



THE PALMERSTON - MURDOCH PROJECT

Presenter: Lyndon Amarin-Woods
ATCA Conference June 1st 2011

ABOUT ME



- 1982 graduate PIT (RMIT) Melbourne Australia
- Currently enrolled in Masters Public Health (MPH) University of WA
- Supervisor Murdoch University Chiropractic Clinic since 2005
 - Supervisor Murdoch Outreach External Clinic Programme
 - South Lake Ottey Community Centre (Aboriginal Health)
 - Palmerston Farm (Live-in Rehabilitation Facility)
 - Part-time private practice:
 - The Heights Shopping Centre
 - 53/200 Mirrabooka Ave
 - ALEXANDER HEIGHTS WA 6064
 - Contact details
 - thechiro@iinet.net.au Landline : 9343 8555 Mobile: 0429 209255
 - Murdoch University Chiropractic Clinic 9360 1202

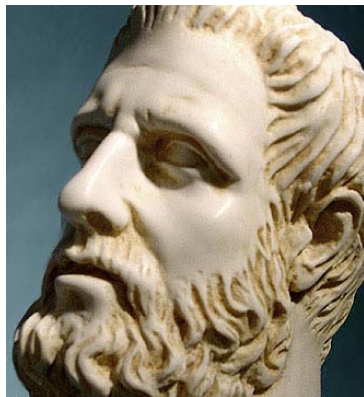
PALMERSTON FARM



Palmerston Farm therapeutic community is a facility where people live full time in the course of recovery from substance misuse. Residents fulfil criteria such as strict non-use of illegal substances, community standards of behaviour and shared responsibility for the various tasks and running of the community usually over a period of 3-4 months.



THE CHIROPRACTIC PROFESSION



- ⦿ Brief outline of profession.
- ⦿ Basis and approach.
 - ⦿ Structure & Function
 - ⦿ Nervous system
- ⦿ Hippocrates



MURDOCH
UNIVERSITY
PERTH, WESTERN AUSTRALIA

THE MURDOCH UNIVERSITY CHIROPRACTIC PROGRAMME

The screenshot shows the Murdoch University website for the School of Chiropractic and Sports Science. At the top left is the Murdoch University logo. A search bar is located at the top right with the text "Visit the Global Website". Below the logo is a large banner image featuring a man's face and the text "School of Chiropractic and Sports Science". Underneath the banner are four columns of content: "Courses", "Current staff", "Current students", and "News". Each column has a small image and a brief description with a "Find out more" link. Below these columns is a "Welcome to the School of Chiropractic and Sports Science" section with a paragraph of text. To the right of this section are four columns of links: "Contact" (Staff directory), "Alumni" (Murdoch University Chiropractic Alumni Association - Facebook), "For staff" (General information), and "For students" (Chiropractic and Sports Science Community, Murdoch Student Information). Below these are "Research" (Research Committee, Grants, Work in Progress, Summer Scholarships) and "Chiropractic Clinic" (About the Chiropractic Clinic, Making an appointment, Opening hours and directions). At the bottom left is the Murdoch University logo and copyright information. At the bottom right is a note: "You are on the main Murdoch site - Find another Murdoch website".

- ① 5 year double degree
- ① Chiropractic Science (BSc, BChiro)
- ① Clinical component
 - ① MUCC Campus
 - ① Outreach clinics
 - Palmerston Farm
 - South Lake Ottey Centre
 - St Patricks; Hands On Health Fremantle



**MURDOCH
UNIVERSITY**
PERTH, WESTERN AUSTRALIA

THE COLLABORATION



- ◎ Background
 - ◎ Genesis
 - ◎ CAA(WA) support
- ◎ Process
- ◎ Treatment / Management

THE RESEARCH

- ⊙ An exploratory (pilot) non-randomised controlled trial examining chiropractic care within a therapeutic community in terms of student- and patient-oriented outcomes.



