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THE SOCIAL SUPPORT OF OLDER ADULTS LIVING WITH HIV/AIDS:  
A SYSTEMATIC LITERATURE REVIEW

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## Abstract

The population of older adults living with HIV/AIDS in the United States is growing due to the aging of the general population, the development of anti-retroviral drug therapies, and the rising number of new infections among older adults. Despite the fact that due to advancing treatments people are living longer with HIV/AIDS, it still remains a complex, life-threatening, and costly disease. Not only does aging with HIV/AIDS have a serious negative impact on the physical health and functioning of older adults, but it also impacts their psychosocial health. The purpose of this paper was to conduct a systematic literature review on the social support resources used by adults age 65 and older living with HIV/AIDS in the United States. The specific aims of this review were to describe the social support resources available to this population, the social support systems actually used by the population, and the barriers they face to social support. The outcomes associated with the use of social support were also presented. The broad goal was to identify nursing practice and healthcare policy implications as well as gaps in the research. The search for literature was conducted using the online databases *PubMed*, *CINAHL*, and *PsycINFO* with the key terms *HIV* and “*social support*.” Selection criteria for inclusion of articles were that they must have been written in English, focused on the population aged 65 and older, and reported research that was conducted in the United States. A total of 18 articles were included in the review. Seven themes relating to the social support of older adults living with HIV/AIDS emerged from the research. The most compelling finding was the level of social isolation and depression experienced by this particular population.

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## Introduction

In 1981 the Human Immunodeficiency Virus (HIV) was first isolated in the United States (Centers for Disease Control and Prevention, 2009). Now, almost 30 years later, HIV/AIDS is still a growing epidemic in this country. The latest statistics from the Centers for Disease Control and Prevention (2009) reveal that the number of people living with HIV/AIDS in the United States “increased steadily” from 2004 to 2007. During those four years there was a 15% increase in the total number of new HIV/AIDS cases (Centers for Disease Control and Prevention, 2009). These data were obtained only from the 34 states that participate in confidential name-based testing, which account for 66% of the cases in all 50 states and the District of Columbia (Centers for Disease Control and Prevention, 2009).

Although the growth has been slow, the number of older adults living and being diagnosed with HIV/AIDS each year is on the rise. The CDC reported that 24% of the persons living with HIV/AIDS in 2005 were over the age of 50, which climbed 7% since 2001 (Centers for Disease Control and Prevention, 2008). And in the year 2006, 10% of all new HIV infections occurred in the population of adults aged 50 years and older (Centers for Disease Control and Prevention, 2008). Gradually increasing each year, the number of adults aged 65 and over living with HIV climbed to near 17,000 in 2007 from 10,512 in 2004 (Centers for Disease Control and Prevention, 2009).

Aside from the general aging of the population that is occurring in the United States, there are a few other factors contributing to the growth of HIV/AIDS in older adults. One of the biggest factors in the growth of this population has been the development of Highly Active Antiretroviral Therapy (HAART) drugs that are contributing to patients with HIV/AIDS living longer (Vance, Childs, Moneyham, & McKie-Bell, 2009). Another key factor is the increasing

number of new infections occurring within the older adult population (Vance et al., 2009). Age-related physical changes (such as thinning of the vaginal wall), the absence of a perceived risk, and a lack of knowledge on HIV transmission contribute to this population's increased risk (Vance et al., 2009). The growing number of single and sexually active older adults due to divorce and spousal death also contributes to the growth of the HIV-positive older adult population (Vance et al., 2009).

There are several reasons why healthcare professionals and policy makers should be concerned about this population and its growth. The first of these reasons being that aging with HIV is costly. The cost of prescription drugs and healthcare in general is expensive for older adults not living with HIV. Older adults living with HIV require even more drug therapies, such as HAART, and have an even greater need for healthcare. One study reported that one daily regimen consisting of three antiretroviral drugs costs \$944 per person (Soni & Gupta, 2009). In the year 2009 the United States government spent a total of 786 million dollars on antiretroviral drug regimens for the 3.98 million patients with HIV/AIDS in this country (Soni & Gupta, 2009). These data can be compared to the cost of treatment for another growing epidemic in this country, type 2 diabetes. A perspective cost-effectiveness analysis study determined that over 15 years the average cost of Glyburide, an oral anti-diabetic drug, was \$2.98 per day (Sinha, Rajan, Hoerger, & Pogach, 2010).

