



Short communication

A comparison of the effectiveness of an adult nutrition education program for Aboriginal and non-Aboriginal Australians



Simone Pettigrew^{a,*}, Michelle I. Jongenelis^a, Sarah Moore^b, Iain S. Pratt^{a,b}

^a School of Psychology and Speech Pathology, Curtin University, Australia

^b Cancer Council, WA, Australia

ARTICLE INFO

Article history:

Received 24 May 2015

Received in revised form

12 September 2015

Accepted 17 September 2015

Available online 25 September 2015

Keywords:

Nutrition education

Diet

Intervention evaluation

Aboriginal

ABSTRACT

Background: Adult nutrition education is an important component of broader societal efforts to address the high prevalence of nutrition-related diseases. In Australia, Aboriginal people are a critical target group for such programs because of their substantially higher rates of these diseases.

Objective: The aim of this study was to assess the relative effectiveness of an adult nutrition education program for Aboriginal and non-Aboriginal participants.

Methods: Pre- and post-course evaluation data were used to assess changes in confidence in ability to buy healthy foods on a budget, nutrition knowledge, and dietary behaviours among individuals attending FOODcents nutrition education courses. The total sample of 875 Western Australians included 169 who self-identified as Aboriginal or Torres Strait Islander.

Results: Perceptions of course usefulness were very high and comparable between Aboriginal and non-Aboriginal participants. Significantly larger improvements in confidence, nutrition knowledge, and reported consumption behaviours were evident among Aboriginal participants.

Conclusion: The findings suggest that adult nutrition education programs that address specific knowledge and skill deficits that are common among disadvantaged groups can be effective for multiple target groups, and may also assist in reducing nutrition-related inequalities.

© 2015 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

1. Introduction

Many Australians suffer from nutrition-related diseases, with higher prevalence rates found among Aboriginal people (Australian Bureau of Statistics (ABS), 2014a; Australian Institute of Health and Welfare (AIHW), 2011; National Health and Medical Research Council (NHMRC), 2000). For example, the proportions of heart disease and type 2 diabetes are 2.6 and 3.3 times greater, respectively, among Aboriginal people relative to other Australians (AIHW, 2014). Reflecting this situation, Aboriginal people have lower intakes of fruit and vegetables and receive a greater proportion of their daily energy from discretionary foods (ABS, 2014b). There is thus an urgent imperative to improve the nutritional status of Aboriginal people (Browne et al., 2014). This will by necessity involve the implementation of effective nutrition interventions that need to be properly evaluated to facilitate informed policy and

practice (Clifford et al., 2011; Gracey, 2007; NHMRC, 2000; Schembri et al., 2015).

1.1. FOODcents

Since 1992, the FOODcents nutrition education program has been delivered in Western Australia to encourage dietary improvement and reduce the risk of diet-related disease among the disadvantaged (Foley and Pollard, 1998). The program is conducted in metropolitan and regional areas throughout the State, and whereas it has not been developed specifically for Aboriginal people, it attracts both Aboriginal and non-Aboriginal participants.

FOODcents is designed to provide participants with knowledge and motivation relating to: (a) increasing consumption of fruit, vegetables, and cereals; (b) decreasing consumption of foods high in sugar, fat, and salt; and (c) improving food expenditure according to the healthy diet pyramid (Foley et al., 1997). The curriculum was developed according to the premises of the Precede-Proceed program planning model that emphasises the need to address barriers to adopting recommended behaviours (Green et al., 1994). Early formative research identified the ability to budget for healthy foods

* Corresponding author.

E-mail addresses: Simone.pettigrew@curtin.edu.au (S. Pettigrew), Michelle.jongenelis@curtin.edu.au (M.I. Jongenelis), smoore@cancerwa.asn.au (S. Moore), SPratt@cancerwa.asn.au (I.S. Pratt).

on a limited income and healthy cooking skills as deficits, and as a consequence user-friendly information materials and in-session activities relating to these issues were developed for inclusion in FOODcents sessions (Foley, 1998).

FOODcents is a flexible nutrition education program that is delivered by a consortium of three non-government organisations: Cancer Council Western Australia, Foodbank WA, and Australian Red Cross. Participants are primarily recruited via referrals from social welfare agencies, word-of-mouth communication, and the FOODcents website. Unlike other programs (e.g., the Looma healthy lifestyle program (Rowley et al., 2000) and the NSW rural fruit and vegetable subsidy program (Black et al., 2013)), the course is designed for low-income people in general and does not have a specific focus on the needs of Aboriginal participants.

Two course types are offered: (a) single-session courses of 1–2 h duration that cover a limited number of nutrition topics and (b) multi-session courses that range from two to eight sessions and provide greater coverage of nutrition concepts. Participants can elect to attend a course featuring the number of sessions that best suits their time constraints and nutrition education needs. Groups can nominate specific topics or activities to be covered in a particular course, and they can make arrangements to have translators or disability assistants in attendance, with the pace of information delivery varied accordingly.

