

Stress Management Skills Help With Chronic Ills

Patients with heart disease, diabetes might do better physically and mentally after coping skills training.

BY MIRIAM E. TUCKER
Senior Writer

WASHINGTON — Increasing evidence suggests that patients with chronic conditions such as diabetes and heart disease who receive coping skills training do better physically and mentally, Redford B. Williams, M.D., said at the annual meeting of the American Association of Diabetes Educators.

Stress and the negative emotions that diabetes engenders can impair control of the disease and increase the risk for major complications, as well as increase the risk of death after myocardial infarction. The exact mechanisms aren't known, but are likely related to changes in sympathetic nervous system activity and cortisol secretion, which could in turn increase depression and lead to non-compliance, said Dr. Williams, director of the Behavioral Medicine Research Center at Duke University, Durham, N.C.



On the positive side, randomized trials have shown that coping skills training—also known as stress reduction, stress management, or a host of other names—reduces psychosocial risk factors and biomarkers of stress such as blood pressure and vascular reactivity. This training may improve metabolic control in diabetic patients, said Dr. Williams, who is also professor of psychiatry, medicine, and psychology at Duke.

"It's not a substitute for diet, exercise, glucose monitoring, and medications," he said. "Managing the stress of everyday life is another leg of the stool of good diabetes management."

Among the coping skills programs for which positive data are emerging is Williams LifeSkills Inc., founded by Dr. Williams and his wife, Virginia P. Williams, Ph.D. He serves as chairman of the organization, and she is president. (See box.)

Among 60 patients who had undergone coronary artery bypass grafting, 30 were randomized to receive six sessions of LifeSkills training; the other 30 listened to a 1-hour lecture on the effects of stress on the heart. Baseline scores on the Center for Epidemiological Studies Depression Scale (CES-D) were 11.1 in the intervention group and 13.7 in the control group, which was not significantly different.

After the intervention, the mean CES-D score in the LifeSkills group dropped to 7.2, while it rose to 16.9 in the control group, a significant difference. At 3 months, the CES-D score in the controls had risen to 17.6, which is considered clinical depression, while it had dropped even further, to 4.3, in the LifeSkills group.

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DR. WILLIAMS

life. In all cases, the LifeSkills group improved even further at 3 months while the controls worsened with time.

Such findings suggest that when it comes to patients with heart disease or diabetes, "we don't need to label patients as depressed or anxious. Everybody needs this kind of training," Dr. Williams said.

Systolic blood pressure (SBP) fell among those who received LifeSkills training, from a mean of 122.3 mm Hg at baseline to 118.7 mm Hg post intervention to 118.3 mm Hg at 3 months. In contrast, among control patients, SBP rose from 118.8 mm Hg at baseline to 124.1 mm Hg post intervention to 126.9 mm Hg at 3 months.

Similarly, resting heart rate in the LifeSkills group dropped from 72.1 beats per minute to 65.2 post intervention and 65.4 at 3 months. In the controls, resting heart rate remained essentially the same throughout (73.8 to 73.6 to 74.9 bpm).

The employees in the intervention group also reported significant reductions in stress, hostility, burnout, and passive interpersonal behavior, all of which have been implicated in the development of cardiovascular disease, said Dr. Clemow of the behavioral cardiovascular health and hypertension program at Columbia University, New York.

Participants underwent baseline and posttrial blood pressure testing and structured interviews to measure hostility, perceived stress, depression, work stress, and interpersonal behavior. The 32 individuals in the intervention group participated in 10 weekly, 1-hour stress and anger man-

How to Cope With Negative Thoughts

The LifeSkills program starts by teaching patients how to be aware of their negative thoughts and feelings so they can evaluate them objectively and learn to manage them appropriately, Virginia P. Williams, Ph.D., said at the annual meeting of the American Association of Diabetes Educators.

LifeSkills is taught through face-to-face workshops, a video plus workbook, and the Web (www.williams-lifeskills.com). The program is "good for getting people out of a 'stuck place,' which can lead to depression," said Dr. Williams, who is president of Williams LifeSkills Inc., Durham, N.C.

