

Bringing Chiropractic to Aboriginal communities: The Durri Model

DEIN VINDIGNI, BARBARA POLUS, GAY EDGECOMBE, JOAN VAN ROTTERDAM,
NICOLE TURNER, LEANNE SPENCER, GEOFF IRVINE and MAX WALSH

ABSTRACT: Aboriginal Medical Services (AMSs) are the main portal of health care for Aboriginal communities, particularly in rural and remote areas where access to community centres and public hospitals is limited. Aboriginal Health Workers (AHWs) are also the first point of contact for people in their community. They have the community's vital trust, respect and local knowledge required in promoting the health of their people through health screening and a range of specialized clinical skills including cardiovascular, diabetes and mental health.

Recent studies have unearthed a disproportionately high prevalence of painful and disabling musculoskeletal conditions in Indigenous people compared with non-Indigenous Australians. These conditions are thought to be overshadowed by more notable causes of mortality including cardiovascular disease, diabetes and death from road trauma.

Though previously under-reported, musculoskeletal conditions commonly treated by chiropractors are thought to impact substantially on the quality of life experienced by Indigenous Australians. These conditions are further complicated by the burden imposed by a range of socio-economic hardship, geographical and cultural barriers. If a person living in economic hardship and/or in a rural or remote community is injured or suffers from a chronic, disabling condition, she or he is often unable to readily access the appropriate tactile therapies such as chiropractic, massage therapy, osteopathy or physiotherapy required in order to manage their condition(s).

There are also important philosophical similarities between healthcare as traditionally practiced in Aboriginal communities and tactile therapies such as chiropractic care.

This article describes the development of a community-based chiropractic program, delivered in Aboriginal Community Controlled Health Services which was informed by a community advisory group in all phases of its evolution including its development, implementation and the delivery of health services and interventions.

It demonstrates the importance of listening and learning from each other's experience in helping to achieve sustainable and culturally sensitive health outcomes for Indigenous communities. It describes an evolving model with potential to be adapted in other Indigenous communities. Evaluating the program's development and shortcomings through participatory action research is designed to ensure that it is sensitive and responsive to the Indigenous community that it serves.

INDEX TERMS: (MeSH): CHIROPRACTIC; AUSTRALIA.
(Other):ABORIGINAL COMMUNITIES.

Chiropr J Aust 2009; 39: 80-3.

Dein Vindigni, OAM, BAppSc(Chiropractic), MMedSc, PhD, FACC¹
Barbara I Polus, BAppSc(Chiropractic), MSc, PhD¹
Associate Professor, Discipline of Chiropractic
Gay Edgcombe, RN, MSc, PhD²
Professor of Community Health
Joan van Rotterdam, BSc, GradDip(Chiropractic), MMedSc (Epidemiology)³
Nicole Turner, (Enrolled Nurse) Project Officer⁴
Leanne Spencer, BHSc(Nursing)PostGradCert(Advanced Generalist
Nursing)⁴
Executive Officer of Clinical Services
Geoff Irvine, DC, MACC⁵
Max Walsh, BAppSc(Chiropractic), MSc, MAppSc, DipEd, FICC, FACC¹
Senior Lecturer, Discipline of Chiropractic
¹ RMIT University, Discipline of Chiropractic, Bundoora, Victoria
² RMIT University, Discipline of Nursing and Midwifery, Bundoora,
Victoria
³ University of Newcastle, School of Medicine and Public Health,
⁴ Durri Aboriginal Corporation Medical Service, Kempsey, NSW
⁵ Chiropractor, Private Practice, Old Bar Beach, NSW

Sources of Funding: Chiropractors' Association of Australia (National).

INTRODUCTION

This paper documents the development of a chiropractic program in a large, Australian rural Indigenous community. It draws on the findings of a community-based study which reported the prevalence of painful, disabling musculoskeletal conditions. This study also examined the support and barriers to promoting musculoskeletal health in the community. Our paper describes a current initiative, commenced in 2006, to introduce chiropractic in the local Aboriginal Medical Service (AMS). Participatory Action Research (PAR) is a tool that has been adopted to rigorously evaluate all phases of this new program. The paper concludes with some recommendations for ensuring that this and other emerging programs remain culturally sensitive as well as responsive to the communities that they serve.