Despite the fact that HIV is evolving into a chronic condition, it remains a serious and life threatening illness. In 2005, 35% of all AIDS related deaths occurred in adults aged 50 and older (Centers for Disease Control and Prevention, 2008). Since the beginning of the HIV/AIDS epidemic 29 years ago, approximately 15,400 people aged 65 and over have died as a result of the disease (Centers for Disease Control and Prevention, 2009).

According to Vance (2010) the combination of having the HIV infection, receiving HIV medication treatment, and the normal process of aging increases one's risk of developing comorbidities. HIV-positive older adults demonstrate increased rates of cancer, hypertension, diabetes, stroke, pneumonia, congestive heart failure, and neuropathy (Vance, 2010). In addition to developing comorbid diseases, aging with HIV has been associated with cognitive decline and a decrease in one's ability to perform activities of daily living (ADLs) (Vance, 2010).

Historically, due to the terminal nature of the disease, HIV was not viewed as a health concern of older adults. HIV positive people were simply not living into their older adult years. This population is new and growing. Very little is known about the experience of being an HIV-positive older adult and the unique challenges that aging brings to living with HIV. Although this issue of "aging with HIV" is not one of enormous prevalence at this time, it is, however, one of growing concern within the nursing and allied health professions. As the population of the United States continues to age and, in parallel, the population of older adults living with HIV/AIDS expands more research will be needed. Nurses will need to understand the intricacies of caring for persons who are HIV-positive and coping with normal age-related changes. The complexity of the physical, mental, and emotional health issues experienced by older HIV/AIDS patients will require highly specialized care and innovative approaches. In the future, healthcare professionals will come to see HIV/AIDS as a health concern of people of all ages, not just the young.

The purpose of this literature review is to explore the social support resources used by adults age 65 and older living with HIV/AIDS in the United States. The specific aims of this review are to describe the social support resources available to this population and the social support systems actually used by this population. This review also aims to reveal the barriers to

social support faced by older adults living with HIV/AIDS. And, finally, outcomes associated with the use of social support will be presented. The broad goal is to identify nursing practice and healthcare policy implications as well as gaps in the research.

## Methods

The search for literature was conducted using the online databases *PubMed*, *CINAHL*, and *PsycINFO* with the key terms *HIV* and “*social support*.” In *PsycINFO* the key term “*older adults*” was added due to the lack of a search tool to limit age. As a result 276 potentially relevant articles were found. Inclusion criteria were that the articles must have been written in English, focused on the population aged 65 and older, and reported research conducted in the United States. Articles were excluded by title and abstract if they: reported research undertaken outside of the United States; did not focus on HIV and social support; or were duplicates of previously identified articles. Graduate student dissertations were not included in this review. Research conducted outside of the United States was not included due to the differences in prevalence, treatment, and overall nature of the disease in various regions of the world. For the purposes of this study it was most effective to focus on the experience of living with HIV within the United States. A total of 87 articles were retrieved in full-text for evaluation and 18 of those articles met the outlined selection criteria (see Figure 1). Sixty-nine articles that did not meet inclusion criteria were eliminated after full text evaluation. Non-research articles, systematic reviews, and opinion pieces were all excluded. Studies on the effectiveness of assessment tools, HIV prevention/risk studies, and other studies on HIV that did not relate to social support were also excluded. As a result, the search yielded a total of 18 articles, nine from *PubMed* and nine from *CINHAL*, that were included in this systematic literature review.

Although the search was conducted for literature that was focused on older adults age 65 and over it was soon discovered that the majority of research conducted with participants that were classified as older adults living with HIV/AIDS focused on persons age 50 and older. The lower limit age criterion for those considered older adults with HIV/AIDS was shifted to include



a younger than typical group, which is likely due to the nature of the disease. Therefore, all studies included in this review, with the exception of two, either have a sample comprised entirely of older adults age 50 and older or compared those 50 and older living with HIV against their younger counterparts. The two exceptions were studies that included participants with ages ranging from 47 to 69 and 48 to 66, but it was determined that they should be included due to their relevance to the topic. Studies with samples that included older adults, but where findings were not differentiated based on age, were deemed not relevant to this review and therefore excluded.

