

Project Report RRH

Aboriginal Health in Aboriginal Hands.

The development, delivery and evaluation of a sports massage course for Aboriginal health workers to promote the musculoskeletal health of Indigenous people living in a rural Community.

A collaborative program between Durri Aboriginal Medical Service, Booroongen Djugun, Hands On health Australia and the University of Newcastle, musculoskeletal health program.

CITATION: Towards promoting the musculoskeletal health of indigenous Australians

ABSTRACT

Context: Indigenous Australians

Indigenous Australians living in rural communities suffer from multiple musculoskeletal problems that significantly impair their activities of daily living. They commonly report 'having learned to live with their pain' and physical disability. Frequent, self-reported explanations for enduring this burden include a lack of awareness of what might help and an inability to access culturally appropriate health services or to pay for private therapies such as, massage, physiotherapy, chiropractic and osteopathy.

Issue: As a step towards addressing the problem in New South Wales (NSW), Australia, Durri Aboriginal Corporation Medical Service (ACMS), Booroongen Djugun Aboriginal College, Hands On Health Australia (HOHA) and the University of Newcastle developed, implemented and evaluated a pilot musculoskeletal training program (MTP) within the framework of a sports massage course for Aboriginal Health workers (AHWs).

The first training program in Australia was conducted in February 2003. Evaluation of the pilot MTP has shown an acceptability of the program to AHWs and a viable method for measuring changes in skills and knowledge acquired by AHWs. The Interest expressed by AHWs to adapt the model in other Communities is an encouraging sign of the potential to disseminate this community-based and owned model.

Lessons: The key to the success of the program, as per other clinical service programs has been the development of the program according to community needs. Also the active involvement of AHWs in all phases of the program including identifying community needs, development, implementation and evaluation of a culturally sensitive health intervention. Collaboration with other organisations with a respect and understanding for Aboriginal community-controlled initiatives has also been crucial to maximising skills, knowledge and resources.

Keywords: Aboriginal, Indigenous, musculoskeletal conditions

Context:

Historical restrictions of educational opportunities combined with a higher concentration in areas with fewer employment opportunities, have resulted in an over-representation of Indigenous workers in low-skilled manual jobs and community service jobs. This has exposed Indigenous people to greater manual handling stress, inadequate knowledge of risks and psychological stressors that lead to significant levels of musculoskeletal and stress-related illnesses few of which are formally reported or compensated^{1,2}.

Musculoskeletal conditions in rural and remote Indigenous Australian populations are also complicated by the poor health suffered by this group³. Obesity, for example, is a risk factor for cardiovascular disease and diabetes. It may also predispose to low back pain and increased stress and pain in other weight bearing joints⁴.

The Durri Community of Kempsey, NSW, Australia, comprises one of Australia's largest rural Aboriginal communities⁵. A recent study has shown that Indigenous Australians living in rural communities suffer from multiple musculoskeletal problems that significantly impair their activities of daily living⁶. A quasi-random cross-sectional musculoskeletal prevalence study was conducted in the Kempsey district, New South Wales (NSW) between January 2001 to July 2002, among 189 indigenous members of the community. The results showed that lower back pain (LBP), followed by neck, head and shoulder pain were the most common conditions. Approximately 40% of participants suffered from between two and four musculoskeletal conditions. A majority of participants had suffered from their principal condition for 7 weeks or more indicating disturbingly high levels of chronicity in the community. Researchers concluded that the majority of people living in this large rural, Indigenous community had learnt to live with chronic levels of pain affecting multiple anatomical sites largely due to financial and socio-cultural barriers⁶. For instance, approximately 25% of community members who reported experiencing pain had not accessed any treatment for their musculoskeletal condition. When questioned about why this was the case, the most common reasons given were that they had 'learnt to live' with the problem, that they were 'unaware of what might help them', or a belief that 'private therapies were too expensive'.

These experiences and considerations were the genesis of the Kempsey sports massage course for AHWs. The purpose of this report is to describe the process of developing and implementing the pilot MTP (subsequently renamed the sports massage course) including culturally appropriate methods for evaluating changes in skills, knowledge and attitudes of participants in the course.

