Photozig collaborates with Stanford University on a DVD for Dementia Care

Stanford University School of Medicine concludes a randomized trial to evaluate the Chinese Caregiver Assistance DVD Program

As part of its ongoing research and development of digital photo and video applications for healthcare, Photozig produced a training DVD for Chinese dementia family caregivers for Stanford University, which contracted Photozig for the complete DVD production. The DVD was filmed entirely in Mandarin Chinese, with a cast of Chinese-American actors, and outlined skill-building techniques for coping with the responsibilities and emotions of caring for an older adult relative with dementia.

This program was funded by the Alzheimer's Association and the Principal Investigator was Dr. Dolores Gallagher-Thompson, Stanford University School of Medicine. Mr. Kajiyama, Photozig, was the Producer. The DVD was produced in 2006 and its effectiveness was evaluated by a randomized trial in 2006-2007.

The promising results of the randomized trial were reported recently by Dr. Dolores Gallagher-Thompson, which are reproduced in the next pages, suggesting that the Chinese Caregiver Assistance DVD Program may improve the quality of life of Chinese American family caregivers.



Wife / Husband role-playing



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Mother / Daughter role-playing



Figure 1: Chinese DVD, main DVD menu, and selected role-playing scenes

DVD Main Menu

Summary of Results: Chinese Caregiver Assistance DVD Program Grant # IIRG-04-1109 from the national office of the Alzheimer's Association Dolores Gallagher-Thompson, Ph.D., Principal Investigator Stanford University School of Medicine

This project grew out of our earlier work with Chinese and Chinese American dementia family caregivers. In the first project, we developed a culturally sensitive, bilingual program to teach a variety of coping skills to help caregivers manage the stress associated with day-to-day caregiving of a loved one with Alzheimer's disease or another form of dementia. We taught things such as: how to better manage disruptive behaviors of the care-recipient (wandering, for example) and how to communicate more effectively with family members so that needed help could be received from them. This program was delivered in the caregivers' home over a 16 week period. It was compared to a program that offered telephone support and that mailed informational materials. A total of 51 women caregivers enrolled in the research and 46 completed it. When the programs were compared statistically, it was clear that caregivers in the skill training (SK) condition improved more than those in the education/support condition (ES). Caregivers in the former were less depressed and reported less stress associated with caregiving at the end of the program. They also reported high levels of satisfaction and said they would recommend the in-home program to other caregivers.

Encouraged by these positive results, the Alzheimer's Association then funded a new project whose aim was to take the most effective skill training techniques from the first study and "package" them in such a way that they would be available to a larger number of Chinese and Chinese American caregivers, for a modest cost (in comparison to the very costly home care program). In this second study, with major input from an Advisory Board of Chinese American professionals and caregivers, our team created a 6-part DVD (and accompanying workbook) that illustrated several key skills for handling everyday stressful caregiving situations. It was produced locally by Photozig, Inc. (Mountain View, CA) in Mandarin Chinese using volunteer actors from a San Francisco-based theatre company, with both English and Chinese sub-titles. They portrayed "less effective" versus "more effective" ways to handle common caregiving situations, such as wandering and suspiciousness. The impact of this new DVD was evaluated with a new group of 70 Chinese and Chinese American caregivers, including some men and some paid caregivers – although the majority were middle-aged women, as is true in most studies. The skill training DVD (SK-DVD) was compared to an education-only DVD (E-DVD) in Chinese provided by another Alzheimer's Assn. chapter; all participants also received monthly phone calls to see if they had any questions and to encourage their use of the materials.

Overall satisfaction with the program was significantly higher in the SK-DVD group than in the E-DVD group. These caregivers also reported greater improvement in knowledge and skills in 6 of 8 content categories (e.g., managing stress) and believed that watching this DVD enhanced their ability to care for their afflicted family member -- more than those in the E-DVD group. Although depression did not improve significantly over time, positive affect did increase. Most importantly, caregivers' stressful reactions to the care recipient's memory and behavior problems was decreased significantly over the course of the 4 months. Results support the conclusion that Chinese-American caregivers like and can benefit from the SK-DVD program. At present we are planning wider distribution of these materials through the national office of the Alzheimer's Assn. For more information please call: 1-800-272-3900 or consult this website: www.alz.org.