The training focuses on core skills, including awareness of thoughts and feelings, evaluation and management of negative thoughts and feelings, deflection strategies, problem solving, assertion and saying "no," communication and empathy, and being positive.

Patients keep a log of their thoughts and feelings, the times of day they occur, and what triggered them. This helps them evaluate whether their thoughts are appropriate given the facts. That process, in turn, facilitates deciding whether the correct course of action is to try to change a situation or change one's negative reaction to it. "Patients can't change the fact that they have diabetes, but they can change the way they manage it," he said.

Patients are taught to use the mnemonic "I AM WORTH IT" to ask: Is the matter Important? Are negative thoughts/feelings Appropriate? Is the

situation Modifiable? And, balancing the needs of myself and others, is it Worth It? If the answer to all four questions is "yes," action skills to change the situation include problem solving, assertion, and saying "no." If the answer to any of the questions is "no," then "deflection skills" such as distraction, thought stopping, and relaxation/meditation are the next step.

Among the "action skills" is a systematic approach to problem-solving: Define the problem, generate alternatives through brainstorming, make a decision, implement the decision, evaluate the outcome, and revisit other options if needed. Assertion is another often-needed skill, in which patients are taught to ask others to change their behavior, to listen to them—or importantly, for people with chronic illness—to ask the physician for more information.

If "deflection" is the better course of action, relaxation exercises such as the one that Dr. Williams took the audience through may be in order: Picture a stop sign and say, "Stop" to yourself. Take three deep breaths, and say, "Relax" on each exhale. Inhale while clenching fists, then relax them on exhale. Inhale while clenching feet, then relax on exhale. Inhale while shrugging shoulders, then relax them on exhale. Inhale while tilting head to the right, then straighten on exhale. Inhale while tilting head to the left, then straighten on exhale. Finish with a "plain" inhale/exhale cycle.

Systolic blood pressure reactivity to anger recall—that is, the increase that occurs when a patient is reminded of a previous anger-inducing situation—also differed between the groups, dropping from 26.1 mm Hg at baseline to 16 mm Hg post intervention to 11.4 mm Hg at 3 months in the LifeSkills group, while rising from 21.5 to 23.1 to 27.7 mm Hg in the controls.

The LifeSkills program hasn't been studied specifically in diabetic patients, but oth-

er findings suggest that they could benefit from such training.

In a study led by Dr. Williams' colleague at Duke, Richard Surwit, Ph.D., scores on the Cook-Medley hostility scale were significantly correlated with glucose metabolism in nondiabetic patients (*Diabetes Care* 2002;25:835-9).

Lifeskills training, which has also been shown to decrease hostility scores, might therefore reduce glucose levels in diabetic patients as well, Dr. Williams said. ■

Anger Management Program Works Well in the Workplace

BY DIANA MAHONEY
New England Bureau

BOSTON — A worksite-based stress and anger management program may improve the cardiovascular health of at-risk employees, Lynn Clemow, Ph.D., said in a poster presentation at the annual meeting of the Society of Behavioral Medicine.

Preliminary results from a randomized, controlled trial indicate that participants who underwent a brief psychoeducational intervention program had reductions in systolic blood pressure. The participants were a diverse group of hospital employees classified as hypertensive on screening.

agement sessions based on materials from the Williams LifeSkills program. The intervention was delivered in small groups by trained clinicians, Dr. Clemow said.

Individuals randomized to the control group received usual care, which included apprising the participants' primary care providers of blood pressure readings at screening and giving the participants a summary of blood pressure management guidelines. Individuals in both groups were stratified by hostility level.

The intervention group participants with a high level of hostility had reductions from baseline in systolic blood pressure during the high stress periods of the

stress/anger structured interview, while their control counterparts did not show reductions. No differences were found in resting clinical blood pressure readings between the two groups over time, but the preliminary findings suggest the utility of such workplace interventions with respect to improving blood pressure under stressful conditions, according to Dr. Clemow.

The intervention group also showed posttreatment improvement in scores of self-reported stress, job burnout, hostility, and passive-unassertive behavior. As hypothesized, "the effects were more pronounced among individuals with higher baseline hostility," Dr. Clemow said. ■