Articles selected for inclusion were compiled in a matrix (see Table 1). Each article was reviewed for purpose, hypotheses and/or research questions, sample, setting, design, measurements, interventions (if any), findings, strengths, and limitations. During the process of reviewing the literature it was discovered that several of the articles emerged from the same data set and reported on very similar concepts. These articles were identified with an asterisk on the matrix in an effort to avoid introducing bias into the review.

## Findings

Of the eighteen articles included in this review, ten of them were descriptive correlational studies. Six of those ten studies involved the comparison of two or more groups of participants. Two studies were comparative descriptive. Five studies used a strictly descriptive design, one of which stood out due to its utilization of focus groups. The remaining study was the only intervention study included in this review. Throughout all of the comparative studies included in this review, most focused on comparing different age groups. However, some studies made racial, gender, or sexual orientation comparisons.

Seven studies used self-administered questionnaires to collect data. Of those, one used a computer-assisted self-assessment. Eight studies conducted individual interviews either in person or via the telephone. One study was done through secondary analysis of a previous data set. The intervention study conducted by Nokes, Chew, and Altman (2003) utilized group discussions held via telephone; data were collected by facilitators. Lastly, in Poindexter and Shippy's (2008) descriptive study, one author facilitated focus group discussions as a method of data collection.

Multiple measurement tools were utilized by the researchers who conducted the studies included in this review. Despite a wide variation in measures due to the different natures of the studies, there were a few measures that were used more frequently throughout the research. The Ways of Coping Questionnaire was a measure used to evaluate the coping styles of participants. Measures for depression, which was assessed in many of the studies, included: the Beck Depression Inventory (BDI); the 20-item Center for Epidemiological Depression Scale (CES-D); the Geriatric Depression Scale (GDS); and the Patient Health Questionnaire depression module. One study did not use a scale and simply asked about participants' experiences of depression,

inquiring if they “had often felt sad or depressed in the past month,” (Shippy & Karpiak, 2005a). The Provision of Social Relations Scale (PSR) was employed in the research to measure the level of social support received by participants, particularly from family and friends. Various measures were used to assess emotional symptoms, physical symptoms, barriers to support, stigma, disclosure, and service utilization within the studies selected for this review. These measures were largely previously established tools.

Throughout this systematic review of the literature, seven themes relating to the psychosocial issues of older adults living with HIV/AIDS emerged.

### **Demographic Differences**

Almost all studies in the review reported at least a few results focused on sociodemographic data. Aside from age, the majority of the demographic findings focused on living situation, race, gender, or sexual orientation. Most of the major findings related to these topics are discussed in this section; however, demographic differences are truly imbedded in all the themes of this review and may be discussed briefly in other areas.

**Demographics and social support.** The focus group study conducted by Poindexter and Shippy (2008) was designed to examine demographic differences in the social networks of older adults living with HIV/AIDS. In order to foster a more comfortable environment, the participants were divided up into five demographically homogenous groups: eight African American women; six non-African American women; three gay, white men; eight African American men; and nine Latino men. As a result, this study yielded clear findings about the demographic differences within this particular population. The group of African American women *intentionally* formed social networks of HIV-positive individuals due to their fear of stigma. Three of the five focus groups (the gay, white men; the African American men; and the

Latino men) *unintentionally* formed social networks comprised of mostly HIV-positive people that they met through the use of HIV/AIDS services. The last focus group of non-African American women was the only group to have formed social networks primarily consisting of individuals without an HIV diagnosis; rationale for their selection of such persons for their supportive networks included the fear of losses related to death, illness, and privacy (Poindexter & Shippy, 2008).

**Living situation.** Five studies revealed that the majority of older adult participants either lived alone or that older adults were significantly more likely to live alone (Crystal et al., 2003; Emlet, 2006b; Emlet, 2007; Emlet & Farkas, 2002; Shippy & Karpiak, 2005b). However, Schrimshaw and Siegel (2003) reported that living alone did not have a significant relationship with the perceived support of individuals living with HIV/AIDS.

