Considerations for Designing Peer Support Programs for Older Adults with Diabetes

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Approximately 26.9% or 10.9 million of older adults (individuals 65 years of age and up) in the United States live with diabetes mellitus (Centers for Disease Control and Prevention [CDC], 2013). Projections of the diabetes burden through the year 2050 suggest that the largest percent increase in individuals diagnosed with diabetes will occur among older adults age 75 years of age or higher (449% increase) and those 65- to 74-years-old (220% increase) (Boyle et al. 2001; Venkat Narayan et al., 2006). Critical to minimizing poor health outcomes among individuals with diabetes is the adoption and maintenance of diabetes self-management behaviors, which can include glucose monitoring, consuming a proper diet, medication adherence, and regular exercise (CDC, 2012).

Among promising programs seeking to improve diabetes self-management behaviors in the general adult population are peer support interventions that are able to address multi-level barriers to diabetes self-management. Researchers in the field argue that peer supporters can provide the type of ongoing support necessary to maintain self-management among peers living with diabetes (Fisher et al., 2012). Successful peer support interventions in diabetes self-management have reported statistically significant improvements in blood glucose levels, and management behaviors (Balagopal, Kamalamma, Patel, & Misra, 2012; Liu et al., 2012; Brown et al., 2012). While older adults are included within many of the diabetes peer support participant populations (Liu et al., 2012; see review by Tang, Ayala, Cherrington & Rana, 2011), there is still a demand for research identifying success factors that are unique to individuals with diabetes who are 65 years of age or older (Kirkman et al., 2012).

To facilitate further exploration and research that will address the demand for success factors in peer support programs for older adults, this paper begins with a demographic summary of elderly individuals with diabetes, presents an overview of facilitators and barriers that these individuals may encounter, and concludes with six suggested areas that should be considered when designing peer support interventions targeting older adults with diabetes and other chronic diseases. Since individuals age 70 and above are likely to have at least...
one of seven major chronic diseases (arthritis, cancer, diabetes, heart disease, hypertension, respiratory disease, and stroke) (Fried, 2000), and because self-management behaviors for several of these are similar to diabetes self-management (e.g., medication adherence, physical activity, dietary regulation, and weight management) (Gallant, 2003), the key recommendations identified in this paper may be applicable to peer support programs among older adults with other chronic diseases.

Profile of Older Adults with Type II Diabetes

Diabetes among older adults can be observed in a diverse set of individuals. In general, these individuals are at higher risk for developing type II diabetes due to multiple factors associated with insulin resistance and impaired pancreatic function (Kirkman et al., 2012; see Figure 1). Elderly individuals with diabetes are diagnosed at or around age 65, since prevalence and incidence level off after age 65, or have been diagnosed during middle age or earlier. Most older adults who experience onset of diabetes during the latter stages of life are non-Hispanic Whites (Kirkman et al., 2012).

Elderly individuals with diabetes also face significant adverse outcomes. For example, older adults will face “higher mortality, reduced functional status, and increased risk of institutionalization,” in comparison to working-age adults (Kirkman et al., 2012, p. 2342). Additionally, in comparison to individuals in all age categories, older adults encounter higher rates of amputation, myocardial infarction, and death from hyperglycemic crises (Kirkman et al., 2012). In response to growing concern over the treatment of diabetes in older adults and the lack of diabetes research and clinical trials including older adults, the American Diabetes Association (ADA) in association with the American Geriatrics Society released a consensus report describing current guidelines for treating diabetes in older adults. Pertaining to diabetes management, they highlighted two points relevant to this discussion:

1. Older adults who are functional, are cognitively intact, and have significant life expectancy should receive diabetes care using goals developed for younger adults.

2. Glycemic goals for older adults not meeting the above criteria may be relaxed using individualized criteria... (Kirkman et al., 2012, p. 2347; emphasis supplied)

This same consensus report indicated that older adults with diabetes also have higher frequencies of geriatric conditions such as cognitive dysfunction, functional impairment, falls and fractures, polypharmacy (taking 6 or more medications), depression, vision and hearing impairment, and other comorbidities or common medical conditions such as cardiovascular disease, anxiety, and decreased socialization (Kirkman et al., 2012).
Facilitators and Barriers to Self-Management among Older Adults with Diabetes

Elderly individuals with diabetes face unique challenges to self-management and require special facilitators in order to properly manage diabetes (see Figures 2 and 3). Barriers can include lack of or inadequate diabetes education, poor health literacy, poor physical activity habits, low diabetes nutrition knowledge, and multifaceted problems coping with comorbidities (Munshi et al., 2013). These multiple barriers require that diabetes intervention materials be adapted to the older adult audience. For example, older adults may require frequent reminders of important diabetes self-management points, sessions that involve teaching one skill at a time, education that transitions from simple skills to more complex skills, and program materials that keep in mind potential low health literacy and vision impairments (Kirkman et al., 2012). For older adults with cognitive impairments, diabetes self-management educators should adapt teaching methods and include the use of aids to facilitate information retention (e.g., hands on experience) and sequential visits to build on previously covered skills (Kirkman et al., 2012). Diabetes self-management education and training should be adapted to the older adult’s specific situation, including addressing social and cultural needs of the individual, and should incorporate family members and community resources to complement treatment plans (Rizvi, 2007).