Issue

Apart from the disturbingly high prevalence of musculoskeletal pain and disability at Durri⁶, the researchers identified various risk factors which, if addressed, presented an opportunity to prevent or minimize the occurrence of the most commonly identified conditions. These findings informed the development, implementation and evaluation of a MTP for Aboriginal Health Workers to assist in the prevention and management of these highly prevalent conditions.

The program was also informed by ongoing discussions with a Community Advisory Group (CAG). The CAG comprised Community Elders, AHWs, a Community nurse and researchers from the University of Newcastle. The CAG highlighted the need for an accredited, practical and culturally sensitive massage program that raised an awareness of bush medicines in the management of pain and disability to preserve and affirm traditional healing practices. Community participation, ownership and sustainability in the design and implementation of the program were seen, by the CAG, as fundamental its success.

The community-based and owned model described in this report presents an opportunity for treating and managing some of these conditions via culturally appropriate musculoskeletal interventions. It has the potential to be adapted and delivered in other rural and remote communities.

A gathering of Cultural Elders of the Community responded to these findings and stated:

We strongly endorse this collaborative, Community-based project that affirms our traditional methods of healing and integrates these within an accredited course of study for our health workers and Elders. It is a valuable first step towards providing our Community with sustainable health-care to reduce the great pain and suffering that our people have learnt to live with (Community gathering, July, 2002).

The primary aim of this project report is to describe the development, implementation and evaluation of a n accredited musculoskeletal training program for AHWs that attempted to address some of the commonly-presenting musculoskeletal conditions and the modifiable risk factors that impact on the musculoskeletal burden of illness experienced by Indigenous Australians living in this rural Community. Part of the evaluation process aimed to explore culturally sensitive methods for measuring any changes to AHWs skills, knowledge and attitudes in relation to their ability to assess and manage some of the commonly presenting conditions. These goals were generally achieved.

Cultural considerations

Why train Aboriginal Health Workers

AHWs were trained as they are best placed to consider cultural factors and social barriers to implementing interventions within their communities⁷. They are also known to provide effective health interventions for their Communities^{8,9,10}. No program exists, however, that provides accredited, on-site clinical training for AHWs. The AMSs were used as the primary venues for delivering the program as these are the preferred access route for the health care delivery undertaken by AHWs⁷.

Why sports massage?

Sports massage was chosen as a framework for developing the MTP on the advice of the CAG as it features as important in the life of the Community. Furthermore, this type of massage was likely to be culturally acceptable and the principles of managing musculoskeletal conditions in general could also be incorporated into a course of this kind. Sport has historically been a bridge between Aboriginal and non-Aboriginal people. It has the potential to highlight people's gifts is accepted by the Community. Ongoing discussions with AHWs and elders of the Community underlined the importance of first gaining the trust of the community before addressing the deeper problems of pain and disability amongst Aboriginal people.

An opportunity for health promotion?

Through sport people of all ages and backgrounds meet regularly on common ground to enjoy activities that promote their health in a broader sense¹¹. The widespread appeal that sports massage has in this Community presented a valuable opportunity for addressing not only musculoskeletal conditions but also some of the major risk factors associated with mortality and morbidity in this and other Aboriginal communities. These risk factors include high levels of obesity, the lack of regular exercise and significant levels of physical trauma and injury. Thus, beyond the potential to help with the pain and disability of musculoskeletal conditions, addressing obesity and lack of physical activity through health education also presented an opportunity to help in the management of cardiovascular disease and diabetes.

Autonomy and self-regulation

The message conveyed by many Aboriginal elders in this and other Communities is the need for collaboration between Aboriginal and non-Aboriginal people but also a measure of independence in shaping the future of their communities. They have also recognised the importance of developing an Indigenous health workforce that is both professionally and cultural competent¹².

Health to Aboriginal peoples is a matter of determining all aspects of their life, including control over their physical environment, of dignity, of community self-esteem, and of justice. It is not merely a provision of doctors, hospitals, community lies the tradition of using hands to heal¹².