**Racial differences.** Heckman et al. (2000) reported on racial differences in sexual orientation, life stressors, coping strategies, social support systems, and psychological distress among late-middle aged and older men living with HIV/AIDS. This research team found race-related differences did exist in relation to disclosure patterns. While African American men and white men disclosed their HIV status to family members at similar rates, African American men were significantly more likely than white men to disclose their HIV status to friends. Despite the fact that African American men disclosed more often to friends, African American men and white men were found to have comparable levels of support from friends. However, African American men reported significantly greater support from family (Heckman et al., 2000). Consistent with that finding, Foster and Gaskins (2009) also reported that older African Americans reported family as their most common source of support.

Although Heckman et al. (2000) reported that there were no significant differences between African American and white men in HIV symptomatology or life stressors, African American men were significantly more likely than white men to see the positive side of stressful situations. They were also significantly more likely to report greater future optimism than white men. Paralleling those findings, Heckman, Kochman, and Sikkema (2002) found that non-white participants used significantly more engagement (or active) coping strategies as compared to white participants.

Despite the positive attitude of the African American, older adult population described in the previously mentioned research, Emlet (2006a) found that 53.8% of the older adult participants of color were socially isolated, as indicated by their Lubben Social Network Scale scores; that percentage was significantly greater than the percentage reported for the younger age group. Both younger and older African Americans living with HIV/AIDS scored significantly lower for the support of friends, the availability of a person to confide in, and for instrumental support when compared with white participants (Emlet, 2006a). Similarly, Emlet (2006b) reported that African Americans (both young and old) had higher stigma scores than their white counterparts. Conversely, Foster and Gaskins (2009) reported that amongst the 24 older African Americans that they studied, most of the participants rarely or never experienced feeling stigmatized. Only in responding to the internalized shame subscale did 60% of the participants report experiencing stigma (Foster and Gaskins, 2009).

Racial differences in relation to rates of depression were also reported on in the research. Emlet (2007) found that non-whites were significantly more likely to exceed the cut-off score for depression on the Center for Epidemiological Studies Depression Scale (CES-D) than were whites. In direct contrast to those findings, Heckman et al. (2000) found that even when sexual

orientation was accounted for, older white men reported significantly higher levels of depression, anxiety, and somatization. Finally, the racial differences in relation to sexual orientation were that older African American men were significantly more likely to identify as heterosexual, while older white men were significantly more likely to identify as gay or bisexual.

**Gender differences.** Gender was another demographic characteristic that was frequently discussed as having an association with social support in older adults. Emlet (2006a) determined that older males and older females with HIV/AIDS differed in terms of available social support. Older men scored significantly lower on social network measures as compared to younger males, but, older women scored significantly higher than their younger counterparts on social network measures. Furthermore, Shippy and Karpiak's (2005a) research revealed an important finding that older women with HIV/AIDS had significantly larger informal social networks than older men living with HIV/AIDS. Women were also significantly more likely to perceive having adequate emotional support levels (Shippy & Karpiak, 2005a). In contrast, Foster and Gaskins (2009) reported that there was not a significant difference in stigma scores between older African American men and women.

### **Social Support Networks and Support Resources**

**Social networks.** Understanding the composition of the social networks of older adults living with HIV/AIDS was the focus of much of the research included in this review. Shippy and Karpiak (2005b) found that on average the social networks of older adults were comprised of 10 people. The results from their study revealed a range from zero to 36 members in participants' social networks. Several studies found that friends were a key element in the social networks of older adults with HIV/AIDS (Emlet, 2006a; Poindexter & Shippy, 2008; Shippy & Karpiak, 2005b). Shippy and Karpiak (2005b) found that 33% of participants selected friends and

partners as their preferred source of support with family falling second with 23% of participants. The researchers reported that 75% of participants reported having more friends than any other support element in their actual support networks. Friends were present in 85% of the older adults' social networks and slightly over half (56%) of those friends were reported as being other older adults living with HIV/AIDS (Shippy & Karpiak, 2005b). The Poindexter and Shippy (2008) focus group study also reported that the majority of older adults' social networks were comprised largely of other HIV-positive persons. Participants in that study frequently reported that "commonality" and "empowerment" were important advantages to having a mostly HIV-positive social network (Poindexter & Shippy, 2008). In addition, it was discussed that having such social networks allowed for greater control of stigma and disclosure issues. A major disadvantage to having HIV-positive networks was the "fragility" of those networks that occurred due to the prevalence of illness and death within them (Poindexter & Shippy, 2008).