A recent evaluation of the FOODcents program using a within subjects pre-post design found that course attendance resulted in significant improvements in nutrition-related knowledge and behaviours (Pettigrew et al., 2015). The purpose of the present study was to analyse the evaluation results by Aboriginal status to determine whether the course in its current form meets the needs of Aboriginal participants. Given the higher rates of nutrition-related illnesses among members of this group, it is critical to understand whether programs designed to address dietary deficiencies among the broader population are effective, or whether separate programs should be developed to cater to the needs of Aboriginal participants. Food consumption is a highly social and cultural phenomenon, which can make it difficult and/or inappropriate to administer standardised programs across multiple target groups (Adams et al., 2012; Bisset et al., 2013; Eyles and Mhurchu, 2009; McGeary, 2013). FOODcents is already tailored to the information needs of low-income individuals, but this may or may not make it appropriate for dissemination to Aboriginal and other groups. The present study investigated whether the knowledge and behaviour changes identified in the broader evaluation hold for Aboriginal participants or, alternatively, whether the program requires modification for this group.

2. Method

A 2-year (mid-2012 – mid-2014) evaluation was conducted that involved pre- and post-course participant questionnaires. Typically, longer questionnaires were administered to participants attending the multi-session courses, with shorter versions used for the single-session courses. The questionnaires included items related to nutrition knowledge and eating behaviours. In addition, participants were asked to provide basic demographic data (e.g., gender, age, Aboriginal status, post code). Extensive details of the instruments have been reported previously (Pettigrew et al., 2015). The study received approval from the University of Western Australia Human Research Ethics Committee.

2.1. Statistical analyses

Differences in results for Aboriginal and non-Aboriginal participants in (a) course perceptions and (b) pre-to post-course changes

in confidence, knowledge, and nutrition behaviours were assessed via independent-samples t-tests. Missing values were treated listwise, with all reported analyses conducted only on available and valid cases. The sample sizes for each analysis are specified in the relevant tables below to indicate effective sample size. The variation in sample size for different evaluation components reflects the different questionnaire length for the single- and multiple-session courses.

3. Results

Around half of the FOODcents courses conducted over the 2-year period were evaluated. In total, 927 participants provided usable pre- and post-course data. Of these, 52 did not report their Aboriginal status, resulting in a usable sample of $n = 875$. One in five sample members (19%, $n = 169$) self-identified as being of Aboriginal or Torres Strait Islander heritage. Table 1 shows the sample profile by Aboriginal status, gender, and age.

Descriptive statistics for course perceptions by Aboriginal status are presented in Table 2. The FOODcents course was viewed highly favourably by both groups, and there were no significant differences in ratings between groups.

Pre-to post-course changes in participants' confidence in their ability to buy healthy foods on a budget was examined. A significant difference between groups was found, with Aboriginal participants exhibiting a significantly larger improvement in confidence ($M = 0.74$; $SD = 1.17$, $n = 156$) than non-Aboriginal participants ($M = 0.53$; $SD = 1.05$, $n = 676$; $t(830) = 2.24$, $p = .025$, $d = 0.19$).

Results relating to changes in participants' knowledge of the link between diet/overweight and various diseases are presented in Table 3. Significant differences between groups were found for all comparisons, with the exception of cancer. In all instances, improvements in knowledge were greater among Aboriginal participants.

Table 4 presents pre-to post-course changes in participants' nutrition knowledge and food-related practices. Significant differences between groups were found for most comparisons, and in each of these cases Aboriginal participants reported greater improvements than non-Aboriginal participants.

Results for participants' reported consumption of fruit, vegetables, and fast food are presented in Table 5. The results relate only to participants attending multi-session courses because those attending single sessions did not have the opportunity to modify their behaviours before the post-survey was administered. Significant differences in pre-to post-course change between groups were found for all comparisons. In all instances, improvements were significantly greater among Aboriginal participants.

4. Discussion

In the context of chronic diseases accounting for 80% of the mortality gap between Aboriginal and non-Aboriginal Australians (AIHW, 2011), it is vital to address nutrition-related disorders among Aboriginal Australians (Gracey, 2007; Rowley et al., 2000). Whereas some approaches to participant engagement are likely to be universally effective (e.g., providing a welcoming environment and demonstrating an appreciation for the social aspects of health (Freeman et al., 2014)), previous research highlights the need to assess the extent to which nutrition interventions should be adapted for Aboriginal people (Adams et al., 2012; Foley and Houston, 2014; Rowley et al., 2000). However, there is little to guide practitioners as to how such adaptations should occur, and care needs to be taken to ensure that interventions do not exacerbate existing gaps in nutrition outcomes between population groups (McGeary, 2013; Wolfenden et al., 2011).

Download English Version:

<https://daneshyari.com/en/article/7331592>

Download Persian Version:

<https://daneshyari.com/article/7331592>

[Daneshyari.com](https://daneshyari.com)