Among various factors that can cause changes in glucose levels in older adults are social circumstances. These social situations can include death of close friends or family members or stress related to providing caregiving to an aging partner (Munshi et al., 2013). Additionally, older adults with diabetes in one study reported numerous social barriers, including “isolation, transportation difficulties, lack of motivation, caregiver stress, financial difficulties,” and several other barriers related to care coordination, poor treatment adherence, and health beliefs (Munshi et al., 2013, p. 545). Coping strategies employed to leverage these social barriers include assistance with (a) identifying and accessing social and community resources; (b) navigating medication and pharmacy assistance; (c) obtaining medication delivery; and (d) using treatment adherence tools (Munshi et al., 2013).

Finally, older adults also face social stigma in clinical and community settings where healthcare providers and caregivers may assume that the older adult does not have the capacity to self-manage, faces a short life-expectancy, may not benefit from diabetic interventions, and has limited capacity to verbalize or communicate preferences (Jack et al., 2004). Qualitative studies exploring concepts of autonomy (an individual’s interest in making important decisions in his/her life) and independence (ability to govern and control daily activities) among older adults find that upholding both principles are important to enhancing an individual’s self-confidence, pride and personal

**Figure 2. Barriers to Diabetes Management**
- Coping with comorbidities
- Low health literacy
- Multiple social barriers and stigma

**Figure 3. Facilitators to Diabetes Management**
- Education through frequent reinforcement
- Building on skills through sequential visits
- Support navigating resources
satisfaction (Randers & Mattiasson, 2004; Haak, Fänge, Iwarsson & Dahlin Ivanoff, 2007). Independence is often connected with a strong desire to remain in the home, or age in place, and continue daily living activities (Haak et al., 2007). Thus, efforts to promote positive diabetes self-management behaviors in older adults must (1) avoid treating these individuals as incapable of principal decision makers in their diabetes management, (2) promote the participant’s independence and autonomy, and (3) enhance the participant’s ability to age in place.

Key Considerations in Peer Support Interventions for Older Adults with Diabetes

The above overview of older adults with diabetes, including key barriers and facilitators to diabetes self-management, points to at least six potential areas for consideration that should be addressed when designing a peer support intervention as discussed below (see Figure 4):

- **Support independence and autonomy among program participants:** Interventions seeking to improve diabetes management among older adults, should promote principles that respect and uphold autonomy and independence among program participants. Peer supporters should be trained to ensure that they are giving participants the freedom to make decisions on matters that are important to participants (Haak et al., 2007). Peer supporters must be sensitive to the individual’s priority decision-making areas in determining whether to administer directive or nondirective support (Gabriele, Carpenter, Tate & Fisher, 2011). In light of the desire to enhance self-management behaviors such as greater physical activity and adoption of healthy nutritional habits and because older individuals may experience negative moods in response to directive support, peer support training should emphasize provision of nondirective support to participants, and program coordinators should ensure that peer supporters provide only minimal directive support (Fisher et al., 1997; Stewart et al., 2012).

- **Tailored peer support:** Peer support should be provided in a manner that is tailored to the strengths and limitations of both participants and older adult peer supporters, but may incorporate goals similar to those for younger individuals with diabetes (Jack et al., 2004; Kirkman et al., 2012).

- **Time:** Based on the learning needs and memory acquisition processes of older adults, peer support programs should facilitate and encourage frequent contact over an extended period of time between peer supporters and older adults with diabetes (Kirkman et al., 2012).
• **Aging in place**: Peer support interventions should address desires to remain independent in community- and home-based settings expressed by older adults by reducing the need for participants’ to transition to institutional settings (Haak et al., 2007).

• **Transportation**: For adults living in rural settings or older adults who prefer face-to-face communication, transportation barriers should be addressed such that peer supporters and participants are able to engage with each other in person, and to allow peer supporters to provide adequate support services.

• Peer support programs should implement a **collaborative care approach** to enlist support from participants’ healthcare providers, and to ensure coordination of care involving participants, peer supporters, family members, caregivers, and healthcare providers, similar to teams described in patient centered medical home models (Jack et al., 2004; Rizvi et al., 2007; Bielaszka-DuVernay, 2011).

### Conclusion

The above recommendations or suggested areas for considerations are intended to encourage further exploration and research that will address a growing need in a population that may require interventions with special adaptations. It should also be acknowledged that these recommendations are preliminary and may be supplemented or altered based on assessments conducted within specific communities or populations of older adults with diabetes. Furthermore, because diabetes self-management behaviors may overlap with self-management behaviors across numerous chronic diseases (Gallant, 2003), the key recommendations identified in this paper may be applicable to peer support programs among older adults with other chronic diseases or comorbidities. Finally, these six recommendations may be used to determine the focus of process evaluation components for peer support programs promoting chronic disease self-management behaviors among older adults.
References