Congruent with the findings of Shippy and Kapiak (2005b) and Poindexter and Shippy (2008), Emlet (2006a) found that for all age groups of adults living with HIV/AIDS, friends and relatives were perceived as significantly more important sources of support than neighbors, with friends viewed as even more important than family. He reported in that same study that age did not appear to have a significant impact on the size of social networks or the relative importance of support sources (i.e. friends, family, and neighbors) within an individual's social network (Emlet 2006a). Consistent with those results, Crystal et al. (2003) found that there was not a significant difference between age groups in the number of close friends in the social networks of those living with HIV/AIDS. And, similarly, Mavandadi et al. (2009) reported there were no significant differences across age groups in regard to the frequency of social interactions. Shippy

and Karpiak (2005a) also reported that the size of one's network did not have a significant effect on the perceived adequacy of emotional or instrumental support received by older adults.

**Adequacy of support and service utilization.** Although Schrimshaw and Siegel (2003) reported that perceived support was not significantly related to age, gender, race, income or education, many variations in perceptions of support, support needs, and utilization of support resources were described by other researchers in the literature. Shippy and Karpiak (2005b) studied 160 older adults living with HIV/AIDS and found that 79% reported having unmet instrumental support needs and 57% reported having unmet emotional support needs. Schrimshaw and Siegel (2003) reported similar findings in their study with 42% of older adults having inadequate levels of emotional support and 27% having inadequate levels of practical support.

Emlet (2006a) studied 44 HIV-positive people age 50 and older and 44 HIV-positive people ages 20 to 39 and found their Lubben Social Network Scale (LSNS) scores indicated that 32% were socially isolated. Older men with HIV/AIDS had significantly lower LSNS scores, which indicated that they were more isolated than younger males with the same condition. Older men also scored significantly lower on instrumental support measures than the younger men. Although the results were not significant, 38.6% of the older adults, both male and female, had LSNS scores that classified them as socially isolated. On a positive note, none of the LSNS subscale scores for the support of friends, family, or neighbors were found to be related to stigma (Emlet, 2006a).

However, Emlet (2006a) did find that that confidant (a person to confide in) scores were significantly and negatively related to stigma and instrumental support scores. Participants age 50 and older with a diagnosis of AIDS had significantly higher scores for the item where



participants were asked to identify a confidant that could provide emotional support.

Conversely, in Schrimshaw and Siegel's 2003 study of 63 older adults living with HIV/AIDS in New York City, it was found that 51% of participants with AIDS reported having insufficient emotional support. Also, those who had been diagnosed more than 5 years prior were significantly more likely to report not having adequate practical support (Schrimshaw & Seigel, 2003).

Differing from the previously mentioned findings that point to the social isolation and unmet support needs of older adults living with HIV/AIDS, were the results of Mavandadi, Zanjani, Ten Have, and Oslin's (2009) study in which they examined the psychological well-being and value of social relationships in the HIV/AIDS population. Mavandadi et al. (2009) found that despite the fact that adults age 55 and older living with HIV/AIDS reported having significantly more medical conditions, they were significantly less likely to have visited a behavioral health specialist and have depressive symptoms as compared to adults younger than age 55 living with HIV/AIDS. As well, older adult participants were significantly more likely to show greater vigor. Subjective support mediated the relationship between age and vigor as well as the relationship between age and depressive symptoms. Older adults were significantly more likely to have greater subjective support than their younger counterparts, and having greater subjective support was significantly associated with less depressive symptoms, greater vigor, and having lower odds of being seen by a behavioral health specialist. Subjective support did not mediate the relationship between age and behavioral health services utilization, and there were no significant differences across age groups in regard to instrumental support levels (Mavandadi et al., 2009).

In contrast to the findings of Mavandadi et al. (2009), Emlet and Farkas (2002) reported in their study of adults ages 30 to 81 living with HIV/AIDS that age was not associated with service utilization. However, Shippy and Karpiak (2005b) reported that 40% of older adults reported difficulties in accessing care. And, AIDS Service Organizations (ASO) were utilized by only 24% of the older adults in that study (Shippy & Karpiak, 2005b).