Development of the sports massage course

The course was developed after first conducting a literature search to determine existing musculoskeletal health programs for AHWs, recruiting the expertise of an experienced course-accreditation consultant and the ongoing recommendations of the CAG.

A review of the literature identified no courses that specifically provided massage training but most training programs for AHWs had pre-requisite subjects such as anatomy, physiology, first-aid, occupational health & safety that entitled AHWs to receive Recognition for Prior Learning (RPL) towards a nationally accredited sports massage program.

The priorities for conducting the sports massage course as identified by the CAG are summarised in Table 1. They included an accredited course, delivered flexibly, on-site with cultural relevance and sensitivity. The course should have potential to be adapted by other rural and remote Aboriginal Communities via the distance learning approaches conducted by Booroongen Djugun College¹³.

The CAG felt that the practical focus of the course content and the flexibly-delivered, on-site approach to teaching delivered by the Murray School of Health Education made this training organisation particularly suitable for implementing the sports massage course. As existing massage courses did not include Indigenous approaches to treating musculoskeletal conditions, this component was subsequently incorporated into the newly designed course and submitted for accreditation. Acknowledging traditional healing strategies was recognised as important by the CAG and has previously been accorded priority by national Indigenous health forums^{14,15}.

The sports massage course was subsequently accredited nationally by the Industry Training Accreditation Body (ITAB) as the first Indigenously developed and administered massage course of its kind. The course will allow graduating AHWs to practice in a range of Community settings including Aboriginal Health Services, sporting clubs, voluntary Community health clinics and private practice. Table 2 provides a summary of the sports massage content.

Delivery of the sports massage course

AHWs were advised about the course via the normal means of disseminating information in the Aboriginal Medical Services (AMSs). This included its inclusion in the agenda of regular AMS staff meetings and via the distribution of a flyer outlining the content and scope of the sports massage course. All administrative components of the course such as registering prospective students and liaising with teaching personnel throughout the program were carried out by the distance learning course co-ordinator at Booroongen Djugun College¹³.

lecturing staff and tutoring support

a lecturer in massage with extensive experience in administering a private massage school and experience in teaching Aboriginal people conducted the on-site musculoskeletal management program¹⁶. Apart from the support and encouragement offered by CAG and the principal lecturer, four tutors with relevant massage experience and massage qualifications, one of which resided in the Community, participated in the program as well as acted as a mentor to students throughout the course.

Participants

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 and share their own skills and knowledge. Table 3 outlines characteristics of participants. 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 seventeen females and three males.

Logistics of delivering the course

In accordance with the recommendations of the CAG the course was delivered with as much flexibility as possible. This included presenting the same session in the morning and the afternoon so that it accommodated the demanding work requirements of AHWs and other participants. The sessions were conducted three days per week (Monday, Wednesday and Friday) over a two- week period. The weekend in between provided students with an opportunity to practise their newly acquired skills as part of a sporting event.

Evaluation of the sports massage course

Methods for measuring changes in skills and knowledge

Despite the informal nature of the assessment process, which included the discreet documentation of individual responses to questioning as well as the documented observations made by tutors of techniques performed, participants appeared to adequately measure changes in skills and knowledge. Figures 1, 2 and 3 summarise changes to pre and post-session skills and knowledge.

Baseline and post-training levels of knowledge and skills were assessed via individual and group questioning techniques as per those utilised by Booroongen Djugun College¹³. Measurement of changes in skills and knowledge of course participants were made according to the informal techniques utilised by Booroongen Djugun College. Baseline skills and knowledge were measured via 'round table' informal questioning prior to each session. Attempts were made to discretely question each participant. AHWs were accustomed to this approach to learning as it formed the basis of their existing training methods¹³. Individualized clinical teaching strategies such as these have been successfully employed in training AHWS in other settings¹⁷. These informal and interactive methods of teaching have reportedly optimised the strengths and improve their weaknesses of AHWs involved in the study of specialised clinical skills^{18, 19}.

Practical homework tasks were reviewed by the lecturer and tutors at the commencement of the following session as a way of consolidating prior learning and recording the satisfactory acquisition of learning goals. Each student was subsequently followed up until the tutor was satisfied that the learning tasks had been adequately achieved. Students were deemed to have adequately completed their Learning Activities if their allocated tutors observed an acceptable level of competence. The process for evaluating skills, knowledge and attitudes in the sports massage course is outlined in Figure 4.