CHINESE and CHINESE-AMERICAN CARGIVER ASSISTANCE PROJECTS (CCAP) Funded by the national office of the Alzheimer's Association to Dolores Gallagher-Thompson, Ph.D., Stanford University School of Medicine

It is now well-documented that many family caregivers (CGs) experience high levels of distress, including even depressive and anxiety disorders, and this effect is readily apparent in many different ethnic and racial groups (Shulz & Martire, 2004; Chou, La Montagne & Hepworth, 1999; Yates, Tennstedt, & Chang, 1999; Patterson, et al., 1998; Pinquart & Sorensen, 2005). Evidence-based interventions have been developed specifically to help family CGs minimize the stressful effects of caregiving. Some of these techniques have been shown to help CGs from different ethnic and racial groups (Gallagher-Thompson & Coon, 2007), but to our knowledge no studies have evaluated evidence-based interventions for Chinese-American CGs. The research discussed here focused on the development and evaluation of an intervention designed specifically for this ever-increasing segment of the US population.

The first phase of this program was completed in collaboration with Chinese-American CGs and local Chinese professionals who work with CGs in Chinese communities. Using their recommendations, we developed an intervention based on principles underlying Cognitive Behavioral Therapy (CBT) that could be administered to individuals in their home within the framework of a psychoeducational model. The decision to work with caregivers in the home resulted from focus-group feedback that Chinese caregivers would be reluctant to seek services requiring them to come to public meetings and discuss their problems with strangers. This intervention is referred to as the In-Home Behavioral Management Program (IHBMP).

In the second phase, IHBMP was compared to a telephone support condition (TSC) in a randomized clinical trial over a 4-month period. Results indicated that the IHBMP was superior to the TSC in reducing depressive symptoms (p=.017), as well as severe stress due to problems encountered in caring for a family member (p=.022). CGs with a high sense of self-efficacy benefited from both conditions, but more so in the IHBMP than the TSC. CGs with a low sense of self efficacy did not benefit at all from the TSC, but did show improvement in the IHBMP. Outcome results have been published in the peer-reviewed <u>American Journal of Geriatric Psychiatry (Gallagher-Thompson, et al., 2007)</u> and other manuscripts are "in press" at this time.

Although the IHBMP was effective, it required more staff time than what is typically required for administering similar small group programs in convenient public locations. Since the home seems to be the preferred site for intervention, the question was raised whether a program could be developed for home use that would require less professional staff time.

Thus, in the third phase we explored the feasibility of using this CBT-based psycho-educational approach to develop a Skill-Training Program similar to the IHBMP that could be recorded on a DVD (SK-DVD). A workbook was also developed to accompany the DVD that amplifies the material and contains practice exercises, to reinforce learning. The content of this DVD paralleled the content of the IHBMP. For each component or topic, stressful situations that frequently occur in caregiving were scripted, showing a typical interaction that often leads to a negative outcome, contrasted with a more positive strategy based on CB principles. Chinese professional actors performed the scripts, which were then discussed by a moderator. A pilot DVD of this approach was evaluated by professionals who

approved of the concept and made suggestions for modifications. Technical production of the DVD, including editing, and adding in both English and Chinese sub-titles, was done by Photozig, Inc., in Mountain View, CA.

In the fourth phase this final DVD skill training package was compared to a DVD containing substantive information about dementia, how to recognize it in family members and what to do to help them (E-DVD) in a randomized clinical trial. Mandarin was the language spoken in both conditions, with a choice of Chinese or English subtitles. Workbooks were in Chinese and English for the SK-DVD caregivers only. Participants were asked to use the DVDs and the other materials for four months. They were called monthly to see if they had any questions or problems with the materials; they were encouraged to continue to review what they had been sent. Overall satisfaction with the program was significantly higher in the SK-DVD group than in the E-DVD group (p<.0001). Those caregivers also reported significantly higher knowledge and skills in 6 of 8 content categories (p<.005 in 5 and p<.05 in 1), and believed that this experience enhanced their ability to care for their afflicted family member more than the E-DVD group (p<.05). Further, positive affect was significantly improved (p < .001) and the stressful reaction to the care recipient's memory and behavior problems was decreased significantly (p<.001). Results support the conclusion that Chinese-American caregivers like and can benefit from the SK- DVD- program. These results were presented at the annual meeting of the Gerontological Society of America in Nov. 2007 in San Francisco, and are being prepared for publication in an international peer-reviewed journal.

<<We gratefully acknowledge grant support from the Alzheimer's Association for this work: IIRG-01-3137 and IIRG-4-1109>>