**Sexual orientation and social support.** Sexual orientation differences regarding support networks did emerge in the research. Emlet (2006a) found that although the social networks of adults age 50 and older were similar for heterosexual and homosexual groups, the non-significant trend was for older gay and bisexual participants to have lower social network scores as compared to younger gay and bisexual adults. Another trend from that study was for homosexuals to have scores that indicated greater support from friends for both the over 50 and under 50 age groups. Interestingly, Crystal et. al. (2003) found that older, gay men experience the most conflict within their social networks, but that there were no significant differences in perceived emotional support levels between younger and older gay men. They also reported that both heterosexual and homosexual older adults experience significantly more conflict in their social networks as compared to younger adults.

**Telephone support groups as a resource.** Nokes, Chew, and Altman (2003) examined the effectiveness of a telephone support group in providing social support and health knowledge to a sample of older adults living with HIV/AIDS. The method for evaluation of the telephone support group's effectiveness was not clearly defined in this particular article; however, it was asserted by facilitators that using teleconference technology to connect the group was not effective (Nokes, Chew, & Altman, 2003). Though it was noted that members expressed concern over the welfare of other members in the group and that they were disappointed when

the study ended, it was determined that developing a “cohesive community” was difficult to do because of the limitations of teleconference technology (Nokes et al., 2003). The limitations were described as the inability to detect non-verbal cues (other than silence), the necessity to have a heightened level of sensitivity, and difficulty in maintaining “boundaries of respect” (Nokes et al., 2003).

### **Barriers to Support**

Schrimshaw and Siegel (2003) studied the perceived barriers to social support of 63 older adults age 50 and over living with HIV/AIDS. There were many barriers discussed by the older adults. One barrier mentioned was non-disclosure. Participants could not receive support if they were unwilling to disclose their HIV-status due to the fear of a negative reaction or the loss of privacy. Older adults did not want the support of those who were prejudiced against them. Homosexual participants in particular expressed the sentiment that it was difficult to receive the support they needed due to the ignorance of others. Other participants felt that they simply did not want to rely on the support of others; these participants wanted to take responsibility for themselves and remain independent. Similarly, it was expressed by some participants that they hesitated to ask for support because they neither wanted to be a burden to others, nor did they want their support sources to feel as though they were being exploited. Other significant barriers mentioned were: the loss of available support sources due to the death of friends and partners who also had HIV/AIDS; the death of parents and siblings; the loss of functioning in older family members who may have otherwise provided support; and living geographically distant from family. Lastly, ageism was discussed as a barrier to receiving support; the older adults recognized the emphasis that society places on youth and health. The older adults felt as though

they were being judged, marginalized, and made to feel lesser because of their age and illness (Schrimshaw & Siegel, 2003).

### **Stigma and Disclosure**

**Stigma experiences.** There are many conflicting findings in the research related to the experiences of stigma within the population of older adults living with HIV/AIDS. According to Emlet (2006b), 50% of the older adults in his study (that included persons of various racial backgrounds) felt ashamed “sometimes” or “often.” Consistent with those findings, Emlet (2007) found that out of the 25 older adults he studied 56% reported experiencing rejection, 40% experienced others displaying fear of contracting HIV, 40% discussed issues of being alone, and 32% reported feeling different from the rest of society. Statements pertaining to public opinion about sexuality, aging, and HIV/AIDS were also mentioned by 40% of the participants (Emlet, 2007). Two of the 25 participants specifically mentioned experiencing feelings of low self-esteem and self-worth. Emlet (2007) also reported that 12% of participants expressed having experienced stigma related directly to their sexual orientation. However, Foster and Gaskins (2009) found in their study of entirely African American older adults that most participants’ Self-Perceptions of HIV Stigma Scale scores indicated that they never or only rarely experienced stigma. The internalized stigma subscale was the only subscale on the Stigma Impact of HIV Scale on which 60% of participants scores indicated experiences of stigma (Foster & Gaskins, 2009).

In contrast to the findings of Foster and Gaskins (2009), Emlet (2006b) found that higher stigma scores in both younger and older adults living with HIV/AIDS were significantly and positively related to being African American. Emlet (2007) had similar findings, reporting that all participants who expressed experiencing “limited” amounts of stigma were white (most

happened to have been diagnosed with AIDS as well). It was also determined by Emlet (2006b) that higher stigma scores were significantly and negatively associated with social support in the form of having a confidant. Despite some of the discrepancies in the research, a few important and relevant findings related to stigma emerged from Emlet's (2006b) study: there were no significant differences in stigma scores between younger and older age groups; age was not found to be significantly related to stigma or disclosure; and a significant and positive relationship between depression scores (CES-D) and stigma scores was identified.

