Barriers and Change Management

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International focus

“Professional services provided by pharmacists who use their skills and knowledge to take an active role in patient health, through effective interactions with both patients and other health care professionals” (Roberts’ doctoral thesis 2005)

- Barriers to widespread implementation

- Models and frameworks for change
  - Major focus on the individual and behaviours, often ignoring organisational factors

- Facilitators of change
  - Many individual factors identified, little consideration of how they work together to optimise implementation

A Conceptual Approach to Pharmacy Practice Research
Barriers and Facilitators of Change

**Barriers**
- **Pharmacist-related**
  - Attitude e.g. fear of change, lack of self-confidence
  - Practice skills e.g. limited communication skills
- **Resource-related**
  - E.g. lack of management and incentives, lack of protocols and guidelines
- **System-related**
  - E.g. limited acceptance by other health professionals
- **Academic and education related**
  - Knowledge and training
- **Other**
  - Lack of mentors and models, lack of vision

**Facilitators**
- **Experiential**
  - Remuneration
  - Pharmacist competence
  - Use of protocols
  - Interaction with patient groups
  - Profile within local community
  - Atmosphere of pharmacy
  - Motivation
- **Potential**
  - Advertising
  - Proven benefits of service
  - Working as a team
  - Documentation system
  - Communication skills
  - Professional reward
  - Autonomy

Research aims

MAIN RESEARCH AIM

To undertake research addressing issues related to implementation and dissemination of patient orientated health care services in community pharmacy.

Collaborative International Research

Roberts AS et al Int J Pharm Pract 2006;14(2):105-113
Roberts AS et al Pharm World Sci 2003;25(5):227-34
Paulino E et al (unpublished)
2001
Development of qualitative research instrument.
Australian researcher in Denmark.

2002
Qualitative studies completed in Denmark and Australia.

2003
Publication of qualitative research instrument.
Qualitative study completed in Spain.

2004
Quantitative study in Australia.
Keynote presentation at FIP congress.
Spanish and Portuguese researchers in Australia.
Qualitative study in Portugal.

2005
“Change Management and Community Pharmacy” research in Australia
Publication of research results from Australia, Spain and Denmark

2006 AND BEYOND
Research commenced in Spain on quality systems in community pharmacy
Research commenced in Australia on business viability in community pharmacy
Theoretical framework:
Organisational theory

- Values
- Innovation adoption
- Change strategies

Change management in Australia

'01
“Development of a research instrument to identify factors affecting practice change in community pharmacy.” [Honours thesis]

'03
“An investigation into business and professional facilitators for change for the pharmacy profession in light of the Third Guild/Government Agreement.” [Report]

'04
"Quantification of facilitators to accelerate uptake of cognitive pharmaceutical services (CPS) in community pharmacy." [Report]

'05
“Practice change in community Pharmacy: the implementation of cognitive services.” [PhD Thesis]

'05

Policy uptake: incorporated into all professional programs and services in the
4th Community Pharmacy Agreement (2005-10)
A Conceptual Approach to Pharmacy Practice Research
Facilitators of Practice Change

**Aims**

**Qualitative Study**
- To identify facilitators and values

- **36 interviews** - owners, pharmacists, pharmacy assistants

- **Thematic content analysis with NVivo software for data management**

**Quantitative Study**
- To quantify facilitators and values
- To identify pharmacies’ adopter categories
- To investigate relationships between:
  - facilitators & individual characteristics
  - values & individual characteristics
  - adopter category & pharmacy characteristics
  - adopter category & facilitators and values

- **735 pharmacies, 1303 individual respondents**

- **Facilitators’ and values’ scales: Factor analysis**
- **Adopter characteristics: Descriptive statistics**

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**“Practice Change in Community Pharmacy: the Implementation of Cognitive Services”**

**Alison S. Roberts**

**Doctoral Thesis 2005**
Null hypotheses

• That there are no significant correlations between the facilitator scores of the respondents and their values scores.

• That there are no significant differences in facilitator scores or values scores between:
  • the age categories of respondents
  • the roles of respondents
  • the accreditation status of pharmacists

• That there are no significant differences between adopter categories according to:
  • the number of full-time equivalent pharmacists
  • the number of full-time equivalent pharmacy assistants
  • annual financial turnover
  • pharmacy location
  • facilitator scores of respondents
  • values scores of respondents
## Results: Facilitators

<table>
<thead>
<tr>
<th>Factor</th>
<th>Facilitators</th>
<th>n</th>
<th>No. of items</th>
<th>Item loading range</th>
<th>Cronbach’s α</th>
<th>% variance explained</th>
<th>Factor scale range</th>
<th>Factor scale midpoint</th>
<th>Median factor score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Relationship with doctors</td>
<td>1274</td>
<td>5</td>
<td>0.59-0.85</td>
<td>0.9</td>
<td>20.17</td>
<td>0.75-3.76</td>
<td>2.23</td>
<td>3.01</td>
</tr>
<tr>
<td>2</td>
<td>Remuneration</td>
<td>1261</td>
<td>6</td>
<td>0.52-0.74</td>
<td>0.82</td>
<td>8.46</td>
<td>0.64-3.22</td>
<td>1.93</td>
<td>2.47</td>
</tr>
<tr>
<td>3</td>
<td>Pharmacy layout</td>
<td>1260</td>
<td>5</td>
<td>0.52-0.79</td>
<td>0.81</td>
<td>6.16</td>
<td>0.64-3.19</td>
<td>1.92</td>
<td>2.45</td>
</tr>
<tr>
<td>4</td>
<td>Patient expectation</td>
<td>1280</td>
<td>4</td>
<td>0.52-0.85</td>
<td>0.82</td>
<td>4.38</td>
<td>0.71-3.53</td>
<td>2.12</td>
<td>2.25</td>
</tr>
<tr>
<td>5</td>
<td>Manpower/staff</td>
<td>1273</td>
<td>5</td>
<td>0.49-0.66</td>
<td>0.8</td>
<td>3.93</td>
<td>0.97-3.04</td>
<td>2.01</td>
<td>2.43</td>
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<tr>
<td>6</td>
<td>Communication/teamwork</td>
<td>1280</td>
<td>6</td>
<td>0.37-0.65</td>
<td>0.77</td>
<td>3.13</td>
<td>1.59-2.65</td>
<td>2.12</td>
<td>2.2</td>
</tr>
<tr>
<td>7</td>
<td>External support and assistance</td>
<td>1274</td>
<td>4</td>
<td>0.47-0.69</td>
<td>0.74</td>
<td>2.55</td>
<td>0.73-2.98</td>
<td>1.86</td>
<td>2.39</td>
</tr>
</tbody>
</table>