BACKGROUND

The poor health of Indigenous Australians

The poor health of Indigenous Australians has been widely reported. This group continues to lag behind on all indicators with life expectancy 15-20 years less than non-Indigenous Australians and rates of hospitalisations, poor health and quality-of-life far greater than other Australians.¹ Factors such as distance from services, availability of transport, availability of culturally appropriate services, workforce shortages and private health insurance cover affect access to, and use of, health services.¹

Studies have identified a disturbingly high prevalence of musculoskeletal conditions previously under-estimated and arguably overshadowed by more notable causes of mortality including cardiovascular disease, diabetes and road trauma.^{2,3}

There are comparatively high rates of painful, disabling conditions which impact greatly on quality of life. Most people with these conditions have to endure their pain and discomfort because of social, cultural and financial barriers which limit their access to complementary therapies including chiropractic, osteopathy, massage therapy and physiotherapy.³

Indigenous people experience higher rates of disability than other Australians. In 2002, in non-remote areas, the rate of those aged 18 years or over with a profound or severe core activity limitation was 2.1 times that of the rest of the population.¹ A 2005 study conducted by the Australian Institute of Health and Welfare showed that 33% of Indigenous people reported musculoskeletal conditions, including arthritis at 17%.¹ Chiropractors have an important role to play in managing disability via the diagnosis and treatment of musculoskeletal conditions as well as the prevention of these conditions.

The role of chiropractic in promoting the health of Indigenous people

The disparity in hands-on healthcare continues despite tactile therapies being culturally consistent with many Indigenous methods of healing which have traditionally relied on healing touch and herbs to nurture one's body and spiritual well-being.

There are important philosophical similarities between health-care as traditionally practiced in Aboriginal communities and chiropractic care.

An elder of the Gumbangirr community recalls his grandfather warming his hands around the camp-fire and then placing them on tender points around his scalp and neck to help relieve the pain and tension of headaches. In many traditional communities, healing involved the use of hands, prayers and bush-medicines delivered by highly gifted, trusted and initiated members of the community. In the distant memories of many community members lies an appreciation that this natural and spiritually-centred approach to health is aligned with the foundations and philosophy of chiropractic.

Tactile therapies have the potential to empower individuals and community members through community-based education programs which promote self-help initiatives.

Some anecdotal evidence also suggests that public health programs which incorporate traditional methods of healing help to affirm the cultural heritage of the community and empower community members. Massage has been traditionally used by many cultural groups and is being increasingly recognised as a valuable adjunct to western medicine for the treatment of musculoskeletal conditions. There is a growing appreciation for the effectiveness and cost-effectiveness of tactile therapies in delivering simple and safe musculoskeletal care.⁴

Chiropractic has the potential to become an important part of comprehensive primary health care. Chiropractors work within a framework of empowering the individual, carer or the community through education programs and the promotion of self-management of health and well-being. Chiropractic also has an important role in the prevention and management of many of the conditions and illnesses that affect Indigenous Australians disproportionately. It also has an important role in injury prevention as well as health promotion though its potential to improve Indigenous health outcomes is limited by major gaps in access to chiropractic services.

The barriers to providing chiropractic to Indigenous communities

There are an estimated 300 Aboriginal Medical Services (AMS) in Australia. These Aboriginal Community Controlled Services are the preferred portal of culturally appropriate health care for Aboriginal communities, but involvement of Chiropractors within these organisations is almost non-existent.³ The situation is worse in rural and remote communities that suffer increased disadvantage in proportion to their remoteness.¹

Indigenous participation in health service delivery also impacts on community access. Aboriginal Health Workers (AHWs) are the first point of contact for people in their community.⁶ They have the vital trust, respect and local knowledge required in promoting the health of their people through health screening and a range of specialised clinical skills including assessment for cardiovascular, diabetes and mental health.⁷

Aboriginal Health Workers have, however, been historically more versed with and trained in mainstream health interventions. There are currently no established, community-based pathways for AHWs to enter professions such as Chiropractic. One notable exception to this is the development of a sports massage therapy program within Kempsey³ and Hopevale.⁸

Indigenous Australians are under-represented in all health professions but most importantly for this discussion, in 2009 there were no known Indigenous chiropractors.¹

Improving access to chiropractic for Indigenous Australians

There is clearly a need to provide greater accessibility to and utilisation of culturally appropriate chiropractic care in Indigenous communities. An evolving awareness of the lack of Complementary and Alternative Medicine (CAM) services to Indigenous communities led to a study that commenced in 2000 undertaken by a Chiropractor.



