

Maori cultural adaptation of a brief mental health intervention in primary care

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ABSTRACT

INTRODUCTION: There are no brief psychological mental health interventions designed specifically for Maori in a primary care setting.

AIM: To adapt an existing cognitive behavioural therapy-based, guided self-management intervention for near-threshold mental health syndromes in primary care, for Maori, and to examine its acceptability and effectiveness.

METHODS: Semi-structured interviews with primary care clinicians and Maori patients were conducted to inform adaptations to the intervention. Clinicians were then trained in intervention delivery. Patients were recruited if they self-identified as Maori, were aged 18–65 years, were experiencing stress or distress and scored ≤ 35 on the Kessler-10 (K10) measure of global psychological distress. Patient and clinician satisfaction was measured through a questionnaire and semi-structured interviews. Post-intervention, patients' mental health status was measured at two weeks, six weeks and three months.

RESULTS: Maori adaptations included increased emphasis on forming a relationship; spirituality; increased use of Maori language and changes to imagery in the self-management booklets. Nine of the 16 patients recruited into the study completed the intervention. Patients and clinicians rated the intervention favourably and provided positive feedback. Improvement was seen in patients' K10 scores using intention-to-treat rated global psychological distress following intervention.

DISCUSSION: This study found that it was not difficult to adapt an existing approach and resources, and they were well received by both providers and Maori patients. Further research is required with a larger sample utilising a randomised controlled trial, to establish whether this approach is effective.

KEYWORDS: Primary health care; Maori mental health; patient satisfaction; brief intervention

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Introduction

Disseminating evidence-based mental health treatments into real-world settings poses a number of challenges for clinicians and policy makers. The field of cross-cultural mental health is a fledgling one.¹ This is certainly the case in New Zealand, with little research on talking therapies for Maori,² none of which are in primary care mental health.

There are disparities between Maori and non-Maori regarding access to mental health services and, when contact occurs, it is often with primary care services.³ Near-threshold mental health

symptom complexes such as anxiety, depression, harmful use of recreational or prescribed substances, or a combination of these (not at a diagnostic level), are common (15.3%) in Maori.³ 'Near-threshold' anxiety, depression and substance use are common presentations in primary care and often coexist. While not meeting the threshold for disorder in standard diagnostic systems such as DSM-IV,⁴ these symptom complexes carry a significant disability burden along with the risk of developing a diagnosable disorder.^{5,6}

These symptom complexes often arise in the context of social problems and cause distress and

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significantly impaired work and role functioning.⁷ GPs perceive and manage them as clinically significant.^{8,9} There is evidence that mental health services are negatively perceived by Maori,^{10,11} and it has been recommended that mental health services for them should be more closely aligned with primary health care, with services geared to their cultural expectations, if they wish. Increasing primary care clinician skills in assessment and management of Maori mental health will maximise early intervention and minimise referral out.¹²

The literature on talking therapy adaptation for Maori is scant.² One study adapted cognitive behaviour therapy for Maori based on input from a range of Maori advisors, with promising outcomes.¹³ However, there are no studies in this area in primary care.

Expert opinion on cultural adaptation suggests that the following aspects of Maori culture need to be incorporated into therapy in order to be effective for Maori: an emphasis on whakawhanaungatanga (the process of forming relationships); an emphasis on the whanau (family) and iwi (tribe);¹⁴ use of te reo (Maori language); an emphasis on spirituality and fostering of strong cultural identity.^{15,16}

At the same time, it is important to maintain awareness of cultural diversity among Maori and generalisations regarding cultural or therapeutic mores should be avoided.^{15,16} While it is important to be aware of common Maori worldviews and how they can be accommodated in practice, it is equally important to be guided by the individual tangata whaiora (person seeking wellness) and their whanau (extended family). International indigenous literature reflects similar concepts and values to those that have been identified in the New Zealand literature.²

An innovative, ultra-brief intervention (UBI) was designed for people aged 18–65 with near-threshold mental health syndromes. The approach was developed through a collaborative process involving patients, clinicians and researchers.¹⁹ UBI consists of three brief sessions of guided, cognitive behaviour therapy-based¹⁸ self-management, with a focus on problem solving and behaviour change, delivered by the primary care clinician in the

primary care setting. The sessions comprise one hour in total and are supported by a treatment manual and self-help booklets on the topics of relationships, stress and breaking habits. The clinician role is that of coach and change facilitator rather than ‘therapist’. Patients work to develop a specific plan for change, which is printed out as a prescription. Prescriptions are integrated with the computerised patient management system for ease of access. There is one follow-up phone call/email to ask how this plan is working.