Total Variance: 48.8%
### Results: Values

<table>
<thead>
<tr>
<th>Factor</th>
<th>Values</th>
<th>n</th>
<th>No. of items</th>
<th>Item loading range</th>
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<th>Factor scale range</th>
<th>Factor scale mid-point</th>
<th>Median factor score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Professionalism</td>
<td>1280</td>
<td>3</td>
<td></td>
<td>0.70-0.82</td>
<td>0.82</td>
<td>30.16</td>
<td>0.77-3.87</td>
<td>2.32</td>
<td>3.09</td>
</tr>
<tr>
<td>2 Altruism</td>
<td>1278</td>
<td>4</td>
<td></td>
<td>0.44-0.77</td>
<td>0.76</td>
<td>14.68</td>
<td>0.99-3.33</td>
<td>2.16</td>
<td>2.77</td>
</tr>
<tr>
<td>3 Business and job satisfaction</td>
<td>1276</td>
<td>3</td>
<td></td>
<td>0.60-0.87</td>
<td>0.78</td>
<td>8.89</td>
<td>0.74-3.71</td>
<td>2.23</td>
<td>2.56</td>
</tr>
</tbody>
</table>

**Total Variance:** 53.7%
Results: Adopter characteristics

Innovators/early adopters
- Larger number of staff ($\chi^2=18.77, p<0.001$)
- Teamwork and communication ($\chi^2=5.84, p=0.054$)
- Desire to help people ($\chi^2=13.16, p=0.011$)
- Value professionalism ($\chi^2=12.12, p=0.002$)

Late adopters/laggards
- Smaller number of staff ($\chi^2=18.77, p<0.001$)
- Less likely to work in teams ($\chi^2=5.84, p=0.054$)
- Not strongly altruistic ($\chi^2=13.16, p=0.011$)
- Value business aspects ($\chi^2=6.48, p=0.039$)

Higher financial turnover ($\chi^2=55.59, p<0.001$)

Lower financial turnover ($\chi^2=55.59, p<0.001$)
Hypotheses

• That there are no significant correlations between the facilitator scores of the respondents and their values scores REJECTED

• That there are no significant differences in facilitator scores or values scores between:
  • the age categories of respondents REJECTED
  • the roles of respondents REJECTED
  • the accreditation status of pharmacists REJECTED

• That there are no significant differences between adopter categories according to:
  • the number of full-time equivalent pharmacists REJECTED
  • the number of full-time equivalent pharmacy assistants REJECTED
  • annual financial turnover REJECTED
  • pharmacy location NOT REJECTED
  • facilitator scores of respondents REJECTED
  • values scores of respondents REJECTED
A Conceptual Approach to Pharmacy Practice Research
The Shape of our Future: Change Management & Community Pharmacy Project

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PHARMIND WHEEL

- Delivering & Accelerating Industry Change
- Non-pharmacy Threats & Opportunities
- Industry Re-structuring
- Marketing & Selling to Stakeholders & Consumers
- Policies, Politics & Perspectives
- Administrative Governance & Decision-Making Processes
- Resourcing & Revenue Flows

HEALTH & ALLIED STAKEHOLDERS
Pharmacy Viability Matrix

Focused Specialty

Provide a small number of specialised pharmacy products and/or services to a focused niche “patient” market that extends beyond their local community.
Pharmacist Change Readiness Wheel

- History of Past Changes
- Resource Availability
- Measurements & Metrics
- Assessing Risk
- Change Orientation
- Information & Knowledge Availability
- Skills Audit
- Time Availability & Timing Analysis
- Profitability Perspective
- Assessment of Need for Change
- Resource Availability
- Measurements & Metrics
- Assessing Risk
- Change Orientation
- Information & Knowledge Availability
- Skills Audit
- Time Availability & Timing Analysis
- Profitability Perspective
- Assessment of Need for Change

The University of Sydney
Pharmacist Change Implementation Wheel

- Triggering the Motivation to Change
- Planning the Change
- Helping and Assisting the Change
- Allocating Resources for the Change
- Responding to & Managing Resistance to the Change
- Situating & Leading the Change
- Integrating & Consolidating the Change
- Marketing the Change
- Communicating the Vision and Change

References:
- This wheel builds on and integrates material drawn from:
  - Nadler, D.A. (1998) *Champions of Change: How CEOs and their companies are mastering the skills of radical change* San Francisco: Jossey-Bass
A Conceptual Approach to Pharmacy Practice Research
Conclusion

- Current research is on the first two levels
- A widespread and integrated approach to research is necessary: inclusion of business and professional aspects
- Future research into quality systems and business viability to provide the infrastructure for optimal and sustainable implementation