How effective is occupation-based intervention for individuals recovering from stroke?

Stroke is the third leading cause of death in the United States. It can also cause significant disability, such as paralysis, speech difficulties and emotional problems. Occupational therapy is instrumental in helping individuals recover from stroke. However, many treatment strategies exist, thus it is critical to determine which is most effective.

1. Ask: Research Question
   In individuals who sustained a stroke, what is the effect of incorporating meaningful occupations in treatments on recovery?

2a. Acquire: Search Terms
   Patient/Client Group: Stroke OR Brain Injuries
   Intervention: Task Oriented OR Meaningful Activity OR Occupational Therapy
   Comparison: No comparison
   Outcome(s): Recovery of Function OR Motor Skills OR Activities of Daily Living

2b. Acquire: Selected Articles
   Legg et al. (2006): Systematic review that examined the effect of OT intervention on personal ADLs in individuals recovering from stroke.
   Rensink et al. (2009): Systematic review that examined the effect of talk-oriented activities on stroke recovery.
   Steultjens et al. (2003): Systematic review that examined the efficacy of OT intervention in primary ADLs, extended ADLs, and social participation in individuals recovering from stroke.
   Trombly et al. (2002): Systematic review that synthesized research findings addressing the effects of OT on restoration of role, task, and activity performance in individuals recovering from stroke.
   Walker et al. (2004): Meta-analysis that examined the effect of community-based OT on ADLs and leisure activities in individuals recovering from stroke.

3a. Appraise: Study Quality
   Legg et al. (2006): Suggestive: Researchers were often not blind, some confounds, dropout rate.
   Rensink et al. (2009): Preponderant: Strong study designs. Reasoning given for inclusion/exclusion of studies, positive and negative outcomes stated.
   Steultjens et al. (2003): Suggestive: Rich inclusion/exclusion criteria, large scale of articles that revealed small, yet significant effects. Total number of participants and mean ages not given.
   Trombly et al. (2002): Suggestive: Large sample size, only used articles with high levels of evidence in final review. Lacked research on particular treatments and information on therapeutic procedures.
   Walker et al. (2002): Preponderant: Clear and appropriate use of analytic tools, appropriate inclusion criteria.

3b. Appraise: Study Results
   OT intervention that is task-oriented and activity-based is effective in helping older adults improve their level of function in recovery from stroke, in areas such as ADLs (basic and instrumental), role participation, social participation, and leisure activities. In order to achieve maximum effectiveness, treatment activities should use or be integrated into tasks that are meaningful to the individual.

4. Apply: Conclusions for Practice
   In a skilled nursing facility, the studies suggest that best practice should include incorporating occupation-based intervention into treatment for older adults recovering from stroke. It may not be possible to integrate occupation into every aspect of treatment, but when possible it can help obtain the best possible treatment outcomes.

References

Reviewers:
Whitney Adam, Christine Kiley, Kimberly Koretoff, Joanne Park, Karen Pidor, and Emily Trup
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✔ Yes: Occupation-based treatment is effective for recovery of individuals who have sustained a stroke.