

Motivational Interviewing and Stroke Patients

Appraised by: Nick Horner SN & Jason Jensen SN Sanford College of Nursing

Clinical Question:

Does motivational interviewing influence behavioral change and reduce mortality in patients who have experienced a stroke?

Articles:

Byers, A. M., Lamanna, L., & Rosenberg, A. (2010). The effect of motivational interviewing after ischemic stroke on patient knowledge and patient satisfaction with care: A pilot study. *Journal of Neuroscience Nursing, 42*(6), 312-322. doi:10.1097/JNN.0b013e3181f8a5e7

Watkins, C. L., Wathan, J. V., Leathley, M. J., Auton, M. F., Deans, C. F., Dickenson, H. A.,...Lightbody, C. E. (2011). The 12-month effects of early motivational interviewing after acute stroke: A randomized control trial. *Stroke, 42*, 1956-1961. doi:10.1161/STROKEAHA.110.602227

Green, T., Haley, E., Eliasziw, M., & Hoyte, K. (2007). Education in stroke prevention: Efficacy of an educational counseling intervention to increase knowledge in stroke survivors. *Canadian Journal of Neuroscience Nursing, 29*(2), 13-20

Synthesis of Conclusions:

All three of the studies involved using motivational interviewing with stroke patients which helped answer the question of whether motivational interviewing influences behavioral change and decrease the mortality in patients who've experienced a stroke. The first study by Byers, Lamanna, and Rosenberg (2010) is a randomized control trial, a level II hierarchy of evidence. The purpose of the study was to evaluate the method of providing stroke education using motivational interviewing paired with the JACHO guidelines. The study showed that the intervention group who received the motivational interviewing along with the standard education which the control group received averaged higher scores on a SKT test to evaluate stroke knowledge. These findings showed that the motivational interviewing paired with the standard education increased the patient's overall stroke knowledge and also increased their satisfaction regarding stroke education before discharge. This was a pilot study which had a very small sample size with only 13 patients completing the study which is a limitation on the findings.

The second study by Watkins, et al. (2011) is a single-center, open, randomized control trial with a level 2, hierarchy of evidence. The purpose of the study was to determine if motivational interviewing benefits patient's moods and mortality post stroke.

The study showed that after a 12 month follow-up, 37.7% of patients in the control group and 48% of patients in the intervention group had a normal mood. Also 12.8% of patients in the control group and 6.5% of patients in the intervention group died. A significant benefit of motivational interviewing over usual stroke care was found for mood ($P=0.020$) and mortality ($P=0.035$). A limitation to the study would be that multiple therapists were used to perform the motivational interviewing using similar but not exactly the same techniques.

The third study by Green, Haley, Eliasziw, and Hoyte (2007) is randomized control trial, a level II hierarchy of significance. The purpose of the study was to examine the impact of using motivational interviewing in brief one-on-one nurse/patient interview of acquisition of knowledge of stroke and influences on lifestyle behavior changes. The study showed that there was an increased stroke knowledge that was statistically significant between the intervention group and the control group. There was also a significant shift from passive to active stage change for the overall study sample. However there was no significant difference between groups on the identified risk factors. A limitation for the study was the time spent with each patient which was in an ambulatory clinical setting which had time constraints.

The quality of each study varied slightly with all showing consistent results that motivational interviewing increases the patients behavior change and reduces their mortality rate. Two out of the three studies had sufficient sample sizes to have significant results. The first study by Byers, Lamanna, and Rosenberg (2010) had 20 participants. The second study by Watkins, et.al(2011) had 411. The third study by Green, Haley, Eliasziw, and Hoyte (2007) had 200 participants. All three stated that further research will be needed in the future to make motivational interviewing a standard in patient care following a stroke, but each had a positive outcome when it is used.

Bottom Line:

The evidence suggests motivational interviewing helps improve patients behavioral changes and also decreases mortality.

Implications for Nursing Practice:

Nurses can use the evidence from these studies when educating patients and caregivers following a stroke. Increased knowledge and lifestyle changes are of the utmost importance when it comes to reducing the mortality of patients and increased their overall lifestyle and mood. Referrals and follow-ups should be made to see a healthcare professional. Then individuals progress will be reported to their doctor.