Dr Geoff Irvine at Booroongen

HISTORY OF CHIROPRACTIC IN DURRI

The study examined the prevalence of painful, disabling musculoskeletal conditions in a large, rural Indigenous community. This work led to a pilot project which introduced chiropractic and massage therapy to the Kempsey Indigenous community.

The original investigation was a cross-sectional musculoskeletal pain and disability study which took place between 2000 and 2003.³

The research project was overseen by a Community Advisory Group (CAG) which comprised the University of Newcastle, Durri Aboriginal Medical Service, Booroongen Djugun Aboriginal Training College and the not-for-profit organization, Hands-On-Health Australia. Members of this Advisory Group included General Practitioners, Psychologists, AHWs and AMS administrators. The findings of this study were significant. After assessing over 200 community members, the typical community profile was a middle-aged male or female suffering from at least two painful musculoskeletal (joint/muscle) conditions that had been present for more than seven weeks. They reported a history of physical trauma related to sporting injuries, car accidents, falls or work-related injuries and a range of lifestyle risk factors including obesity, smoking, prolonged sitting, heavy lifting and psychosocial stress. If they were aware of interventions that might assist in alleviating this chronic pain, they had not sought treatment because of the cost of treatment including chiropractic, osteopathy and massage or an attitude of being resigned to enduring pain and poor health.

The reported findings highlighted the need for a culturally sensitive, accessible and affordable approach to managing these painful and disabling conditions endured by the majority of community members.

In the short term, the Community Advisory Group recommended that a chiropractic program be implemented as a simple and effective approach to help prevent and treat the substantial burden of musculoskeletal illness endured by the Durri community.

The study also informed the longer-term development of an accredited, flexibly-delivered, community-based sports massage course for assessing and managing common, uncomplicated musculoskeletal conditions as a precursor to training Indigenous chiropractors to care for their own community within a culturally sensitive framework.

As a preliminary pilot, twenty health workers were trained in sports massage and several of these health workers continue to use their skills in caring for the community within various settings including the Aged Care facility at Booroongen Djugun, the diabetes and cardiovascular programs, maternal and infant health, youth-work and alongside sports & recreation programs.

Beyond the Durri chiropractic program, a chiropractic clinic has been in operation at the Redfern AMS for many years and a chiropractor has recently started a part-time chiropractic clinic in an AMS in Forster, NSW. More recently, Murdoch University had commenced regular student chiropractic outreach programs in Western Australia.

However, beyond these important initiatives, chiropractic continues to be conspicuous by its absence in most Aboriginal communities throughout Australia despite its potential for effectively assisting the widespread burden of musculoskeletal conditions in Indigenous communities.

THE CURRENT SITUATION

Two Chiropractors currently work at the Durri AMS and the Booroongen Djugun Aged Care facility in Kempsey. The clinics run every two weeks and see a cross-section of both young and old members of the community. The service is well-received and is growing steadily.⁹

CAA support – Chiropractors supported to provide chiropractic care to Durri

The Durri chiropractic program is subsidised by the Chiropractors' Association of Australia National, (CAA) and steps are in place to evaluate the development and outcome of the program so that it attracts the resources and support required to sustain the program.

Engaging the Durri AMS team in the evaluation of the chiropractic pilot project – a role for research

To ensure that the Durri chiropractic program is sustainable and continues to be responsive to the needs of the community, the CAG has recently entered a research partnership with the Discipline of Chiropractic at RMIT University to evaluate the development and implementation of the program.

Participatory Action Research (PAR) has been selected as the most appropriate research methodology to review the impact of the Durri Chiropractic program. There are several strengths to using PAR. As its name implies, PAR encourages the participation and sharing of collective wisdom of key stakeholders in the community. Central to PAR is engaging all participants as equal partners in evaluating the program as it unfolds and modifying it in the light of emerging recommendations,¹⁰ expressed by the key people in the program including AHWs, Elders, leaders of various Indigenous health programs.