**MURDOCH
UNIVERSITY**
PERTH, WESTERN AUSTRALIA

ABSTRACT

Chiropractic is an emerging profession with an evolving role in musculoskeletal health, particularly regarding patient assessment and musculoskeletal care. Concurrently, the WA Department of Health is actively planning future services by exploring innovative ways to provide for the health care needs of the population, using the Health Networks as a vehicle. Of relevance is the Musculoskeletal Health Network that focuses on various musculoskeletal issues, like spinal pain and chronic disease, with a view to inform future healthcare planning and services. In line with the Musculoskeletal Health Network's models of care, the chiropractic profession in WA is actively exploring pioneering roles with a view to contribute to the mainstream health care system and service provision. An example of this is the chiropractic care provided to residents at Palmerston Farm in Perth, a novel service to people affected by substance use, by supervised chiropractic Interns from Murdoch University. Although this type of community outreach is not original, this project represents a fresh, contemporary role for chiropractic to participate in mainstream healthcare services. The drugless approach to health care intrinsic to chiropractic constitutes an intuitive adjunct to the Palmerston ethos of recovery with empowerment.

This project examines the effect of experience on chiropractic Interns with respect to perceptions, learning outcomes and attitudes toward those in substance recovery, alongside the measurement of patient outcomes and satisfaction with care. The process of care provision is to be evaluated and implications for health service provision and impact on the wider community explored.



**MURDOCH
UNIVERSITY**
PERTH, WESTERN AUSTRALIA

THE RESEARCH TEAM

- ⊙ **Gregory Parkin-Smith** MChiro, MBBS, MSc, DHSc
 - Medical Practitioner, Chiropractor
 - ⊙ Senior Lecturer Murdoch University
- ⊙ **Lyndon Woods** B.App.Sci (Chir)
 - Chiropractor
 - ⊙ Clinical supervisor. MPH candidate
- ⊙ **Vincenzo Cascioli** M: Tech (Chiro)
 - Chiropractor
 - ⊙ Murdoch Campus Clinic Director
- ⊙ **Dianne Kennedy** Bh Sc
 - Therapeutic community Co-ordinator



MURDOCH
UNIVERSITY
PERTH, WESTERN AUSTRALIA

THE CLINICAL ENCOUNTER

- ⊙ Residents of Palmerston Farm
 - ⊙ Prospective group
 - ⊙ 'Control' group
- ⊙ **Client/Resident Perceptions; PSQ-18** Adapted from;
 - ⊙ *Marshall GN., Hays RD., The Patient Satisfaction Questionnaire Short-Form (PSQ-18) RAND Corp Santa Monica, CA (1994)*
 - ⊙ *Coulter ID., Hays RD., Danielson CD., The Chiropractic Satisfaction Questionnaire, Topics In Clinical Chiropractic, Vol. I, Issue 4, 1994, pp. 40-43.*