**Disclosure patterns.** Emlet (2008) determined that disclosure occurred through three modes—violations of confidentiality, intentional disclosure, and unintentional disclosure. Emlet (2007, 2008) found that 60% of the older adults in his study utilized “protective silence” or the non-disclosure of their HIV status as a mechanism to protect themselves against rejection or negative reactions. Several issues with disclosure were revealed through the research. Emlet (2007) reported that 32% of participants were fearful of sharing their HIV status, 16% feared that their status might be unintentionally disclosed to others (e.g. others noticing their medications or their chronic illnesses), and 24% expressed that they had already experienced violations of confidentiality. In another study by Foster and Gaskins (2009), most participants reported that they had disclosed their status to family members, especially mothers and sisters. Participants rarely mentioned disclosing their status to friends, and none of the participants reported disclosure to church members. Although many said they were no longer sexually active, it was acknowledged by participants that sexual partners had a need to be informed of their status (Foster & Gaskins, 2009). There was a recurrent theme of difficulty in trusting others as a barrier to disclosure.

Foster and Gaskins (2009) also determined that participants' disclosure of their status had an impact on the sources of social support available to them; if others are not aware of their HIV status, they cannot be called upon to support the individuals with their illness-related issues. In Emler's (2006b) study disclosure had a significant positive relationship with time since HIV diagnosis, use of services, and having someone to confide in. He also found that disclosure had a significant negative relationship with being African American and being exposed to HIV through heterosexual encounters (Emler, 2006b).

### **Depressive and Psychological Issues**

**Depression rates.** This review of the literature revealed the prevalence of depression in older adults living with HIV/AIDS. Emler (2007) reported that 36% of the participants over the age of 50 had Center for Epidemiological Studies Depression Scale (CES-D) scores that exceeded the cut-off for depression. He also determined that there was a significant and positive relationship between CES-D scores and stigma scores. Consistent with those findings, Shippy and Karpiak (2005a, 2005b) reported that 58% of all participants age 50 and over had been diagnosed with depression. Rates and predictors of depression in this population were confirmed by Heckman's research team (Heckman, Heckman, et al., 2002; Heckman, Kockman, et al., 2002). In this study the Beck Depression Inventory was utilized to measure the rates of clinical depression. Thirty-three percent of the older adults with HIV/AIDS had mild depression, 21 % had moderate depression, and 4% had severe depression (Heckman, Heckman, et al., 2002; Heckman, Kockman, et al., 2002). It was explained by authors that the Chronic Illness and Quality of Life (CIQOL) variables (AIDS stigma, barriers to healthcare, and social services, physical well-being, social support, and engagement coping) accounted for half the variance in depressive symptoms among the older adults studied (Heckman, Kockman, et al., 2002).

**Psychological symptoms.** Despite the levels of depression within this population Heckman, Heckman, et al. (2002) found that older adults did not report increased levels of psychological symptoms; only 22% of participants reported elevated cognitive-affective symptoms. However, increased numbers of psychological symptoms were significantly associated with white race, unemployment, more limitations in Activities of Daily Living (ADL's) because of HIV/AIDS symptomatology, less support from friends and family, more life stressor burden, and more barriers to care. The barriers to care that were identified as having an impact on psychological symptoms were medical and mental inadequacies, stigma, and lack of personal resources (Heckman, Heckman, et al., 2002).

**Suicidal ideation.** The prevalence of suicidal thoughts was the focus of Kalichman, Heckman, Kochman, Sikkema, and Bergholte's (2000) research study. They found that 26% of the late middle-aged and older adult participants reported thoughts of taking their own life within the last week. Suicidal ideations were most common among white, gay men. Those participants who had thoughts of suicide were more likely to be symptomatic of HIV/AIDS and report having significantly higher levels of depression when compared to those who did not have suicidal thoughts. Participants who had suicidal ideations were significantly more likely to report experiencing anxiety, somatization, hostility, interpersonal sensitivity, and depression. Additionally, it was found that participants who reported suicidal ideations were significantly more likely to report poorer physical, emotional, and functional well-being. Those participants with suicidal thoughts also reported having significantly less social support from family and friends despite the fact that they were found to be significantly more likely to disclose their HIV status to close friends. Participants who did not express having thoughts of suicide reported significantly greater use of the positive-reappraisal coping strategy, while those who did have

suicidal thoughts reported significantly greater employment of avoidance and escape coping strategies. Kalichman et al. (2000) noted that differences between those who were suicidal and those who were not suicidal for somatization, coping strategies, and physical functioning can be accounted for by depression.

