Research Report SEPT 2010

The University of Montana Rural Institute
RTC RURAL
Research and Training Center on Disability in Rural Communities

Findings from a Study of the *Working Well with a Disability* Program

People with disabilities are employed at a rate of 36.9%, compared to 79.7% for people without disabilities (Erickson & Lee, 2008). Lack of accessible transportation, social insurance disincentives, and negative attitudes by employers are cited reasons for this disparity. People with disabilities also describe secondary health conditions as a barrier to employment (Ipsen, Seekins, & Arnold, in press; Kaye, 2009). Secondary conditions are health issues that are intensified by primary disability, including conditions such as chronic pain, fatigue, pressure sores, weight problems, and depression.

Because access to health promotion programs typically occurs at the worksite, it's troublesome that secondary conditions are a significant barrier to employment. Literature reviews about worksite-based health promotion consistently show significant health improvements for participants, including less absenteeism and less medical care use. These positive outcomes are most pronounced for employees with multiple health risk factors (Pelletier, 1996, 2001, 2005).

Programs targeting people with disabilities report similar outcomes. For instance, participation in the *Living Well with a Disability* program was associated with significant reductions in rates of reported secondary health conditions and days of limitation (Ravesloot, Seekins, & White, 2005).

The purpose of this study was to assess the efficacy of a health promotion program in enhancing health and employment outcomes for Vocational Rehabilitation (VR) clients. We hypothesized that participation in the *Working Well with a Disability* program would result in reduced rates of secondary health conditions and increased rates of employment.

RTC:Rural
52 Corbin Hall
The University of Montana
Missoula, MT 59812
Toll free: 888.268.2743
Fax: 406.243.2349
TTY: 406.243.4200
rtcrural@ruralinstitute.umt.edu
rtc.ruralinstitute.umt.edu
Alternative formats available

Methods

We recruited 291 VR clients with physical disabilities from 20 offices in five states. We randomly assigned 161 participants to the *Working Well with a Disability* program and 130 to a control group. All participants were asked to provide data about their secondary conditions and employment status at five points in time – at baseline, at three, six, and nine months, and at one year.

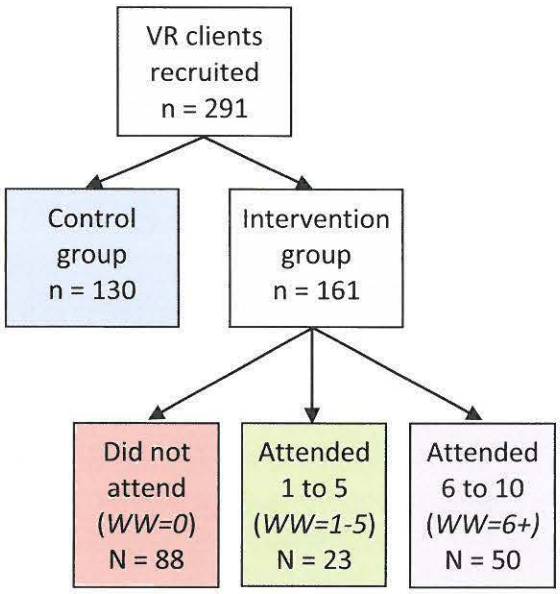
We created the *Working Well* program by modifying the *Living Well* program towards employment issues. The ten-week *Working Well* program used the goal of employment as the impetus for making lifestyle changes to manage secondary conditions. Two-hour *Working Well* sessions covered goal setting, problem solving, pathway planning, healthy reactions, advocacy, stress management, physical activity, nutrition, and maintenance. Centers for Independent Living (CILs) were responsible for delivering the program. CIL facilitators received eight hours of telephone-based training on program content, and were provided contact information for the randomly assigned participants. CIL facilitators made the participant contacts, set up the meeting schedules, and delivered the *Working Well* program.

Data Analysis

Although 161 VR clients were assigned to the Intervention group, only 73 actually attended any *Working Well* sessions. This non-compliance rate made data analysis difficult because the people who attended the program reported significantly higher rates of secondary health conditions at baseline than the people who were assigned to the program but did not attend.

To control for these differences, we analyzed the data in four groups. We compared the Control group with three subsets of the *Working Well* Intervention group. The three subsets included Intervention group participants (1) who did not attend any sessions, (2) who attended from one to five sessions, or (3) who attended from six to ten sessions. Figure 1 shows participants who provided data at baseline and three months.

Figure 1. Study group participants



Results

Figure 2 shows the change in the average sum of secondary conditions score (SCSI) over time. The Control group started with an average SCSI of 27.5 and ended up at 24.4, a small but significant decrease in secondary conditions over time [$F(2.9, 224.4) = 4.19$, $p = .007$].