Cultural acceptability of the course

Overall, participants commented that the sessions conducted in the course were enjoyable, well organised, useful and relevant to them. The time was reported as being used efficiently though the pace was rated as average instead of suitable or very suitable

Personally, I have gained the importance of touch and feel. Professionally, I've learned to make sure that your client doesn't feel intimidated or embarrassed. This was explained and demonstrated professionally. As a nurse working in diabetic health, I can already see the potential to improve patients suffering from stress as well as the pain and discomfort of poor circulation.

Female, 38 AHW.

My father and grandfather were traditional healers of this country. They didn't go to any white School. They had a gift for it. As a child, I remember that people would come from everywhere to be helped y my father and he would go to them. My father had a lot of love and healing to give. He would sometimes warm his hands around the camp-fire and touch different points on the face and neck to cure our headaches and other wounds. We need to go back to the bush and to our Elders to learn about the great ways of caring for each other."

Male, aged 50. Elder.

The training program appeared to be culturally acceptable to the participants of the course according to a confidential and anonymous post-session questionnaire (Appendix 1). Overall participants found individual sessions enjoyable, well organised, useful and personally relevant. Time was reported as being used efficiently though the pace was reported as 'average' instead of 'suitable' or 'very suitable'. Figure 5 summarises the acceptability of the course to participants.

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 considered 'very knowledgeable', 'very helpful', and 'very clear' in directing activities. The pilot training program appeared generally acceptable to participants.

Application of skills and knowledge

An important extension of the training program was the potential application by AHWs and Elders of massage skills and knowledge in not only addressing the pain and disability associated with the common musculoskeletal conditions but also several of the risk factors associated with some of the other major causes of morbidity and mortality, including heart disease and diabetes.

For instance, the primary cardiovascular health worker in the Community now uses massage in helping his stroke patients to cope with the pain and disability associated with soft tissue contractures, those working in mental health are using relaxation massage in assisting with the many stresses that both their patients and their colleagues encounter in their demanding roles and some maternal health workers are even adapting their skills in providing infant massage.

The ongoing practise sessions developed by AHWs together with the CAG served as a valuable avenue for reviewing and refining skills and knowledge. Finally, the incorporation of lectures in the traditional use of local bush-medicines and massage oils, albeit introductory in nature, did appear to affirm aspects of the traditional system of healing, historically adopted by the Dughutti and Gumbangirr people of the Kempsey district.

Lessons:

The development of the sports massage course appeared to be culturally and logistically feasible. With ongoing mentoring there appeared to be an opportunity for meaningful integration of the skills and knowledge acquired during the course. The collaborative development of the program according to the needs expressed by the Community and articulated via the Community Advisory Group formed a valuable foundation for the program. In addition, the active participation of AHWs throughout all aspects of the program including conducting the prevalence study, developing, delivering and evaluating the health intervention appeared crucial to its success.

The message of many Aboriginal elders in this and other Communities is the need for collaboration between Aboriginal and non-Aboriginal people whilst 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.

The key to the success of this program sprang from ongoing collaboration with the CAG and AHWs throughout all phases including identifying Community needs, course development, accreditation, implementation and evaluation.

If Indigenous musculoskeletal health is to be improved in the long-term, programs must consider education, the environment and cultural factors, as well as traditional health paradigms. In order to respond to these issues, there should ideally be a substantial increase in funding and training of Aboriginal and Torres Strait Islander health workers, who play major roles in health promotion as well as healthcare.