Clinicians were trained in a two-hour training session. Clinician and patient satisfaction ratings were very positive and patient outcome scores indicated that this approach may be beneficial, although the sample was small in the acceptability study.¹⁹

This paper reports on the process and outcomes of a feasibility study into adapting the UBI approach to better fit the needs of Maori patients. The aim was to develop a credible and acceptable UBI for subthreshold mental health syndromes among Maori, to be delivered in primary care settings by non-specialist clinicians. The questions were:

1. To what extent and in what way does UBI need to be adapted for Maori?
2. How acceptable is the adapted intervention to clinicians and Maori patients?

Methods

Adaptation process

The adaptation process comprised a review of the literature, along with both individual face-to-face and group interviews with primary care clinicians and individual face-to-face interviews with Maori potential users of the intervention. The rationale for this approach was that a collaborative approach to therapy adaptation was more likely to result in an approach that was feasible and acceptable in this context. Early in the research process, a partnership was formed with a Maori health researcher (KM, co-investigator), who worked clinically in a primary care setting. She established relationships with local providers, conducted the interviews with patients and clinicians, and had face-to-face contact with patients to collect intake and outcome data.

Interviews

Semi-structured interviews were conducted with nine general practitioners (GPs) and nine primary care nurses. Of these, four identified as Maori (one GP, three nurses), six as New Zealand European and eight as 'other' ethnicity. Clinicians were based in urban group practice primary care settings, none of which were specifically focused on Maori health needs, but all of which had some Maori patients attending their practices.

Clinicians were shown the existing UBI booklets and the existing clinical approach was outlined to them. They were asked to respond to the existing UBI approach and to suggest how it would need to be adapted to better meet the needs of Maori patients.

Clinicians reported that the existing approach and structure appealed. They felt the same basic format could be retained, but they thought it had a 'middle-class European flavour'. They suggested that we have more and different imagery and more Maori language, easier language, fewer words, more relevant scenarios in the vignettes, a karakia (prayer) and a whakawhanaungatanga process (forming connections). Clinicians were keen to get continuing education credits for the training and preferred to have the training during regular peer meetings.

Semi-structured, individual face-to-face interviews were also conducted with six potential patient users of the intervention, who all identified as Maori. Recruitment was through an article in the local community newspaper. Feedback from the potential patients was similar to that of the clinicians. There was a range of responses to the idea of offering karakia, with some more comfortable with the idea than others.

Adaptations made

In response to the feedback, the following adaptations were made to UBI: Patients were invited to begin sessions with an optional karakia or whakatauki (proverb). Whakatauki were provided, such as 'He manga wai koia kia kore e whikitia; It is a big river indeed that cannot be crossed'. Alternatively, clinicians and patients were given the

WHAT GAP THIS FILLS

What we already know: Near-threshold mental health syndromes are common among Maori. Little is known about brief interventions in primary care for these syndromes and, similarly, the literature on adapting talking therapies for Maori is scant.

What this study adds: This paper describes the process and outcomes of an adaptation of an innovative, ultra-brief intervention, creating a version with promising clinical effectiveness and acceptability for Maori.

option of offering a karakia in English or Maori, if they were comfortable.

A whakawhanaungatanga process was added at the start of the first session. In this process, clinicians were encouraged to self-disclose a little bit about themselves, such as family background or work history, and ask their patient about these areas.