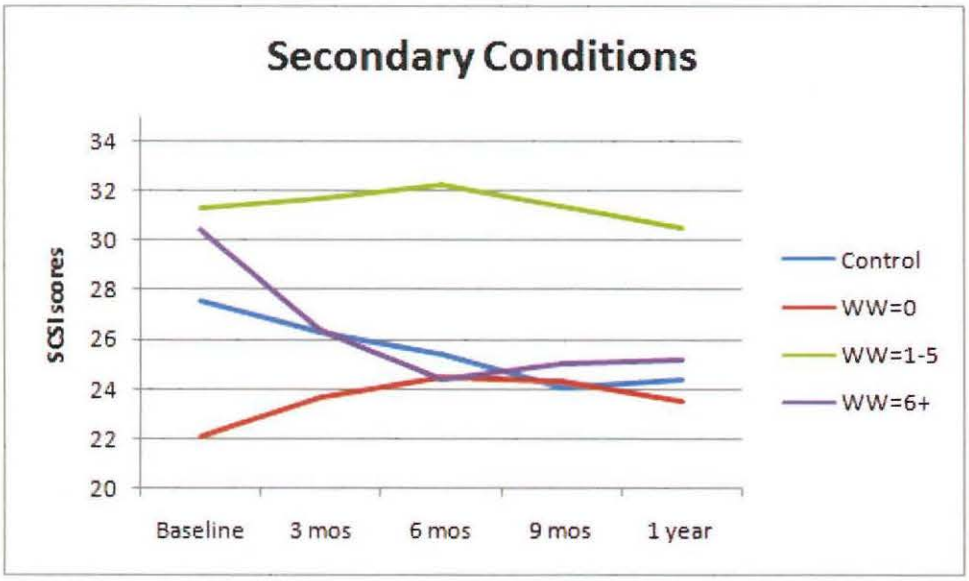
Intervention group participants who did not attend any sessions (WW=0), reported the lowest average SCSI rates at baseline (M = 22.1). Their scores increased and decreased slightly over the course of the study, ending with a mean of 23.5 at one year. These fluctuations were not significant, all p's > .05.

Intervention group participants who attended from one to five sessions (WW=1-5) reported a high number of secondary conditions at baseline (M = 31.3), and reported no significant changes over time, all p's > .05.

Intervention group participants who attended 6 to 10 sessions (WW=6+) started with a high

average baseline SCSI of M = 30.4. Over time, this group's scores decreased significantly for the first six months, and then leveled off [F (3.13, 96.94) = 4.11, p = .008].

Figure 2. Secondary condition scores over time



The results of a repeated-measures analysis of employment outcomes for each time period for all four groups revealed no significant changes for any of these groups (all p's > .50), even after receiving VR services for a full year.

Limitations

Self-selection into the *Working Well* program was problematic from both a data analysis and programmatic standpoint. Because Intervention group attendees looked different from both the non-attendees and the Control group, it was difficult to directly compare data.

Further, at each wave of data collection, fewer surveys were returned, resulting in a 41% rate of attrition over the study. Although attrition rates were similar across study groups, small sample sizes resulted in low statistical power.

Discussion

Self-selection into self-help programs is not unusual. *Working Well* is similar to any number of other behavior change programs, like weight loss, exercise classes, or drug rehabilitation. Just being assigned to a program doesn't make it work.

We assumed that participating in *Working Well* was important for reducing secondary conditions. During our study, participants who reported lower rates of secondary conditions at baseline were less likely to even attend one session of the program. It's likely that these people did not experience a pressing need for health promotion programming, and so were less committed to attending.

Conversely, participants with higher rates of secondary conditions were more likely to attend. However, only those who attended at least half of the sessions actually saw significant reductions in their rates of secondary conditions. Engaging more fully in the program was associated with better outcomes.

If we consider the *Working Well* program to be like other behavior change programs, then these results make sense. *Working Well* appears to be an effective way to reduce problems of secondary conditions for the people most affected by them, if they engage in the program.

While positive trends in employment outcomes would have strengthened the argument for offering health promotion services to VR clients, it was not surprising that results were not significant. Employment outcomes are quite variable for the VR population and a much larger sample would be needed for statistical power. Additionally, the time horizon of the study was short and may not have fully captured VR employment outcomes.

Conclusions

The findings suggest that the people most affected by secondary conditions who actively participated in the *Working Well* program, experienced significant reductions in limitation from secondary conditions. Although the results do not support a direct relationship to employment, we know from past studies that higher rates of secondary conditions are associated with worse employment outcomes (Ipsen, et al., in press; Kaye, 2009).

References

Erickson, W., & Lee, C. (2008). 2007 Disability Status Report: United States. Ithaca, NY: Cornell University Rehabilitation Research and Training Center on Disability Demographics and Statistics.

Ipsen, C., Seekins, T., & Arnold, N. (In press). A prospective study to examine the influence of secondary health conditions on vocational rehabilitation client employment outcomes. Disability and Health Journal.

Kaye, H. S. (2009, November). Barriers to employment for people with disabilities: Bad advice, poor health, and ineffective public policy. Paper presented at the APHA 137th Annual Meeting, Philadelphia, PA.

Pelletier, K. (1996). A review and analysis of the health and cost-effectiveness outcome studies of comprehensive health promotion and disease management programs at the worksite: 1993-1995 update. American Journal of Health Promotion, 10, 380-388.

Pelletier, K. (2001). A review and analysis of the clinical and cost-effectiveness studies of comprehensive health promotion and disease management programs at the worksite: 1998-2000 update. American Journal of Health Promotion, 16, 107-116.

Pelletier K. (2005). A review and analysis of the clinical and cost-effectiveness studies of comprehensive health promotion and disease management programs at the worksite: update VI 2000-2004. Journal of Occupational and Environmental Medicine, 47(10), 1051-1058.

Ravesloot, C., Seekins, T., & White, G. (2005). Living Well with a Disability health promotion intervention: Improved health status for consumers and lower costs for health care policy makers. Rehabilitation Psychology, 50, 239-245.

Authors

Catherine Ipsen and Charles Asp

©2010 RTC:Rural.

Our research is supported by grant #RO1DD000135 from the Centers for Disease Control and by grant #H133B080023 from the National Institute on Disability and Rehabilitation Research, U.S, Department of Education. The opinions expressed reflect those of the author and are not necessarily those of the funding agencies.