Older adults in health education research: some recommendations

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Abstract

A review of articles published in two health education journals is provided to examine the extent to which older adults were included in published research. The review suggests that older adults were included in about 15% of the research articles published in Health Education and Behavior and Health Education Research. Of the articles that include older adults, age differences in study processes and outcomes are rarely examined, and very few studies advance specific hypotheses based on a theoretical or conceptual model of aging or older adulthood. Several recommendations for health education research are suggested.

Introduction

Certain segments of the population may require special health education efforts because their unique needs or characteristics have not been recognized in the design, implementation or evaluation of existing health programs or services (Marin et al., 1995). For several reasons it can be argued that older adults are one such group.

The 33.9 million adults over the age of 65 represent 12.8% of the US population (USDHHS, 1997). Among this group, age-related physical changes (e.g. sensory declines, loss of muscle mass and bone density, increased risk of fractures) may alter the context in which health-promotive and self-management tasks are performed (Wallace, 1997). The majority of older adults take several prescription and non-prescription drugs, and have more than one chronic illness (Roth, 1990). Thus, the probability of drug and illness interactions increases with age, complicating health-related tasks (Wallace, 1997).

The value and belief systems of older adults may also facilitate or interfere with optimal strategies for maintaining health. For example, older adults may be less likely to respond to symptoms (e.g. fatigue, depression) because they are interpreted as an inevitable part of growing older or not perceived as serious enough to warrant medical attention (Stoller et al., 1993). The psychosocial context of older adulthood may also affect efforts to maintain optimal health and facilitate self-management (Kaplan, 1997). For example, due to the changes in social relationships that frequently accompany growing older (e.g. widowhood), the quantity and quality of social support may be altered. Because the availability of support has been associated with regimen adherence and positive illness outcomes, older adults may experience more problems with their health and self-management behaviors (e.g. diet, exercise) than young and middle-aged adults (Glasgow and Toobert, 1988; Connell, 1991; Kaplan, 1997).

Obviously, these are just a few examples of how the changing physical and psychosocial context of older adulthood may impact health education efforts. Although the educational approaches that have been effective with the general population may be appropriate for older adults, the broader context of older adulthood and age-related changes
that accompany the aging process may challenge common assumptions about program design, implementation and evaluation (Kane, 1997).

This Point of View article provides a brief review of the extent to which older adults were included and issues relevant to older adulthood were addressed in two major health education research journals in the past decade. Specifically, all research articles published in *Health Education Quarterly* (HEQ) (now *Health Education and Behavior*) and *Health Education Research* (HER) over the past decade were examined. Each article was reviewed to determine the age of the study sample, if age was included in the analysis and if the implications of age differences were addressed in the discussion.

Of the 299 research articles published in *HEQ* between 1985 and 1994, 44 (15%) reported results that included older adults in the sample. Ideally, in each of these 44 studies, age would have been included in the data analysis and the context of older adulthood considered in the discussion of findings. Such a comprehensive treatment of age and issues of older adulthood was demonstrated, however, in only 15 (34%) of the 44 studies. Examples include: (1) an assessment of the health education needs of an aging veteran population (King *et al.*., 1986); (2) a study conducted to identify strategies for increasing physical activity among employees of a large corporation (King *et al.*., 1990); (3) a discussion of opportunities for health promotion in long-term care settings (Minkler, 1984); (4) a community-based health promotion program entitled ‘Staying Healthy After 50’ (Simmons *et al.*., 1989); (5) an educational program designed to promote self-management behaviors among older adults with heart disease (Clark *et al.*., 1992); (6) a community-based outreach program that addressed problems of social isolation, poor health and powerlessness among older adults (Minkler, 1985); and (7) an arthritis self-management program (Lorig and Gonzalez, 1992). In three additional studies age was discussed in the context of social marketing as a factor to consider when developing health education interventions (Lefebvre and Flora, 1988; Strecher *et al.*., 1989; Salter and Flora, 1991).

In 17 of the 44 studies published in *HEQ*, older adults were included in the sample, but age differences were not explored and issues of older adulthood were not addressed in the discussion and interpretation of results. Because the majority of these studies addressed health issues that have important implications for older adults (e.g. breast self exams, smoking cessation, mammography), discussion of age differences in process and outcome variables would add considerably to our understanding of the effectiveness of specific interventions with this population. Finally, in three of the 44 studies, age was treated as a control variable; thus, age differences were not discussed. In six studies, the sample was restricted by age (e.g. adults aged 50 and under), but a rationale for such a classification was not provided.

A similar decade review of *HER* was conducted. Of the 402 research articles published in the journal, 67 (17%) were based on studies that included older adults in the study sample. As in *HEQ*, studies based exclusively on samples of older adults were the exception. Examples include studies designed to examine: (1) the process and impact of a cancer communications program (Rimer *et al.*., 1986); (2) results of a stroke education program based on a peer education model (Glanz *et al.*., 1986); (3) predictors of pain and functioning among older adults with arthritis (DeVellis *et al.*., 1986); (4) beliefs and self-efficacy about breast cancer and breast self examination (Baker, 1988); and (5) the impact of a tailored self-help smoking cessation guide on quit rates of older smokers (Rimer *et al.*, 1994).

