

## Original Article

# A community-based sports massage course for Aboriginal health workers

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## Abstract

**Objective:** To pilot a community-based and owned sports massage course for Aboriginal health workers (AHWs).

**Design:** Descriptive, pilot educational intervention study.

**Setting:** Rural, Indigenous Australian community.

**Subjects:** AHWs working in a rural community.

**Main outcome measures:** Cultural and logistical acceptability of the program to AHWs.

**Results:** The course was delivered within a culturally acceptable framework with applicability for the evaluation of sports massage skills and knowledge changes in a larger sample.

**Conclusion:** The sports massage course demonstrated its applicability in this rural Aboriginal community and it has the potential to be adapted and adopted in other similar settings.

**KEY WORDS:** Aboriginal, Indigenous, musculoskeletal health training, rural.

## Introduction

Indigenous Australians living in rural communities suffer from multiple musculoskeletal conditions that significantly impair their activities of daily living. A study of Indigenous people in Kempsey, New South Wales (NSW), showed that low back pain (LBP), followed by neck, head and shoulder pain were the most common conditions. Approximately 40% of participants suffered between two and four musculoskeletal conditions and the most commonly reported level of pain was 'high'.

Sporting injuries was a common cause of reported injuries.<sup>1</sup>

These communities experience particular barriers to health care that exacerbate this burden of illness.<sup>1</sup> In addition, individuals commonly report 'having learned to live with their pain' and tolerance of physical disability because of a lack of awareness of what may help and inability to access culturally appropriate health services or pay for private therapies such as massage, physiotherapy, chiropractic and osteopathy.<sup>1</sup>

Lower educational levels combined with fewer employment opportunities, have resulted in an over-representation of Indigenous workers in low-skilled jobs. This has exposed them to greater manual handling risks and psychological stressors that lead to significant levels of musculoskeletal and stress-related illnesses, although few of these are formally reported or compensated.<sup>2,3</sup>

Musculoskeletal conditions in rural and remote Indigenous Australian populations are further complicated by comorbidities that compound this burden of illness.<sup>4</sup> Obesity, for example, a risk factor for cardiovascular disease and diabetes, may also predispose to low back pain as well as increased stress and pain in other weight bearing joints.<sup>5</sup>

To review and explore approaches that address musculoskeletal conditions, a community advisory group (CAG) comprising elders, Aboriginal health workers (AHWs), the main providers of health-care programs for their communities,<sup>6–8</sup> a community nurse and researchers from the University of Newcastle was formed in an Indigenous community in NSW. After reviewing the magnitude of the problem and possible solutions the CAG decided to investigate conducting a sports massage course for AHWs. Sports massage was suggested because this type of massage was likely to be culturally acceptable to the community and the principles of managing musculoskeletal conditions in general also could be incorporated into a course of this kind. It

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*What is already known:* Aboriginal health workers are widely recognised as being essential in providing culturally appropriate and effective health-care for their communities. No program exists, however, that provides on-site clinical training in musculoskeletal management for AHWs.

*What this study adds:* This study suggests that in rural Aboriginal communities, characterised by limited access to health services and a high burden of musculoskeletal conditions, Aboriginal health workers may be effectively trained in sports massage as a step towards also providing culturally sensitive management of the high burden imposed by these conditions in their communities.

was recognised that any training program of this nature be based on management of the most prevalent musculoskeletal conditions and address modifiable risk factors such as weight loss for obesity, maintaining physical activity, smoking cessation and injury prevention.<sup>9</sup>

The main objectives of this study were to develop, accredit, implement and pilot a culturally sensitive sports massage course for AHWs and to address some common musculoskeletal conditions among Indigenous people.

## Methods

The musculoskeletal/sports massage training program, was developed and conducted in Kempsey, a large rural Australian township with a total population of 27 500 and an estimated Indigenous community of 1000.<sup>10</sup>

### Development of the sports massage course

Several steps were involved in the sports massage course.

Ongoing recommendations from the CAG informed course delivery. The priorities for conducting the sports massage course as identified by the CAG are summarised below:

1. Training should be delivered on site and involve mentors such as elders and health workers from the community.
2. The course should be a nationally accredited qualification and structured so that it encourages AHWs to build on a qualification at diploma and degree level.
3. Training should be flexibly delivered given that most AHWs work in demanding, full-time jobs.
4. The teaching approach should acknowledge the particular cultural sensitivities of the community, including traditional methods of healing.
5. The course should have potential for adaptation and adoption by other rural Aboriginal communities via the distance learning approaches conducted by Booroongen Djugun College in rural and remote communities.

A literature search was conducted to explore existing musculoskeletal health programs for AHWs and the CAG sought a course accreditation consultant with experience in developing qualifications for the complementary health industry and working with Indigenous communities.

Course content was based on a review of existing massage programs but incorporated elements of the sports massage course conducted by the Murray School of Health Education after recommendations by the CAG.<sup>11</sup>

Theoretical and practical components of the course were consolidated via Integrated Learning Activities (ILAs) which satisfied the national accreditation requirements prescribed by the Industry and Training Accreditation Body (ITAB) of Australia.

Submissions were made to state and commonwealth government funding bodies to conduct the course as well as a non-government organisation (NGO) known as Hands On Health Australia (HOHA).<sup>12</sup> Also, experienced massage therapists with skills in teaching Indigenous communities and a willingness to deliver the program flexibly were sought.

AHWs were advised about the course and that there were two avenues for participation. The first was either a nationally accredited qualification as an AHW, an assistant in nursing (AIN) or other allied health qualification. The second enabled community elders with an interest in the sports massage course to participate.

The ITAB provides national accreditation of vocational qualifications and acknowledges areas of prior learning.

