Is Your Hoist Collecting Dust?

Better hoist prescription, clinical reasoning and client compliance

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About MontroseAccess
- Established in 1932
- Service for children aged 0-18 with predominantly a physical disability
- 500 Clients, 40% Neuromuscular disorder
- Therapy services: physiotherapy, occupational therapy, speech pathology, social work, recreational activities, support staff

MontroseAccess clients and hoist use
- Children and young adults with physical disabilities are restricted in their ability to perform self-care tasks, mobility & transfers
- Hoists are introduced by occupational therapists to assist with safe transfers for their children in their home

Why did we do this research?
1. Occupational therapists anecdotally reported hoists were often left unused
2. Concerns regarding heavy manual tasks performed by carer/parents on a daily basis
   - Forces on lumbar spine from lifting may cause long term tissue damage

Literature Review
- Shepherd completed a study in South Australia; Mother’s perceptions of the introduction of a hoist into the family home of children with physical disabilities
- Shepherd discovered “acceptance and use of the hoist may take up to 2 years after acquisition”
- Overall positive impact of the hoist (Shepard)
- Low back pain (LBP) in occupational settings has been extensively studied. There are few studies on LBP in domestic settings, especially informal caregiver setting
- “Studies of caregivers of children have reported a high rate of self-identified musculoskeletal problems including high incidence of neck and back pain” Thomas, J. et al (2007)
**Aims of the study**

Investigation of the following issues:

1. Back pain/carer strain as a result of manual handling tasks related to their children
2. Psychosocial factors
3. Time constraints
4. Environmental factors
5. Equipment overload
6. Equipment design

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**Method**

- Pilot study
- Combination of quantitative and qualitative
- 12 clients with Duchenne Muscular Dystrophy
- 1 client with Spinal Muscular Dystrophy
- 7 MontroseAccess occupational therapists

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**Results**

7 surveys returned:

- 3 felt very skilled using hoist, 3 felt average
- 5 felt that grief and loss does not impact on whether they use hoist or not
- 5 feel that hoist was issued at right stage of child’s life
- 4 felt that time constraints do not stop them from using the hoist
- 4 felt that lifting (instead of using hoist) was an opportunity to demonstrate care

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**Interview with parents**

- General hoist use
- Back pain and back care
- Barriers or challenges with hoist use
- Perceptions of hoist use
- Prescription and follow-up training
- Suggestions for other parents

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**General Hoist Use**

- 12 of 13 families that were interviewed were using an electric hoist and only 1 family was using a ceiling hoist
- 6 families had only been using the hoist for under 2 years. The other 7 families had had the hoist for between three and over five years
- 6 out of 13 families use their hoist more than 5 times per day, 4 used it 3-4 times per day, and 1 family uses it twice per day

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**Back pain and back care**

- Seven out of thirteen reported back pain of varying degrees
- Reluctant to attribute pain as a result of lifting their children
- The cumulative effects of manual handling their children certainly raises concerns
### Barriers and challenges with hoist use
- Condition factors
- Emotional factors
- Environmental factors
- Hoist design factors
- Other factors

### Perceptions of hoist use
- Carers generally reported a positive response to the hoist
- Some carers reported that it was hard in the beginning
- The majority of carer’s reported that children were nervous and uncomfortable in the beginning
- “It is quicker not to use the hoist but my body suffers”

### Prescription and follow up training
- Prescription
- Follow up from MASS
- Follow up from therapists
- Back care exercise program for carers

### Suggestions for other carers
- **Hoist usage:** don’t leave your child in the hoist e.g. to answer the phone
- Be calm and slow. Don’t panic
- Allow 30 minutes to get him up in the morning
- Over time, things get easier
- **Environmental:** don’t have carpet
- **In the beginning:** “use it as soon as you can. Doesn’t take much to ruin your back. Save your body”

### Limitations of the study
- No ethics committee
- Time
- Limited client group
- Study needs to be expanded

### Recommendations
- Design
- Introduction of the hoist
- Follow up
- Education
- Further study
Video

Conclusions

- Back pain/carer strain
- Psychosocial factors
- Time constraints
- Environmental factors
- Equipment overload & equipment design
- Discrepancy of anecdotal evidence compared to the study findings

References


