

Developing an evidence-based practice in seating: a personal exploration

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Service

Professionalism

We are all 'caring professionals'

But are we professional in our caring?

Evidence = facts

The evidence-base is just a fancy term for expressing the facts of a given situation

The real questions are:

- what are the facts wanted for?
- who wants them

Who wants the knowledge?

- Professionals - without facts we do not know if we are providing a professional service
- Wheelchair users (“users”)
- Management - ? first phase of audit or PDSA cycle
- Service commissioners

What facts 1?

- Size of the fleet
- Shape of the fleet
- User data -
 - age
 - diagnosis etc
- Utilisation of the equipment
- Safety of the equipment

What facts 1a?

- Managers
 - size of fleet
 - what equipment used - cost / chair
- Users
 - waiting times
 - reliability of chairs
 - safety

What facts 1b?

- Commissioners
 - what proportion of chairs used every day
 - numbers of children / pensioners
 - numbers with deteriorating conditions
- Professionals
 - what are the objectives set for different groups of users
 - are they being met?

What facts 2?

Are there benefits to using the chair for:

- Users
- Carers
- Accountants
- Other service providers
 - employers
 - social services

How to get these facts

- Document routine information in a consistent manner, easily put on computer
- Concentrate on collecting data of maximum use to interested parties
- Additional data can be collected: -
 - phone (Frank et al 2000)
 - postal questionnaire (Belcher & Frank 2005)
 - interview (Davies et al 2003)

What about research?

Asking questions with an assumption that the answer will inform practice

- Do users experience pain?
 - Where & when
- Do cushions prevent pressure sores?

Pain in wheelchair users

- Is it severe?
- Does it relate to the chairs / cushions we prescribe?
- Does it vary over time?

If yes, can the pain be ameliorated through better chair prescribing (is it inevitable?)

Assessment of pain

- Qualitative
- Quantitative
- Other

Quantitative assessment of pain

E.g. data from telephone Q or routine review

- 26% of EPIOC users admitted to discomfort sitting in their chair 4 months after delivery
(Frank et al Clin Rehabil 2000)
- 46% experienced pain / discomfort 1.9 years after delivery
(Frank et al RAATE conference 2001)

Quantitative assessment of pain

Use of a purposefully designed questionnaire to establish the extent of pain or discomfort

e.g. Crane et al 2004

uses a 7-point Likert scale from:

‘strongly disagree’ to ‘strongly agree’

Quantitative assessment of pain (Crane et al 2004)

- I feel comfortable
- I feel poorly positioned
- I feel like I need to move or shift my position
- I feel pressure in some part or parts of my body
- I seek distraction to relieve discomfort

Qualitative

Semi-structured telephone interviews of young EPIOC users (N=18)

- 9 reported no pain or discomfort; and 9 moderate pain or discomfort
- Pain relief included movement of painful limbs, use of cushions and regularly using pain medication
- Pain affected by jarring from curb climbers (2), seating and posture (9), and lack of support from back/arm rests (3)

Qualitative

Semi-structured telephone interviews of
young people (N=18)

"Due to certain school policies where children are left in wheelchairs all day long, she is bound to experience pain and discomfort and yes, she does complain of it sometimes.

Juddering happens just going along the road because of so many holes in the pavement. - Children shouldn't spend all day in wheelchairs."

Evans et al unpublished data

Use of specific techniques

- Visual analogue scales
- pain drawings

Davies et al 2003

Gibson and Frank 2005

10am

12 Midday

Numbness



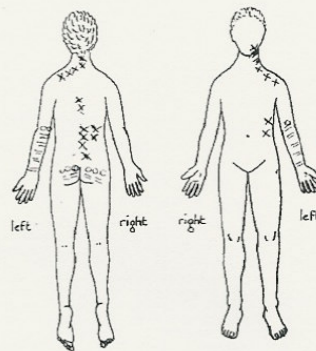
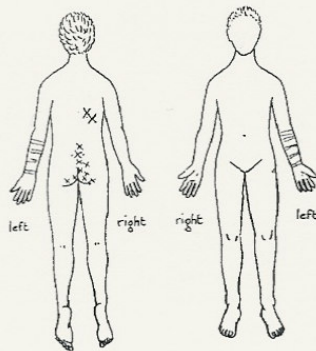
Pins & Needles



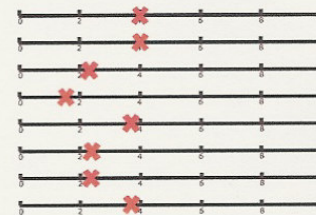
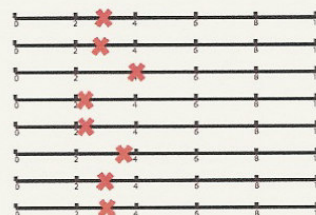
Ache



Pain



Back



Please list other areas

2pm

4pm

Numbness



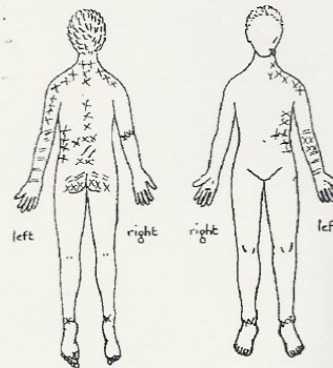
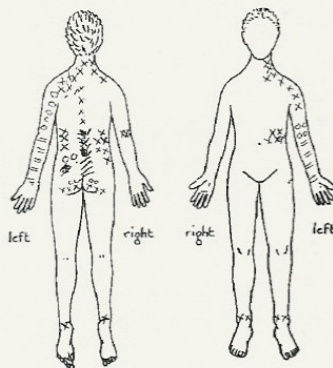
Pins & Needles



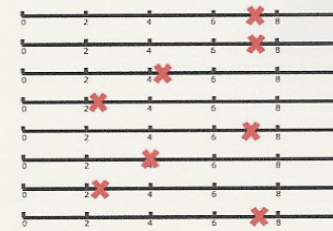
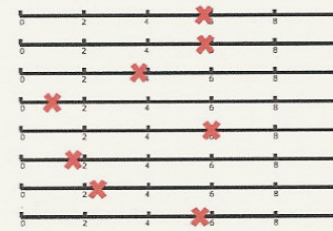
Ache



Pain



Back



Please list other areas

Conclusions

- Consistent methodical record-keeping greatly assists running an efficient service and gaining support for investment
- Audit and review essential for understanding your service (strengths/weak)
- This will raise questions about the problems experienced by your users

Conclusions

- Knowledge is gained through asking questions
- Link with audit department or local university for help with questions and techniques (qualitative / quantitative)
- Research can be simple, cheap and effective and help you develop your professional skills to benefit your users