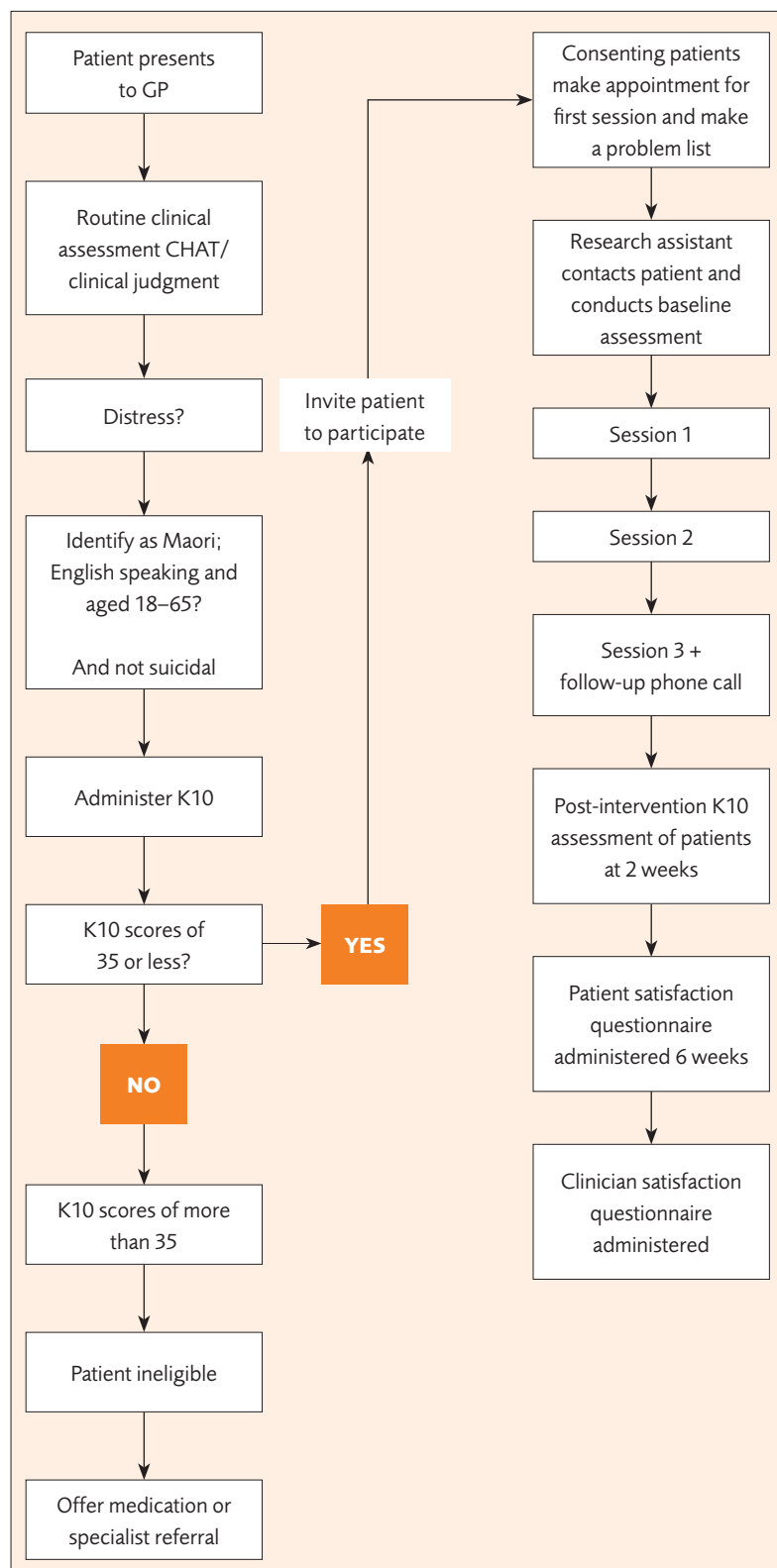
The imagery in the self-help booklets was changed by increasing the number of images and using more Maori designs. A Maori graphic designer was employed to make these changes. The covers of the booklets and treatment manual and some of the imagery contained in the booklets are shown in Figure 1.

The scenarios in the vignettes were changed to be more culturally relevant, such as playing

Figure 1. The covers of the self-help booklets and treatment manual and some of the imagery contained in the booklets



Figure 2. Recruitment of patient participants and data collection process



touch rugby, rather than soccer. The sessions were changed to include a stronger emphasis on how whanau (extended family) could be involved in supporting the person, and patients were also asked about whether wairua (spirituality) was an important part of their wellbeing and, if so, how they nourished it.

There was a slight increase in the use of Maori language in the booklets, largely through the use of whakatauki, and terms such as 'wairua' and 'whanau'. Both patient and clinician feedback had suggested that full translation would not be helpful.

Clinician training

The clinician training session was two hours long and included a presentation and role-play practice. In addition, the adaptations made for Maori were outlined and a video role-play of a clinician working with a Maori patient was added. This demonstrated skills such as offering the whakatauki and whakawhanaungatanga process.

