The Center for Research and Outreach

Putting Research to Work for Military Families



Efficacy and Acceptability of a Home-Based, Family-Inclusive Intervention for Veterans With TBI: A Randomized Controlled Trial

Winter, L., Moriarty, H. J., Robinson, K., Piersol, C. V., Vause-Earland, T., Newhart, B., ... Gitlin, L. N. (2016). Efficacy and acceptability of a home-based, family-inclusive intervention for veterans with TBI: A randomized controlled trial. *Brain Injury*, 30(4), 373-387. doi:10.3109/02699052.2016.1144080

SUMMARY: Traumatic brain injury can result in long-term physical, emotional, and interpersonal difficulties and has become a topic of increasing concern for Service members. An in-home treatment program that focused on environmental changes and included families was compared to usual care for Veterans with traumatic brain injuries. The program was highly acceptable to Veterans and resulted in greater improvements in community reintegration and symptom difficulties compared to usual care.

KEY FINDINGS:

- Veterans in the in-home treatment program reported higher levels of community reintegration and less difficulty managing troubling symptoms than controls at a four-month follow-up.
- Veterans rated the in-home program as highly acceptable and participated in, on average, 91% of the eight sessions.
- Veterans in the in-home treatment program did not report greater improvement in functioning, potentially due to the program targeting specific problems rather than overall functioning.

IMPLICATIONS FOR PROGRAMS:

Programs could:

- Educate Service members diagnosed with traumatic brain injuries on in-home treatment options
- Provide information on strategies for changing Service members' home environments to better fit their abilities and needs following a traumatic brain injury
- Educate Service members' families on common difficulties related to traumatic brain injury

IMPLICATIONS FOR POLICIES:

Policies could:

- Recommend the development of home-based treatment programs for traumatic brain injury
- Continue to provide support for programs that address the unique difficulties associated with traumatic brain injury among Service members
- Promote the use of traumatic brain injury treatments targeting environmental changes to fit Service members' abilities in addition to standard cognitive rehabilitation treatments

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METHODS

- Participants were recruited through the Medical Rehabilitation Service of the Veterans Affairs (VA) department, which, since 2001, screens all Veterans for possible traumatic brain injury.
- Veterans reported community reintegration, levels of functioning, and difficulty managing troubling symptoms following a traumatic brain injury through in-home clinical interviews.
- Symptoms and functioning of Veterans assigned to the in-home program or to usual care were compared at a four-month follow-up.

PARTICIPANTS

- The sample included 81 Veterans, with an average age of 40 years old (SD = 13.01), who were primarily male (91%); treatment groups were stratified by gender.
- Veterans were primarily White (58%) or Black (36%), and 14% identified as Latino.
- The sample included Veterans of several war cohorts, including OIF (62%), OEF (24%), OIF and OEF (11%), Vietnam or post-Vietnam (17%), and other wars or stateside injuries (11%).
- Most Veterans were diagnosed with mild, rather than moderate or severe, traumatic brain injuries (69%), and the majority had experienced multiple traumatic brain injuries (64%).

LIMITATIONS

- More long-term follow-up is needed to draw conclusions about lasting effects of the treatment.
- Study results may not generalize to Veterans who seek medical care outside of the VA system.
- Only Veterans with a close family member were included in the sample, meaning results may not generalize to Veterans with less social support or other forms of support.

AVENUES FOR FUTURE RESEARCH

Future research could:

- Conduct a study with long-term follow-up to assess maintenance and generalization of gains
- Examine the effects of combining the in-home treatment with a cognitive rehabilitation program to target both cognitive functioning and environmental adaptation
- Investigate how other forms of social support may be included in the treatment program

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