MURDOCH
UNIVERSITY
PERTH, WESTERN AUSTRALIA

CLINICAL AUDIT DATA

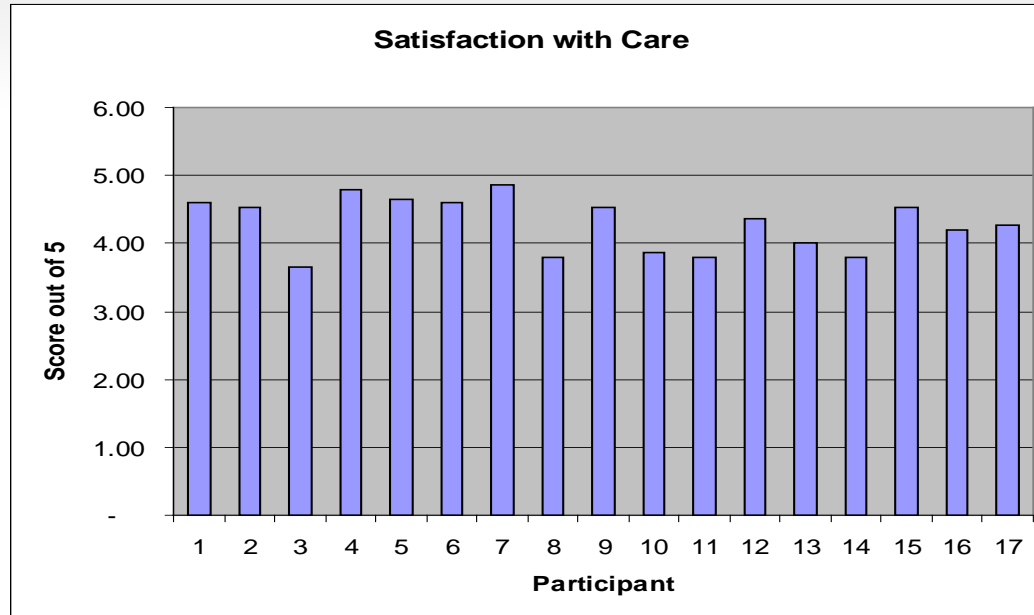
PSQ of treated residents in the past

- The interns are good about explaining the reason for any tests and procedures.
- Sometimes interns make me wonder if their diagnosis is correct.
- When I go for chiropractic care, they are careful to check everything when treating and examining me.
- The interns act too businesslike and impersonally toward me.
- My interns treat me in a very friendly and courteous manner.
- Those who provide my care sometimes hurry too much when they treat me.
- I have some doubts about the ability of the interns who treat me.
- The interns usually spend plenty of time with me.
- I am dissatisfied with some things about the chiropractic care I receive.
- I would like more privacy when I get treatment.
- The interns are interested in me as a person.
- I understand what the interns tell me about the cause of my health concerns.

RATING AVG	4.60	4.53	3.64	4.80	4.64	4.60	4.86	3.79	4.53	3.87	3.79	4.36
NORMATIVE MEAN	3.09	3.68	3.19	3.45	3.74	3.88	4.29	3.52	3.58	3.84	3.67	3.48

SD	0.63	0.52	1.28	0.56	0.63	0.63	0.36	1.19	1.06	1.55	0.97	0.84
NORMATIVE SD	1.00	1.00	0.92	0.92	0.98	0.89	0.98	1.08	1.02	0.96	1.00	1.11

CLINICAL AUDIT DATA



t-test at 95% confidence level (two-tailed) using data across categories:

t-statistic = -4.52; df = 26; p-value = 0.000119

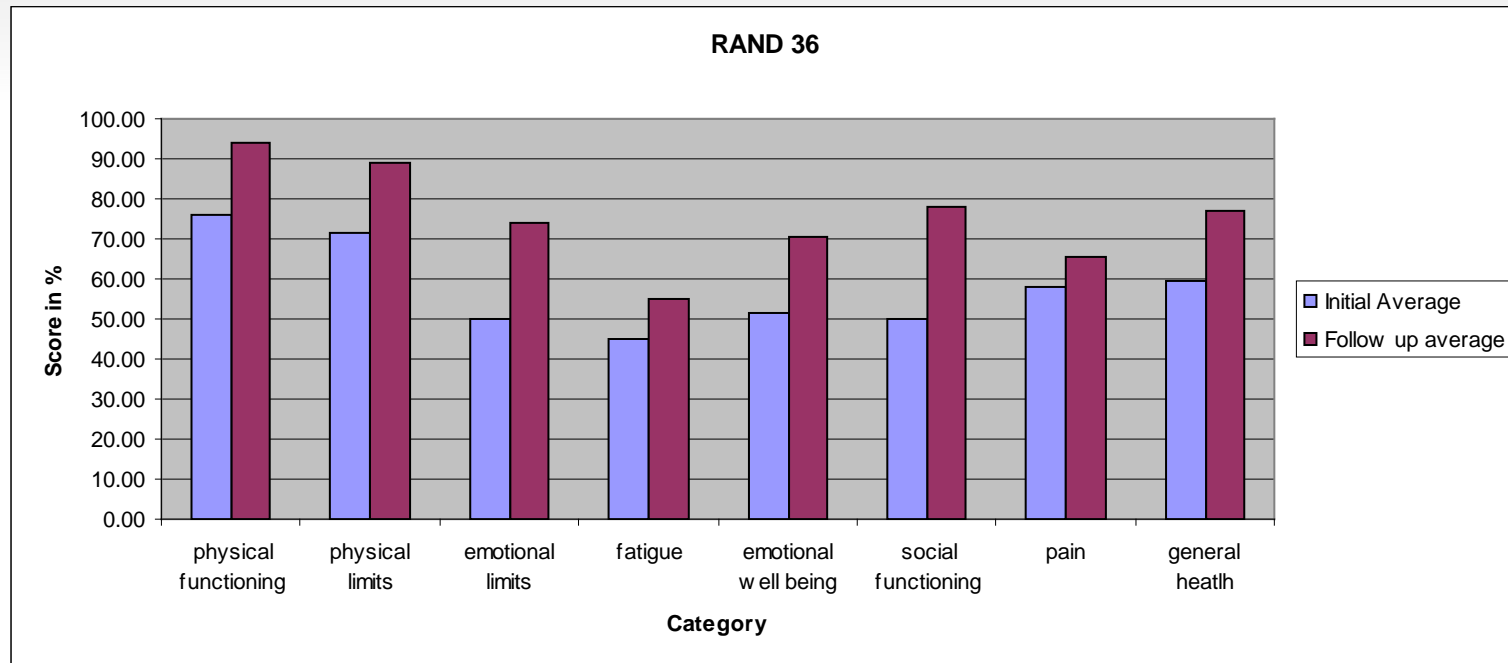
Significant difference between scores and normative mean

