarification and probing, was used to seek out information to identify and address participants' beliefs about using more effective communication behaviours with customers, and to generate suggestions as to how best to collect the information required from the customer.

Cognitive behavioural theory (4) is not a conceptual framework to assess change. Thus, to assess the potential multiple pathways to behaviour change, the Theory of Planned Behaviour (TPB) (5) was used. TPB is a model which represents three variables (attitudes, subjective norms (perceived social pressure), perceived behavioural control) which predict intention to perform a behaviour. This model is relevant to this particular training context: the preliminary research (6) that informed this current study showed that perceived social pressure from the customer, and perceived control of one’s own behaviour, are powerful influences on the nature and quality of information exchange in community pharmacies.

This paper reports how a theory-based communication skills training package for MCAs was devised and its effect in achieving behaviour change assessed.

**Methods**

**Participants**
Thirty MCAs from 20 community pharmacies in Grampian, Scotland were recruited and randomised to the intervention (n=20) and control (n=10) groups. MCAs in the intervention group were invited to two, four-hour training sessions, held one month apart in two convenient venues. The control group MCAs were invited to attend one training session at study completion.

**Intervention**
Previous research (6) identified that many MCA consultations do not comply with the Royal Pharmaceutical Society of Great Britain (RPSGB) guidelines for the supply of pharmacy medicines, due to inadequate information-gathering. This deficit in communication was due to lack of relevant questioning, particularly lack of relevant open questions; for example, “what medicines are you currently using?”

Specific strategies for questioning behaviour were identified from the evidence-based Calgary-Cambridge model of communication skills (7). This model outlines the essential skills for communication within a healthcare consultation, provides specific teaching and learning methods and the evidence that substantiates their use. The model is skills-based and experiential, to encourage learner participation and reflection.

Training focused on information gathering skills, including question style and active listening. The training session emphasised the importance of establishing symptoms, sequence of events, current drug regimen and
whether any other medications had been used for the problem. Additionally, training was provided on some of the process skills required to give information effectively: for example, using visual aids, labelling information, and what to do if the product was not effective (e.g., consult your GP).

Training involved didactic teaching in 10 minute blocks, separated by demonstrations of specific communication skills and their consequences, discussion of difficulties in changing behaviour, sharing experiences, identifying good and less effective communication skills from scenarios (audio-tapes of “real-life” consultations) and rehearsing effective communication skills in everyday scenarios. A standardised protocol was used to ensure consistency across the training groups.

Current work (8) suggests that the ‘active ingredients’ of interventions can be mapped on to target constructs that are theorised to mediate behaviour change. Thus, Table 1 outlines the content of this training package mapped onto theoretical constructs from cognitive behavioural theory and the Theory of Planned Behaviour. Further details are available from the authors (JC).

Table 1. Intervention components (behaviour change techniques) that were used to target specific constructs in the TPB.

<table>
<thead>
<tr>
<th>Session</th>
<th>Intervention component</th>
<th>Change technique</th>
<th>Target construct</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Discussion of rationale for training</td>
<td>Specify target behaviour</td>
<td>Intention</td>
</tr>
<tr>
<td>1</td>
<td>Discussion of information about effective communication</td>
<td>Provide information about behaviour</td>
<td>Attitude, Intention</td>
</tr>
<tr>
<td>1</td>
<td>Demonstration of specific behaviours</td>
<td>Modelling</td>
<td>Perceived behavioural control, Subjective norm</td>
</tr>
<tr>
<td>1</td>
<td>Demonstration of consequences of behaviour</td>
<td>Specify consequences</td>
<td>Attitude</td>
</tr>
<tr>
<td>1</td>
<td>Discussion of potential difficulties/barriers and how to address them</td>
<td>Socratic questioning, Coping, planning</td>
<td>Perceived behavioural control, Subjective norm</td>
</tr>
<tr>
<td>1</td>
<td>Participants asked to state intention</td>
<td>Contract</td>
<td>Intention</td>
</tr>
<tr>
<td>2</td>
<td>Participants reflect on change in attitudes or behaviour</td>
<td>Social processes of encouragement, Socratic questioning, pressure, support</td>
<td>Subjective norm</td>
</tr>
<tr>
<td>2</td>
<td>Provision of positive feedback</td>
<td>Feedback; reward</td>
<td>Subjective norm, Attitude</td>
</tr>
<tr>
<td>2</td>
<td>Scenario based task (in pairs)</td>
<td>Rehearsal, Social processes</td>
<td>Perceived behavioural control, Subjective norm</td>
</tr>
<tr>
<td>2</td>
<td>Provision of ‘handy hints’ sheet to assist practice</td>
<td>Rehearsal, Prompt</td>
<td>Perceived behavioural control, Intention</td>
</tr>
</tbody>
</table>

Theory was also used to develop a questionnaire to explore the effect of communication skills training. This questionnaire was based on the TPB (9). It assessed cognitions about two behaviours: finding out the customer’s symptoms during product consultations; and finding out what other medications the customer was using during advice consultations. Self-efficacy was also assessed; an increase in skills is likely to lead to
increased self-efficacy (10). The self-efficacy items included asking the participants to report their confidence in undertaking the target behaviour in a range of situations (e.g. customer in a hurry). The questionnaire was administered at three time points: baseline, and one month after each of the training sessions.

**Results**

The results of the full study, including the impact of training on MCA communication and the results from the TPB questionnaire, will be reported elsewhere (Using behavioural theory to develop and evaluate a communication skills training package for medicine counter assistants to improve the appropriate supply of nonprescription medicines: submitted for publication) but, in summary, some improvements in communication were seen in the intervention group in terms of number of questions asked although no improvement was shown in the use of open questions.

**Discussion**

This paper describes the process by which two psychological theories of behaviour change (cognitive behavioural theory/therapy and the Theory of Planned Behaviour), comprising several behaviour change techniques, were applied to the development of a training package. These psychological theories were used to enhance and explore the impact of training on cognitions (e.g., beliefs, attitudes) and behaviour change i.e. the use of effective communication skills by medicine counter assistants. Furthermore, a theory of communication skills for healthcare consultations was also used to underpin training in effective communication skills in medicine counter assistants’ practice.

Much health service training fails to impact on participants’ behaviour and, consequently, patient outcomes (11,12). Underpinning complex interventions, such as training, with a theoretical basis enables the mapping of specific mediators of behaviour change on to intervention components, which in turn provides information on which aspects of training might be successful. The results of this study suggest that using theory to underpin training might well allow this to take place. Thus, using theory as a basis for interventions may increase the effectiveness of future interventions.

**References**


(6) Watson MC, Bond CM, Grimshaw JM, Johnston M. Factors predicting the guideline compliant supply (or non-supply) of nonprescription medicines in the community pharmacy setting. Quality and Safety in Health Care. In press.


