Patient Satisfaction in Older Adults Using Telerehabilitation in Home Health: A Systematic Review

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Introduction$^1\text{-}^3$

- Telerehabilitation: alternative to conventional PT methods
  - Telecommunication technologies are used to provide PT service to individuals in their own home
- Access to therapy is difficult in rural areas
  - Patients and PT
- Distance and associated costs of travel for home health PT increase in rural areas
Patient satisfaction of telerehabilitation is an important indicator of the degree of efficacy.

Will elderly enjoy technology based therapy?

- May be portrayed as a challenge because those over the age of 65 did not grow up with technology at their finger-tips like the millennials did.

Patient satisfaction of telerehabilitation in older adults has yet to be compiled in a systematic review.
Purpose

• To determine patient satisfaction levels of older adults using telerehabilitation within the home
Search Terms

Telerehab*

AND

Older Adults OR Elderly OR Geriatrics

AND

Patient Satisfaction
Databases

- PubMed
- ProQuest
- Science Direct
- CINAHL
Inclusion Criteria

- Peer Reviewed
- Published in 2006-2016
- Scholarly journals
- In English
- Human Subjects
- Mean age of subjects > 65 y/o
**PRISMA**

1. **Identification**
   - Records identified through database searching (n=81)
   - Records after duplicates removed (n=77)

2. **Screening**
   - Records screened (n=77)
   - Records excluded based on title or abstract (n=37)

3. **Eligibility**
   - Records screened for eligibility (n=40)
   - Records excluded, with reasons (n=34)
     - Mean age of subjects is not >65 years old (n=8)
     - Does not measure patient satisfaction (n=8)
     - Telerehab was not administered by a PT (n=18)

4. **Included**
   - Records included (n=6)
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Results

- Out of 40 articles screened for eligibility, 6 met inclusion criteria
- PEDro scores ranged from 2-7
  - Mean of 4.33
- Sackett Level of Evidence = B (all articles)
- Sample size range: 21-236
  - Total of 514 subjects
  - 72 total dropouts
    - Only 4 from technological difficulty
Results: Patient Satisfaction Measures

- Patient satisfaction outcome measures used:
  - Qualitative interviews
  - French Healthcare Satisfaction Questionnaire
  - Researcher-developed satisfaction evaluation questionnaires
    - Likert-type and VAS scales
Results: Patient Satisfaction Scores

- Patient satisfaction scores
  - 82-90% out of 100%
  - 5-7 out of 7
  - >9/10
- Subjectively reported that patients were “comfortable with technology regardless of prior exposure.”
Conclusion

• Weak→ Moderate evidence to support the use of telerehab to satisfy older adults
  • Due to low PEDro scores secondary to study design
• Findings showed positive reports of satisfaction when using telerehab
• Inability to use technology does not seem to be a major barrier
  • Lack of significant drop outs
Limitations

• Multiple outcome measures between studies

• Lack of comparable data on patient satisfaction between groups

• Some drop-outs due to difficulty with technology

• Select databases used
Future Research

• Needed to compare patient satisfaction between intervention and control group rather than just reporting on intervention group

  • ie. Does telerehabilitation have higher patient satisfaction outcomes as compared to those patients receiving traditional PT?
Clinical Relevance

• Telerehab satisfies older adults’ PT expectations

• Telerehab is an efficient method for delivering PT in the home without the cost of travel

• May consider suggesting telerehab to those:
  • Living in remote areas
  • Those without transportation
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References