CLINICAL AUDIT DATA

- ◎ RAND-36 Baselines
 - ◎ Residents treated by chiropractic interns

category	Initial Average	Follow up average
physical functioning	75.57	93.56
role limitations due to physical health	70.31	91.67
role limitations due to emotional problems	56.25	80.56
energy/fatigue	47.71	59.17
emotional well being	52.00	73.44
social functioning	50.78	79.17
pain	55.00	65.42
general health	61.25	77.81

CLINICAL AUDIT DATA



t-test at 95% confidence level (two-tailed) using data across categories:

t-statistic = -7.48; df = 8; p-value = 0.00014

Significant difference from baseline to follow-up

THE EDUCATIONAL EFFECT

- ⊙ Present cohort (5th Year Chiropractic Interns)
- ⊙ Previous graduates

Intern Perceptions; SPSLE

- ⊙ Adapted from;
 - ⊙ *Piper B., DeYoung M., Lamsam GO., Student Perceptions of a Service-Learning Experience, Am. J. Pharm. Education Vol 64. 153-165(2000)*



MURDOCH
UNIVERSITY
PERTH, WESTERN AUSTRALIA



SPSLE QUESTIONNAIRE

⊙ **Program assessment**

1. The placement was educational.
2. I learned a lot from the placement.
3. The placement should be longer.
4. The placement should be eliminated from the program.
5. The placement made me feel like I made a difference.

SPSLE QUESTIONNAIRE (CONT)

Specific competencies

1. The placement highlighted the importance of respect for all people.
2. The placement enhanced my awareness of others in need.
3. The placement enhanced my confidence in interacting with other professionals.
4. The placement provided the opportunity to enhance my communication skills.
5. The placement made me realise how much I have to offer those in need.
6. The placement gave me the opportunity to learn first-hand about empathy.
7. The placement makes me want to do community service work in the future.
8. I learned about the importance of teamwork.
9. The placement impressed upon me the many opportunities for chiropractors to serve the community.
10. I am more aware of the needs of the community as a result of the placement.
11. Community service is a part of the chiropractor's obligation.
12. The placement did a lot to change prior perceptions I had about the community I served.
13. Community service is effective in enhancing the perception of personal awareness and social responsibilities.

ETHICS APPROVAL PROCESS

- ◎ Murdoch University Human Research Ethics Committee
Based on National Statement on Ethical Conduct in Human Research (2007)
 - ◎ Developed jointly by National Health and Medical Research Council ,
Australian Research Council & Australian Vice-Chancellors' Committee
- ◎ Conditional approval; Project No. 2011/051 13th May 2011
- ◎ Project in process of being submitted to
Australian New Zealand Clinical Trials Registry (ANZCTR)

ANZCTR
Australian New Zealand Clinical Trials Registry



MURDOCH
UNIVERSITY
PERTH, WESTERN AUSTRALIA

THANK YOU