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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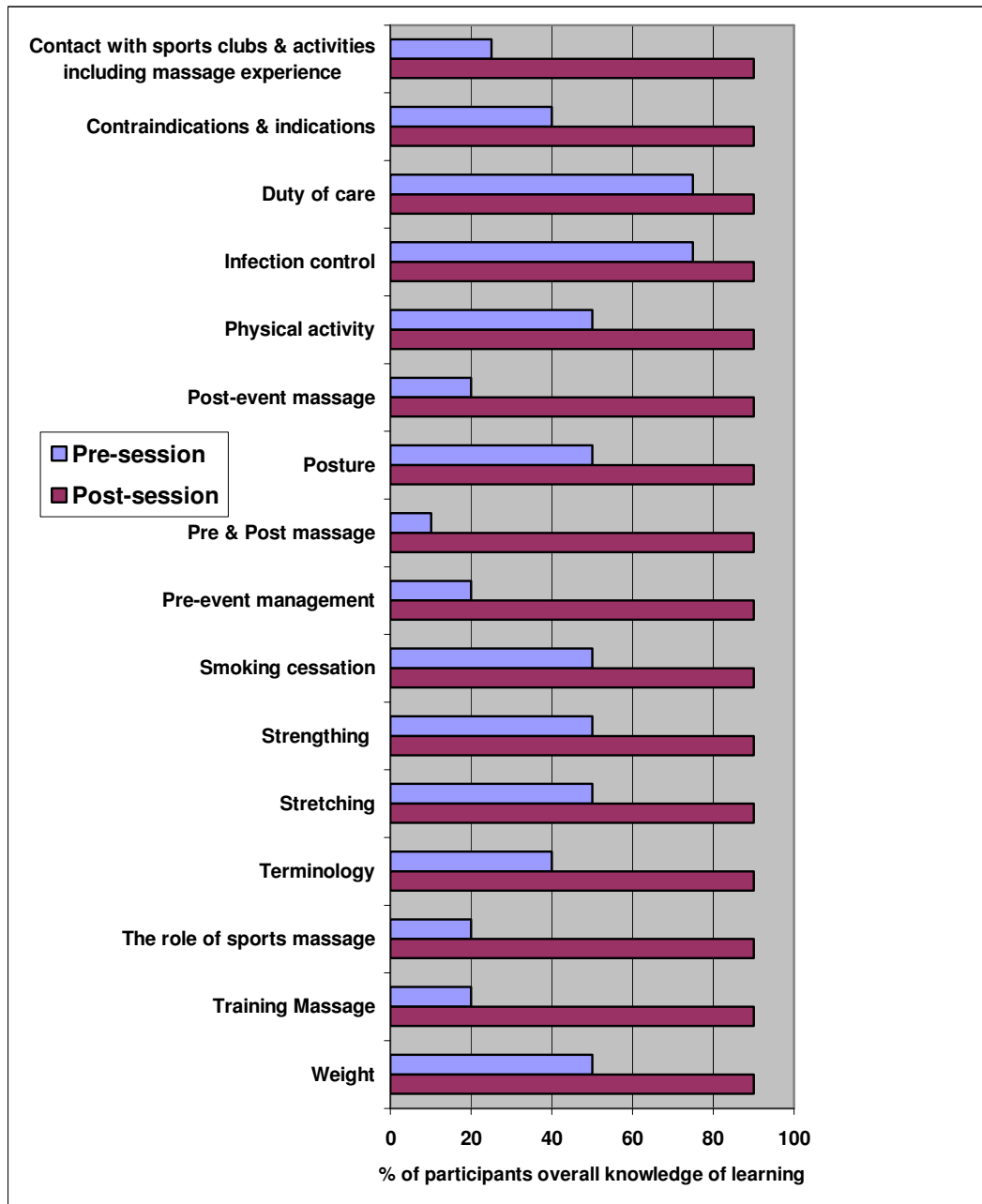
Table 1 Suggestions by the CAG for developing and delivering the sports massage course for AHWs

- 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 such that it encouraged 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.