Recruitment

As shown in Figure 2, patient eligibility was determined by clinician assessment of the presence of psychological distress. This was assessed by clinical judgment and/or the Case-finding and Help Assessment Tool (CHAT) for lifestyle and mental health assessment of adult patients in primary care.²⁰ After applying the exclusion criteria (non-English speaking, under age 18 or over age 65, no suicidal ideation in the past two weeks), the remaining patients were screened by the clinician for the presence of psychological distress using the Kessler-10 (K10) measure of global psychological distress (a standard 10-item self-report questionnaire based on questions about the level of anxiety and depressive symptoms in the preceding four-week period). Higher scores on the K10 indicate greater distress.²¹

A score of 35 or less on the K10 determined final eligibility. Patients with K10 scores over 35 received their GP's usual care as appropriate—generally medication or referral to a mental health professional. Patients meeting criteria for inclusion were invited to participate in the study. The

right-hand column of boxes in Figure 2 shows the study data collection process before, during, and after the UBI-Maori (UBI-M) sessions.

Clinician and patient satisfaction

Clinician and patient satisfaction questionnaires were administered following completion of the intervention (patient questionnaires at two weeks post-intervention and clinician surveys at the end of the study). Possible responses to each statement were based on a five-point Likert scale to indicate levels of agreement or disagreement. The statements were designed by the investigators and informed by feedback obtained from clinician and patient interviews conducted during the design phase of the intervention. Patient K10 scores were reassessed at two weeks, six weeks and three months post-intervention. Patients and clinicians were also asked a semi-structured series of questions about what they liked and did not like about the intervention and any changes they would like to see.

Data collation and analysis

All semi-structured interviews were audio recorded and transcribed verbatim. The transcript data was collated thematically under the headings of each question by the data gatherer (KM).

Questionnaire data were entered into Microsoft Access. Data analysis was performed using R 2.11. The 95% confidence intervals reported were based on the *t*-distribution. Formal comparisons between K10 scores at intake with K10 scores post-intervention used paired-sample *t*-tests across participants. As only some participants who completed the intervention completed all three follow-up outcome measures ($n=7$), the descriptive statistics and hypothesis testing for the K10 data were calculated on an intention-to-treat basis—that is, missing data points were replaced with the most recent K10 score available for that participant. This produces a slightly more conservative estimate of the magnitude of improvement compared to excluding these individuals from analysis. Descriptive statistics (range, inter-quartile range, and median) were calculated for the Likert-response items on the patient satisfaction scales.

The feasibility study was approved by the Central Regional Ethics Committee. (CEN/09/11/085). Approval was also gained from the Ngai Tahu Research Consultation Committee which is a partnership between Te Runanga o Ngai Tahu and the University of Otago.

Findings

Sample

Sixteen patients were recruited into the study. The majority of these patients were female (13/16, 81%) and the median age was 38.9 years, with a range from 20 to 65 years. They came from a low socioeconomic, urban group, with 56% not in paid employment and 71% having an annual household income of less than \$20,000.

Five people did not complete the study for work or personal reasons, and two did not complete due to clinical reasons (including one patient referred to secondary mental health services). This left nine patient participants who completed the intervention. Seven of these completed all the follow-up measures.

Of the 22 clinicians trained in the intervention, five clinicians used the intervention, each seeing between one and seven patients.

Levels of patient satisfaction

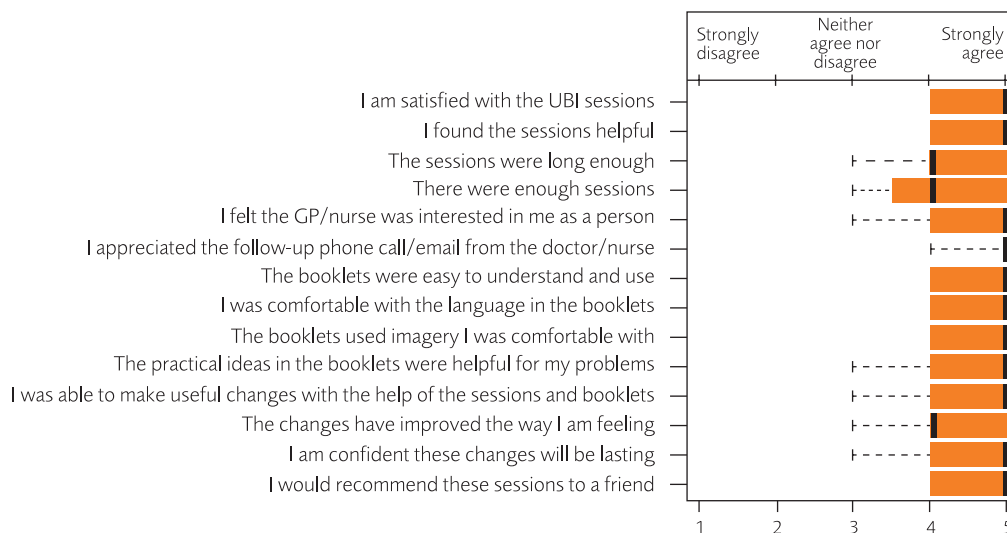
The results of the patient satisfaction questionnaire at two weeks post-intervention are presented in Figure 3.

