THE PALMERSTON - MURDOCH PROJECT

Presenter: Lyndon Amorin-Woods
ATCA Conference June 1st 2011
• 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)

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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
THE MURDOCH UNIVERSITY CHIROPRACTIC PROGRAMME

5 year double degree

Chiropractic Science (BSc, BChiro)

Clinical component

- MUCC Campus

- Outreach clinics
  - Palmerston Farm
  - South Lake Ottey Centre
  - St Patricks; Hands On Health Fremantle
THE COLLABORATION

- Background
- Genesis
- CAA(WA) support
- Process
- Treatment / Management
An exploratory (pilot) non-randomised controlled trial examining chiropractic care within a therapeutic community in terms of student- and patient-oriented outcomes.
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.
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
Resident 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)

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.

<table>
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<tr>
<th>RATING AVG</th>
<th>4.60</th>
<th>4.53</th>
<th>3.64</th>
<th>4.80</th>
<th>4.64</th>
<th>4.60</th>
<th>4.86</th>
<th>3.79</th>
<th>4.53</th>
<th>3.87</th>
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<th>4.36</th>
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<tbody>
<tr>
<td>NORMATIVE MEAN</td>
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<td>3.19</td>
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<td>3.74</td>
<td>3.88</td>
<td>4.29</td>
<td>3.52</td>
<td>3.58</td>
<td>3.84</td>
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<td>SD</td>
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<td>0.56</td>
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<td>0.63</td>
<td>0.36</td>
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<td>1.00</td>
<td>0.92</td>
<td>0.92</td>
<td>0.98</td>
<td>0.89</td>
<td>0.98</td>
<td>1.08</td>
<td>1.02</td>
<td>0.96</td>
<td>1.00</td>
<td>1.11</td>
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</table>
t-test at 95% confidence level (two-tailed) using data across categories:

\[ t\text{-statistic} = -4.52; \; df = 26; \; p\text{-value} = 0.000119 \]

Significant difference between scores and normative mean
## Clinical Audit Data

### RAND-36 Baselines

Resident treated by chiropractic interns

<table>
<thead>
<tr>
<th>category</th>
<th>Initial Average</th>
<th>Follow up average</th>
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</thead>
<tbody>
<tr>
<td>physical functioning</td>
<td>75.57</td>
<td>93.56</td>
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<tr>
<td>role limitations due to physical health</td>
<td>70.31</td>
<td>91.67</td>
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<tr>
<td>role limitations due to emotional problems</td>
<td>56.25</td>
<td>80.56</td>
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<tr>
<td>energy/fatigue</td>
<td>47.71</td>
<td>59.17</td>
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<tr>
<td>emotional well being</td>
<td>52.00</td>
<td>73.44</td>
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<tr>
<td>social functioning</td>
<td>50.78</td>
<td>79.17</td>
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<tr>
<td>pain</td>
<td>55.00</td>
<td>65.42</td>
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<tr>
<td>general health</td>
<td>61.25</td>
<td>77.81</td>
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</table>
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;
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.
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.
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)
THANK YOU