Diabetes Buddies Program in South Africa

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As the diabetes epidemic continues to rise in South Africa, the country's health system faces many challenges in meeting the needs of people with diabetes. The Diabetes Buddies program was a pilot program designed to promote a healthy lifestyle and better management of diabetes through reciprocal support among women in the Mfuleni Township surrounding Cape Town, South Africa.



The study was conducted by Dr. Mary Jane Rotheram-Borus and her colleagues at the University of California in Los Angeles (UCLA) and to ensure that the program was tailored to the cultural needs of the women in South Africa was advised by a local organization called Women for Peace. The intervention had three components: a) a series of 12 psycho-educational group sessions that addressed improving one's lifestyle of eating, moving, and abstaining from alcohol and drugs; b) mobile phone probes about daily lifestyle; and c) text messages to support lifestyle changes.

Eligible participants were Xhosa women with diabetes who were able to read. A total of 22 women were recruited from the local health clinic and paired with a "buddy". The Diabetes Buddies were then trained by 2 Peer Mentors (women with diabetes who were trained at UCLA) using the following 12-week curriculum: a)Introduction, b)Using the cell phone, c)Understanding our feelings, d)Healthy eating, e)Physical activity, f)Healthy cooking, g)Diabetes overview, h)Talking to your doctor, i)Healthy families, j)Eating healthy portions, k)Stress & relaxation, and I)Looking to the future. Outside of weekly group sessions, women were able to contact each other through use of a mobile phone network, which allowed ongoing support between buddies.

Women were also encouraged to share their successes and challenges in adopting new and healthier lifestyles. As part of the mobile phone component, one message, or probe, was sent daily to each participant with the goal of helping the women gather information to use in the management of their disease.

FOUR KEY FUNCTIONS

Assistance with Diabetes Management in Daily Living

Diabetes Buddies used mobile phones to contact their peers and answer daily "probes" about self-management.

Social/Emotional Support

Diabetes Buddies reached out to each other through a mobile phone support system and also found training meetings to be good forums for social and emotional support.

Linkages to Care

Diabetes Buddies met with nurses from the local health clinic for assessments of biomarkers of diabetes.

Ongoing Support over Time

A year after program completion, the original group of women recruited more participants and continued to meet.

In addition to baseline assessments, the program also conducted a 3- and 6-month assessment following the intervention. Evaluation measures included: biomarkers of diabetes; self-reports of lifestyle, coping styles and mental health symptoms; and support measures. In pre-post comparisons at 3 months, there were increases in sleep time, blood checks by a health care provider, positive coping styles, and level of social support.

The Diabetes Buddy program has provided a long-term model for sustained behavior change, which is evidenced by the continuation of the program one year evaluation. Programmatically, post having infrastructure in place is critical for a sustainable peer support model. Also, in terms of developing interventions, the use of the mobile phone is beneficial in resource-poor settings.

TRAINING SUMMARY

Duration: 12 weeks

Content:

- ➤ Introduction
- Using the cell phone
- Understanding our feelings
- ➤ Healthy eating
- Physical activity
- > Healthy cooking
- Diabetes overview
- ➤ Talking to your doctor
- ➤ Healthy families
- > Eating healthy portions
- Stress & relaxation
- Looking to the future

Approach: Group sessions

Language: English and Xhosa

RESOURCES Appointment card Overview of 12 group sessions ➤ Baseline and follow-up assessment > Recruitment script **PUBLICATIONS**

- Fisher EB, Boothroyd RI, Coufal MM, Baumann LC, Mbanya JC, Rotheram-Borus MJ, Sanguanprasit B, and Tanasugarn C. (2012). Peer Support for Self-Management of Diabetes Improved Outcomes in International Settings. Health Affairs. 31(1):130-
- Rotheram-Borus MJ, Ingram BL, Swendeman D, Lee A. (2012). Adoption of Self-Management Intervention for Prevention and Care. Primary Care. 39(4):649-60
- Rotheram-Borus MJ, Tomlinson M, Gwegwe M, Comulada WS, Kaufman N, and Keim M. (2012). Diabetes Buddies: Peer support through a mobile phone buddy system. The Diabetes Educator. 38(3):357-65

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