Table 2 Summary of the sports massage course content

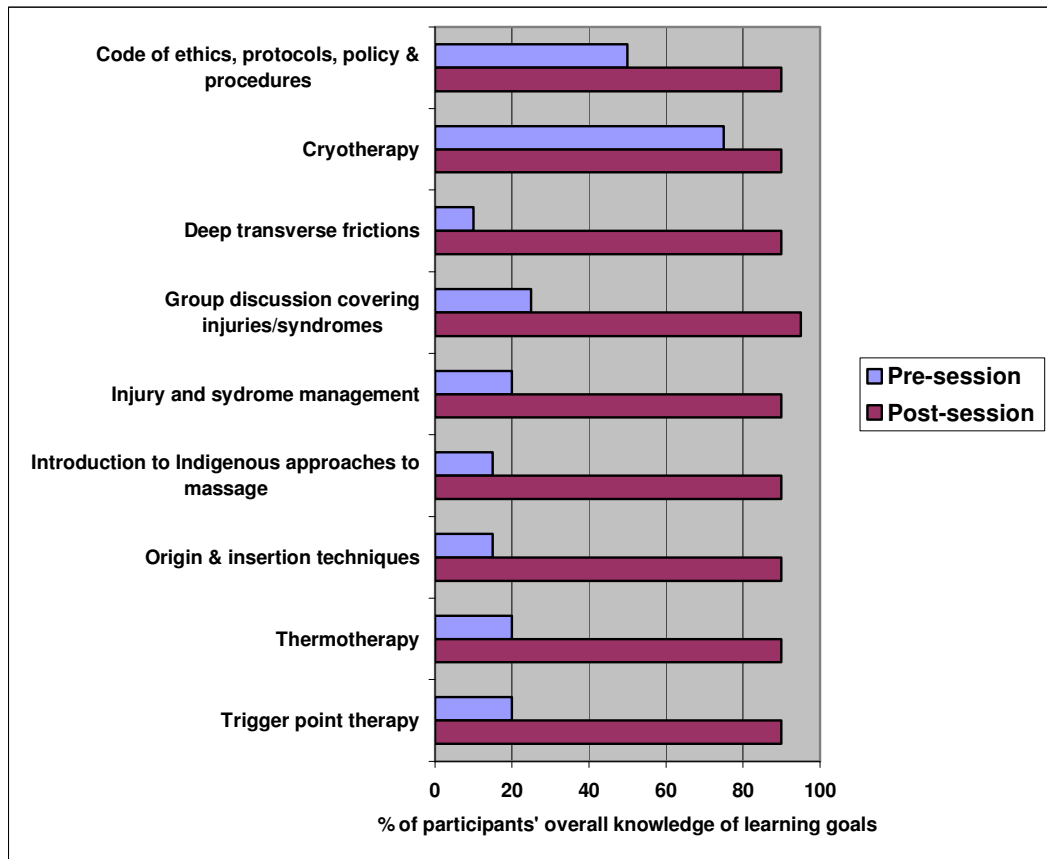
1. A review of general muscle groups.
2. The physiological basis and benefits of massage.
3. The applications of sports massage amongst people of all ages.
4. Massage terminology.
5. Pre (sport) event massage techniques.
6. Post (sport) event massage techniques.
7. Sports training massage.
8. Massage 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).

Figure 1 Participants' understanding of the theory of sports massage for topics covered in the first week of the course



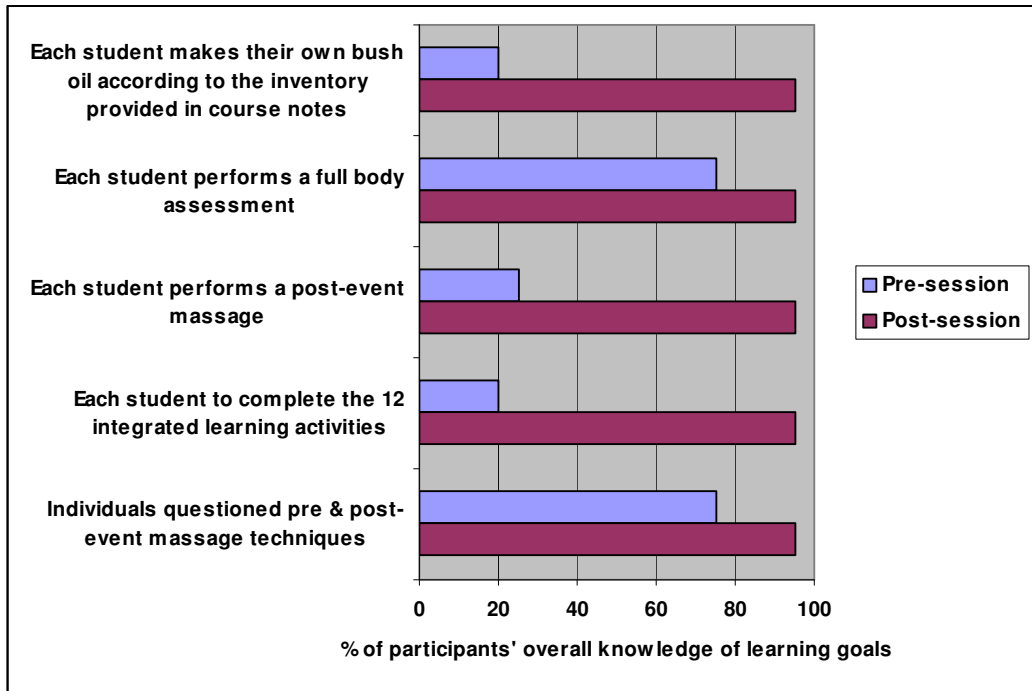
Notes: Participants' skills and knowledge assessed using 'round table', informal assessments during each session and at the commencement of subsequent sessions.