In 27 (40%) of the 67 studies published in *HER* that included older adults, age differences were not reported. In many cases a focus on age differences was not essential to the goals of the study. It is also the case that in many studies the proportion of the sample defined as older adults was small, limiting power to detect significant age differences. The wide age range of the sample included in several of the studies, however, was sufficiently large (e.g. 20–93, 18–88) to justify including age
in the analysis, if only as a control variable. In fact, age was treated as a control variable in only two studies published during this period.

In 10 studies published in HER, the sample was restricted by age; in most cases, the result was to exclude older adults (e.g. samples restricted to adults aged 25–64, 45–64, 16–59, 18–44, less than 65). In an additional 23 studies, age differences were reported in the results section but not addressed in the discussion section. Most commonly, age differences were reported by age group (e.g. under 30, 30–39, 49–49, 50–59, >60; 15–24, 25–39, 40–59, over 60), although a rationale for establishing specific age categories was rarely provided. In 20 studies published during this period the age of the sample was not described.

In summary, about 15% of the research articles published in these two leading health education journals included older adults. In these studies age differences were rarely explored and very few studies advanced specific hypotheses based on a theoretical or conceptual model of aging or older adulthood. Even when age differences were examined, the implications of significant findings were rarely addressed. In several studies, older adults were excluded because an upper age limit was set as a criterion for sample inclusion (e.g. 60, 65).

Obviously, there are several limitations to this highly selected review. First, the results are based on only two health education journals and may not provide an accurate assessment of the attention to older adults in the general health education literature. HEQ and HER were selected because they publish a wide range of topics related to health education, including intervention studies. Second, health education research that includes older adults may appear in any number of journals in the health and social sciences, including those that focus on gerontology, psychology, health promotion, program evaluation and specific chronic illnesses, to name but a few.

**Recommendations for researchers and practitioners**

To respond more effectively to the future health education needs of older adults, age differences need to be examined in a greater proportion of studies that include older adults. Although age is an imperfect indicator of the multiple contexts of older adulthood because of its complex relationship with gender, socioeconomic status, ethnicity and race [see (Markides, 1989) for discussion of this topic], it remains a useful variable for purposes of analysis. Much could be learned from the data available to the researchers whose published studies included older adults but did not address age differences. At a minimum, all studies should provide descriptive information about the age of the sample (i.e. mean, SD, range) along with other demographic information (e.g. gender, race/ethnicity, educational level, income). Whenever appropriate (e.g. studies based on samples with a wide age range), a rationale for why age differences were not examined should be provided.

Moreover, when older adults are included in health education research, they are often treated as a homogenous group. From a lifespan perspective, we should expect distinct periods of development and change beyond the age of 60. The health education needs of the oldest old (over the age of 85) are likely to be quite different than for adults in their sixth and seventh decades (McLeroy et al., 1995). In the future, health education interventions need to better reflect the diversity among the older adult population and to target subgroups of the population that may be difficult to reach or at high risk. Older women, for example, have been the target audience for several educational interventions [e.g. a program designed to facilitate heart disease management (Clark et al., 1994); a coping skills program designed for family caregivers (Gallagher-Thompson and DeVries, 1994)]. In addition, increased attention to how race, ethnicity and culture impact research with older adults is clearly warranted (Connell and Gibson, 1997; German and Shapiro, 1997).

Interdisciplinary collaboration is needed to increase our understanding of the educational and health-related needs of older adults. A large body of psychosocial research published in the gerontological literature appears to have little impact on the work of health education practitioners and
researchers, making the task of identifying and reviewing the relevant literature difficult and serving as a barrier to interdisciplinary exchange (Schloman and Byrne, 1992). Similarly, results of programs designed for specific chronic illnesses and published in disease-specific journals are not always disseminated to researchers and practitioners in related fields (e.g. psychology, health education) (Clark et al., 1991). This occurs despite the fact that health promotion and self-management interventions share a common focus on health behavior change (e.g. promoting exercise, weight loss, and optimal nutrition). Adoption of common theoretical and conceptual frameworks, as well as measures that have been found to be reliable and valid for use with older adults, is recommended to bridge research and practice.

Opportunities for health educators to gain knowledge and skills in adult development and aging, including offering appropriate curriculum and internships, should be assessed and possibly expanded. This suggestion is useful, however, only to the extent that a subset of the individuals who pursue careers in health education are interested in working with older adults. If this is not the case, the attitudes of prospective health education students about older adults could be examined (Carpenter, 1996). If the myths and misconceptions about older adults common among the general public are identified, steps could be taken to increase awareness and understanding of this age group and better inform students of the wide range of health education needs of this population (e.g. health promotion, self-management, health policy, advocacy, community-based outreach education).

A great deal of additional research is needed to inform the future course of a comprehensive and interdisciplinary health education agenda that is responsive to the needs of older adults. The effort required, however, will be a worthwhile investment in improving the overall health of a growing proportion of our population.

References


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