Both AHW and AIN courses were offered by Booroongen Djugun College in the Kempsey district. These qualifications enabled participants to gain recognition of prior learning (RPL) in anatomy, physiology, occupational health and safety, history-taking skills, the assessment of vital signs (including blood pressure, pulse rate, respiration rate, body temperature) and skills in addressing health risk factors such as smoking, obesity and physical inactivity). This underpinning knowledge

augmented the application of sports massage skills and knowledge.

Traditional healing strategies were included in the course and similar measures have been accorded priority by national Indigenous health forums.<sup>13</sup>

Pre and post-training levels of knowledge and skills were assessed via individual and group-questioning techniques consistent with those utilised by Booroongen Djugun College.<sup>14</sup>

Each student was subsequently followed up until the tutor was satisfied that learning tasks had been adequately achieved. Evaluation of course content, pace and teaching strategies, as well as strengths and weaknesses of the course was conducted after each session by a self-administered confidential questionnaire.

Analyses were descriptive and included methods for assessing changes in skills, knowledge and attitudes as well as self-reported confidential impressions of course content and teaching strategies.

## Results

The review of the literature identified no courses that specifically provided massage training for Indigenous people but most training programs for AHWs had prerequisite subjects such as anatomy, physiology, first-aid and occupational health and safety that entitled AHWs to receive RPL towards a nationally accredited sports massage program.

The appointed course-accreditation consultant (ITAB registered) assisted the CAG in fulfilling the requirements for developing a nationally accredited sports massage qualification.

The sports massage course was accredited nationally by ITAB in 2003 and allowed graduating AHWs to practice sports massage therapy in a range of community settings including Aboriginal Health Services, sporting clubs, voluntary community health clinics and private practice.

Following is an outline of the course content:

1. A review of general muscle groups.
2. The physiological basis and benefits of massage
3. The applications of sports massage among people of all ages
4. Massage terminology
5. Pre (sporting) event massage techniques
6. Post (sporting) event massage techniques
7. Sports training massage
8. Massage for relaxation, massage in sport, infant massage and massage in the rehabilitation of chronic pain and disability
9. Traditional, Indigenous approaches to massage and regional bush medicines used in the management of musculoskeletal conditions
10. Integrating massage in addressing other health conditions such as the soft-tissue contractures experienced by those with stroke
11. Conditions managed by mental health workers that are associated with anxiety and stress
12. Stimulating peripheral circulation through massage for people affected by diabetes and teaching mothers how to perform infant massage for their children
13. Managing risk factors associated with musculoskeletal conditions (promoting healthy weight, smoking cessation, regular exercise, healthy posture and injury prevention).

The content was based on a syllabus that addressed the identified musculoskeletal health needs of the community determined by the prevalence study within a culturally acceptable and logistically viable framework and that fulfilled the requirements of the ITAB for course accreditation.<sup>1</sup>

The HOHA provided the \$A7000 funding required to conduct the study during the 2-week period in which the course was conducted.

All teaching staff volunteered their services. The CAG appointed an experienced massage lecturer with a background in teaching Aboriginal people and four tutors with relevant massage experience and qualifications, one of whom resided in the community, participated.

Twenty participants enrolled in, and completed, the sports massage course. This included 18 AHWs and two community elders. Participants' mean age was 38 years. The sample comprised 17 women and three men reflecting the proportion of female to male AHWs and AINs involved in Aboriginal health in this community.<sup>10</sup>

The course was flexibly delivered over a two-week intensive period with the same class conducted in the morning and afternoon to facilitate participation.

According to subjective responses and the ongoing observations of acquired clinical skills, participants demonstrated a substantial increase in skills and knowledge.

Qualitative evaluation by self-administered confidential questionnaires, demonstrated cultural acceptability of the program. Overall, participants found individual sessions enjoyable, well organised, useful and personally relevant. Time was reported as being used efficiently though the pace was rated as 'average' instead of 'suitable' or 'very suitable', with participants expressing a preference for a slower pace.

The most common concern reported by students was the level of 'course difficulty', which was rated as 'relatively difficult' by the majority of respondents, yet practise sessions, were not considered 'too difficult' by the majority of participants. The tutors were reported as 'very knowledgeable', 'very helpful', and 'very clear' in directing activities. The pilot training program appeared generally acceptable to participants.

## Discussion

This study has demonstrated that a pilot clinical massage course has utility in a rural Aboriginal community and has the potential to be adapted in similar settings. The teaching style and environment appeared conducive to promoting favourable learning outcomes and the evaluation of this model with a larger sample size is considered worthwhile.

The message of many Aboriginal elders is that there is a need for collaboration between Aboriginal and non-Aboriginal people while maintaining Aboriginal independence in shaping the future of their communities. They also recognise the need for an Indigenous health workforce that is both professionally and culturally competent.<sup>13</sup>

The key to the success of this program sprang from ongoing collaboration between the CAG and AHWs throughout all phases of the process.

## Study implications

The model described in this report presents an opportunity for AHWs to potentially address some of the most prevalent musculoskeletal conditions via culturally appropriate musculoskeletal massage techniques and the management of some modifiable risk factors common to both heart disease and musculoskeletal conditions, such as weight loss for obesity, maintaining physical activity and smoking cessation.<sup>5,9,15</sup>

The authors also acknowledge that if Indigenous musculoskeletal health is to be improved, programs must consider education, the environment and cultural factors.<sup>16,17</sup> While this project was made possible with the generous contribution of a voluntary organisation, courses of this kind are not likely to be sustainable if they are purely dependent on occasional donations for funding. The hope of collaborators is that this community-based model of promoting musculoskeletal health may provide encouragement and support for Aboriginal communities throughout Australia.

## Acknowledgements

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