Figure 2 Participants' understanding of the theory of sports massage for topics covered in second week of the course



Notes: Participants' skills and knowledge assessed using 'round table', informal assessments during each session and at the commencement of subsequent sessions.

Figure 3 Changes in participants' skills in sports massage during the course



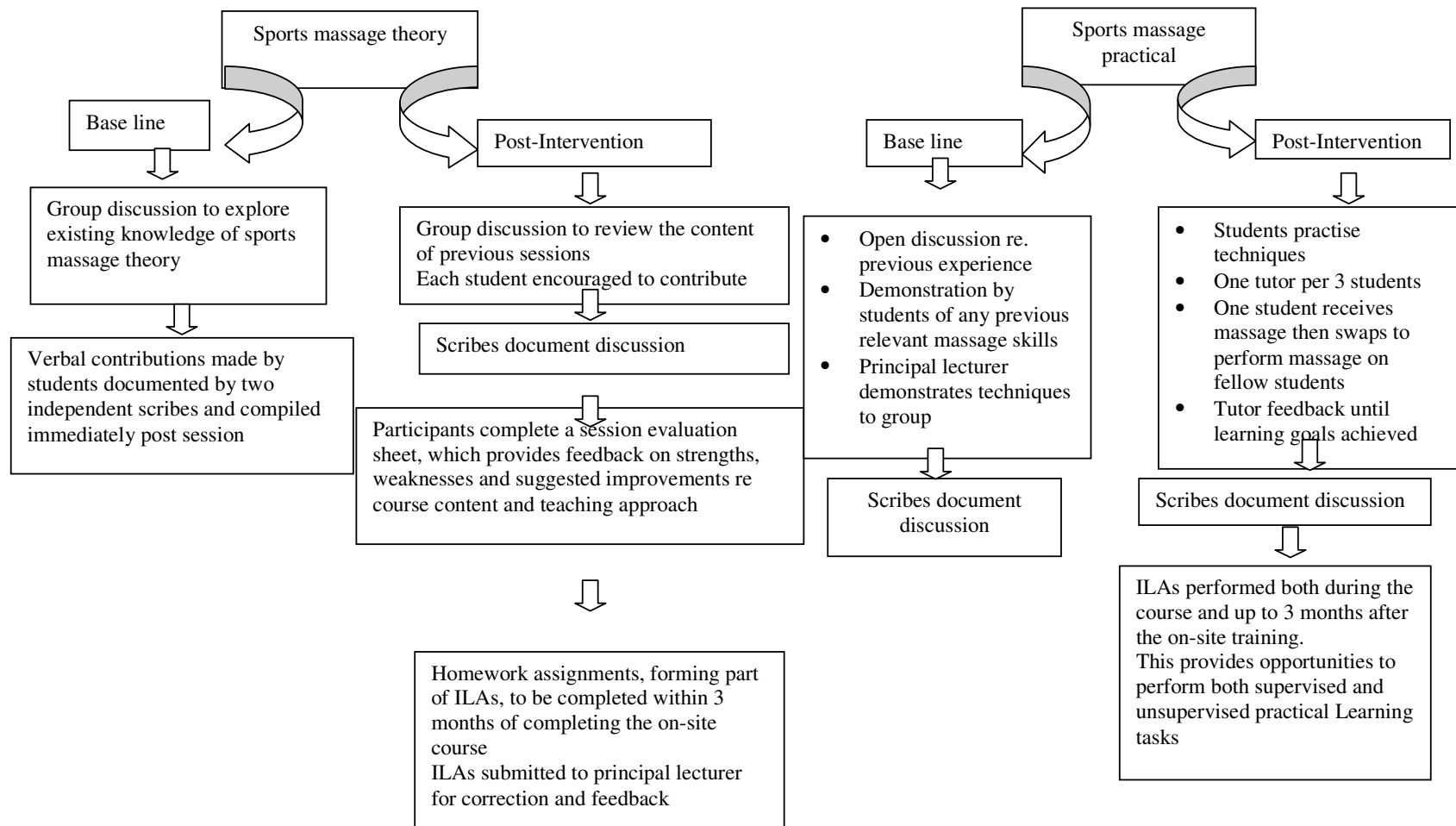
Notes: Participants skills and knowledge assessed using round table, informal assessments during each session and at the commencement of subsequent sessions