Acceptance of chiropractic by various groups – the journey so far

Early PAR data suggests that the program has been well-received by most members of the community. Despite small beginnings, on average six to eight patients attend each session. According to administrative staff at both the Durri AMS and Booroongen Djugun College, the Durri chiropractic program has been well-utilised particularly given its relative newness as a health discipline in this and other Indigenous communities.⁹

Acceptability of Chiropractic Care to the Durri clinicians.

Preliminary workshops using PAR suggest that there are nonetheless some barriers to the introduction of the chiropractic program amongst some members of the health-care team. Some of these reservations include a lack of awareness about chiropractic, in particular its safety and documented effectiveness in treating musculoskeletal conditions.¹¹ These concerns coupled with a need to demonstrate effective outcomes for community members, decision makers and funding bodies prompted the development of the evaluation of the program using a blend of quantitative and qualitative methods.

Measuring the effectiveness of chiropractic intervention

A mixed method approach involving patient self reports coupled by interviews have been developed to enable the researchers to describe the response to the Durri chiropractic program from the patient's perspective. This enables the assessment of whole person outcomes resulting from the program and allows the patient themselves to give meaning to their health-care experience.¹² A previous study using this same approach has documented patient characteristics and perceptions to receiving tactile therapy in a remote, rural Indigenous community in far north Australia.⁸

CONCLUSION

Bringing chiropractic to Durri is a challenging, yet rewarding journey. From this experience may evolve a model with potential to be adapted in other Indigenous communities. Evaluating the program as it unfolds through participatory action research will enable it to be culturally sensitive and responsive to the Indigenous community that it is designed to care for.

The Durri chiropractic program represents an innovative opportunity to make a positive short and longer term impact on the health of Indigenous Australians in this community

and beyond. It is a small but important step in bringing a method of healing which is akin to traditional approaches to promoting health through hands-on treatment. Providing on-site chiropractic as part of a multidisciplinary team alongside flexibly-delivered sports massage training that empowers communities has potential to make a sound contribution to the health of Indigenous Australians. The program is community-based and is the result of many years of collaboration between like-minded individuals and organizations committed to making a sustainable difference to the health of Indigenous communities. Establishing trust, listening and learning from each other's perspectives and traditions have been essential ingredients in establishing the Durri chiropractic program. Our shared hope is to collaboratively help seed similar programs in Indigenous communities throughout parts of Australia.

REFERENCES

1. Australian Institute of Health and Welfare (2006): Australia's Health 2006, AIHW cat. no. AUS 73, AIHW, Canberra.
2. Vindigni D, Perkins J. Identifying musculoskeletal conditions among rural Indigenous peoples. *Australian Journal of Rural Health* 2003;11: 187-92.
3. Vindigni D. Promoting the musculoskeletal health of Indigenous Australians living in rural communities. *Aboriginal Health o Aboriginal Hands*. Doctoral Dissertation, The University of Newcastle, 2004.
4. Vickers A Zollman C ABC of complementary medicine: Massage therapies, *BMJ* (319):1254-1257, 1999.
5. Australian Indigenous healthinonet. Available at: <http://www.healthinonet.ecu.edu> Accessed: 23rd April, 2009.
6. National Aboriginal and Torres Strait Islander Health Council (NAT-SIHC) (2004) National Strategic Framework for Aboriginal and Torres Strait Islander Health: Framework for action by Governments, Commonwealth of Australia, Canberra.
7. Pacza T, Steele L, Tennant M. Dental train-the-trainer program for Aboriginal health workers in the Kimberley Region. A report prepared by the School of Oral Health Sciences, The University of Western Australia, Nedlands; 2000.
8. Paterson C, Vindigni D, Polus B, Browell T, Edgecombe G (2008). Evaluating a massage therapy training and treatment programme in a remote Aboriginal community. *Complementary Therapies in Clinical Practice*, 14, 158-167
9. Personal communication, Leanne Spencer, Executive Officer Clinical Services, Durri Aboriginal Medical Service, October, 2008.
10. Hart E, Bond M. *Action Research for Health and Social Care*. Buckingham: Open University Press, 1995.
11. Participatory Action Research Workshop, Held at Durri AMS, Kempsey, NSW, November 2008
12. Paterson C. Seminar, School of Health Sciences, 7th April 2009 RMIT University, Paterson.