Patients who completed all three UBI-M sessions reported high levels of satisfaction with most aspects of the intervention. Some would have preferred more sessions and/or longer sessions. Some did not find the self-help booklets particularly relevant. Patient comments from the semi-structured interview are shown in Figure 4.

Levels of clinician satisfaction

The clinician satisfaction questionnaire ratings are not shown graphically due to the small number of clinicians who delivered the complete intervention ($n=4$). The interview data was thematically

Figure 3. Boxplots (median, interquartile range, range) showing patient satisfaction ratings (n=9)



collated under the headings of each question by the data gatherer (KM). Interview data and ratings indicated a high degree of clinician satisfaction with many aspects of UBI-M. These included the intervention, timing between sessions, the logical structure, the manual was easy to use, the prescriptive approach was acceptable, and it seemed to meet patients' needs. Clinicians reported that they largely kept to the framework and it was different from their usual practice. They were happy to use the approach again and would recommend it to colleagues. However, some felt that the length of sessions was inadequate. Some suggestions were made for improvements, such as a booster training session soon after the initial training and assistance with pronunciation of Maori words. Clinician comments are shown in Figure 5.

Mental health status of patients at follow-up

Changes in the mental health status of the patient participants are illustrated in Figure 6, as measured by mean K10 scores and 95% confidence intervals (n=16 intention-to-treat analysis) at intake and post-intervention (at two weeks, six weeks and three months). Results in the left-hand part of the figure are from the original UBI study,¹⁹ which had a larger sample size (n=18). The results in the right-hand side of the figure are from the UBI-M study. For both studies, analysis was based on an intention-to-treat analysis.

Improvements in score from the intake period were calculated for the UBI-M study. Mean improvement at Week 2 was 5.2 points (95% CI 1.5–8.8; one-sample *t*-test $t(15)=2.99$, $p=0.009$). Mean improvement at Week 6 was similar at 5.1 points (95% CI is 0.9–9.3; one-sample *t*-test $t(15)=2.60$, $p=0.020$). By month 3 post-treatment, the mean improvement from intake was no longer statistically significant at 4.2 points (95% CI -0.5–8.96; one-sample *t*-test $t(15)=1.90$, $p=0.077$).

Discussion

A particular strength of this study is the demonstration that a culturally appropriate collaborative approach to intervention adaptation can result in

Figure 4. Patient satisfaction comments

'It felt as though he was helping me that step further'

'It helped me as a person to have faith in myself again that I can actually pull through these tough times'

'It gave me the power back'

'I just felt safe in that environment'

'He was lifting me out of my hole but not mollycoddling me. I was doing it but he was there too'

a talking therapy which has both clinical promise and high credibility and acceptability to patients and clinicians.

Improvement was seen in patients' rated global psychological distress following intervention. While the improvement was not statistically significant, the confidence intervals indicate that it is highly likely that the true mean improvement will be greater than zero (i.e. an actual improvement). However, this study is limited by the absence of a control group; hence, it remains unclear whether this is any greater improvement than might have occurred with no intervention. Other limitations include the relatively short follow-up (three months) and the small sample. There was relatively low uptake by clinicians. Reasons given for not using the intervention included not finding suitable patients (some practices had a low percentage of Maori patients), finding change difficult and being busy with competing demands.²²

Unlike secondary care, primary care has a broad scope and patients may not present there with mental health issues as the main problem. The

Figure 5. Clinician satisfaction comments

'Good to have another tool'

'Familiar face, familiar environment were helpful'

'It normalises it. That fear is not so much there'

'I needed help with pronunciation'

'Like the getting to know process'

'Different from my usual practice. I do not usually self-disclose any personal information'

'The karakia put people at ease; patients seemed surprised but appreciative at being offered it'

'Had to chase people for sessions 2 and 3 (text reminders helped)'

'An extra training session would help, to help people get started'

'Bang on, really'