Appendix 1. Sports massage course feedback form for students

- a) Was the session well organised?
- b) Was the information provided useful?
- c) Was the session relevant to you?
- d) Did you gain any useful information?
- e) Was the time used efficiently?
- f) How did you find the pace?
- g) How was the level of difficulty?
- h) Was the session enjoyable?
- i) How did you find the processes?
- j) Were the tutors knowledgeable?
- k) Was the tutor helpful?
- l) Was the tutor able to clearly direct activities?

- m) What topics should be expanded? Added or omitted? Please explain.
- n) What did you like about today's session?
- o) What improvements could you suggest?
- p) Any other comments?

Figure 4 Outline of the process for developing skills, knowledge and attitudes in the sports massage course



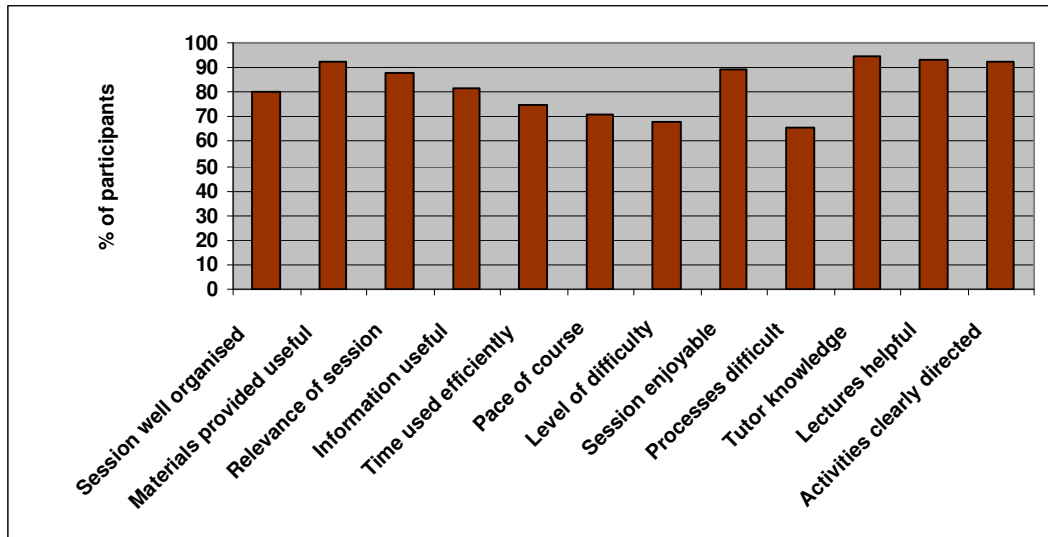


Figure 5 Student participant's evaluation of the sports massage course