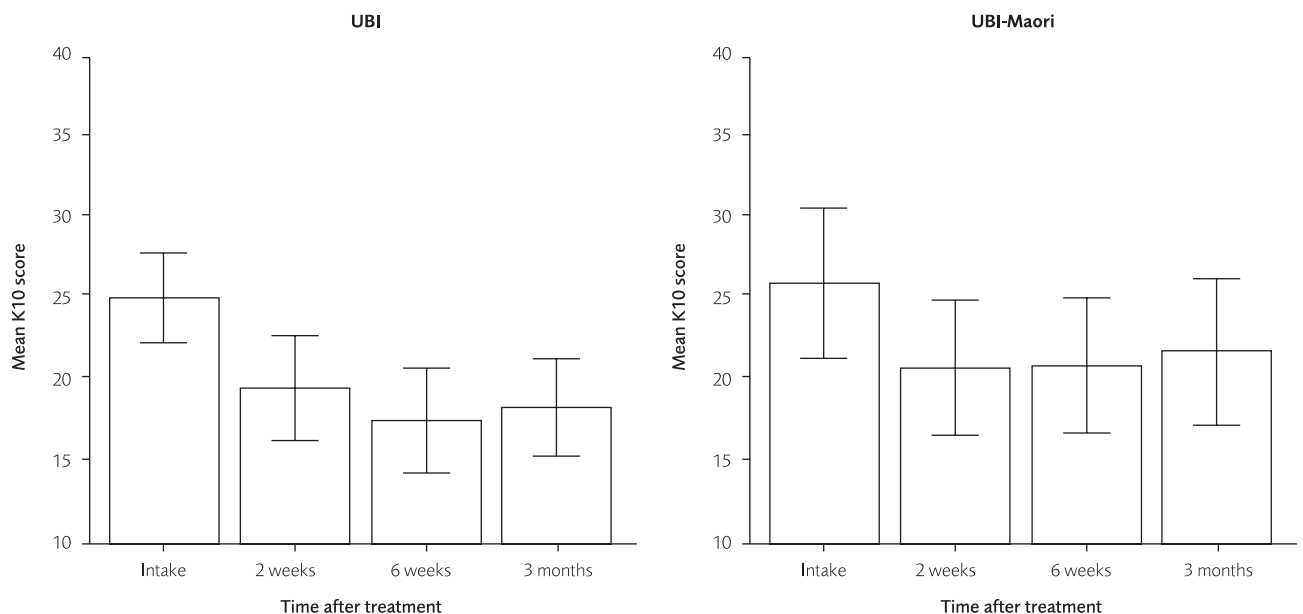
'It empowered clients to go away and do their own mahi (work) and then come back'

'I liked how the client made their own realisations'

'I liked having a framework so you don't fall apart in the middle of it'

'Nobody in her life had ever paid her that kind of attention... it was quite humbling'

Figure 6. Mean K10 scores (95% confidence intervals) for UBI and UBI-Maori adaptation at intake, two weeks, six weeks and three months. Analysis includes intention-to-treat carry-over of initial K10 scores for non-completers.



competing demands on clinicians in terms of time and multiple presenting problems make it challenging for clinicians to incorporate mental health interventions into routine clinical practice, particularly if a suitable patient is not identified soon after UBI training occurs. This uptake issue could be addressed by providing top-up training approximately three weeks after the initial training occurs. Confidence with pronouncing Maori words could be assisted by the provision of a CD recording, practising common words and whakatauki. The training could be incorporated into ongoing peer review processes.

The total amount of contact time for this intervention is one hour and although this is brief in terms of traditional therapy approaches, for many clinicians in the primary care context this is a long time. However, it can be argued that this is a relatively small amount of time compared to an area like diabetes care, which is long term and time consuming due to the emphasis on teaching self-management. Clinicians may nevertheless need both protected time and resources for this approach to be sustainable.

Our experience suggests that there is potential for clinical improvement to occur through brief talking interventions in primary care with both Maori and non-Maori versions of UBI. It seems likely that there are similar change processes that operate across cultural groups, at least for this near-threshold group of patients. The strong tradition of Maori oratory in healing aligns well with the overall principles of the brief intervention and particularly with the Maori adaptation.

Despite the limitations, the findings of this study suggest that cultural adaptation of an intervention was feasible and was well received by both patients and clinicians. All but one of the research team in the study were non-Maori, and concerned about 'getting it right' culturally. The experience of this adaptation was rewarding for the research team and offers a model for other areas of clinical practice.

Further research is required by way of a randomised controlled trial to establish whether this approach is effective.

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COMPETING INTERESTS

None declared.