### **Health and Functioning**

**Health and age.** Mavandadi, Zanjani, Ten Have, and Oslin (2009) found that older adults living with HIV/AIDS reported having significantly more medical conditions than younger adults living with HIV/AIDS. Emlet and Farkas (2002) determined in their study of adults living with HIV/AIDS ages 30 to 81 that there was a significant increase in mortality rate with age. Twice as many older adults living with HIV/AIDS over the age of 60 died as compared to those ages 30-49. It was also determined by Emlet and Farkas (2002) that older adults had a significantly shorter time between diagnosis and death, however, age was not found have a significant effect on whether or not an individual had received an AIDS diagnosis. Despite the evidence that has been presented on the prevalence of illness and mortality within the population, Crystal et al. (2003) reported that there were no significant age differences in self-reported quality of life scores. However, Shippy and Karpiak (2005a) found that older adults with more comorbid diseases and physical strain were significantly more likely to report having adequate instrumental and emotional support.

**Functional status.** Emlet and Farkas (2002) found that age did not have a significant effect on functional status as determined by the Karnofsky Performance Scale (KPS). Crystal et al. (2003) found that older gay men reported significantly greater overall health ratings and scored similarly to younger gay men on physical functioning and role functioning measures. Their research also revealed that older injection drug users were the most “disadvantaged” group



in regards to physical functioning and role functioning as compared to those exposed via other routes. Older injection drug users scored significantly lower on physical and role functioning scores than their younger counterparts (Crystal et al., 2003).

### **Support and Adherence to Anti-retroviral Therapy**

Although adherence is a prevalent topic in HIV/AIDS research, this review's search only yielded one study that related adherence to older adults and social support. Johnson, Heckman, Hansen, Kockman, and Sikkema (2009) studied 244 adults age 50 and older living with HIV/AIDS. Findings revealed that 80% of participants were compliant with their medication regimen and that 83% were compliant with instructions. There were several relationships reported that were all found to be mediated entirely by negative affect. Those relationships were as follows: there was an indirect and significant relationship between adherence with both social support and maladaptive coping; there was an independent and significant relationship between negative affect and adherence; and there were statistically significant bivariate relationships between adherence and social support and maladaptive coping. In addition to that, 100% of the effect of both social support and maladaptive coping on adherence was found to be indirectly mediated by negative affect. However, there was not a statistically significant independent relationship between social support and maladaptive coping. Not surprisingly, it was found that participants who were adherent to their antiretroviral therapy were significantly more likely to have a decreased viral load. One hundred percent of the total effects of social support, maladaptive coping, and negative affect on viral load were indirectly mediated by adherence. This study was unique due to its incorporation of neuropsychological testing for executive functioning, verbal fluency, and global functioning. However, Johnson et al (2009) did not find that there was a significant association between neuropsychological data and adherence.

## Discussion

This systematic review of the literature on the social support of older adults living with HIV/AIDS in the United States highlights many of the key issues experienced by this population. Although the individual studies in the review at times had findings that were inconsistent and contradictory, there are several important conclusions that can be made from this body of research. Most importantly, social isolation and depression are prevalent in older adults living with HIV/AIDS. Also, one study reported that a little over one quarter of the older adult participants had suicidal ideations, a finding that should be of concern to the healthcare community (Kalichman et al., 2000). The presence of such psychosocial issues within this population indicate that combined experiences of living with a debilitating disease, facing rejection and stigma, and going through the normal aging process taken together can be very stressful.

It also emerged from the research that HIV-positive older adults have unmet emotional support needs. Further research will be needed in order to understand how healthcare professionals can best intervene to help meet the emotional support needs of this vulnerable group. If their emotional support needs are met, then their overall mental health and quality of life can be improved. Fortunately, some important discoveries about the typical characteristics of the social networks and social support of older adults living with HIV/AIDS may serve as a basis for the development of future studies. Older adults living with HIV/AIDS tend to form social networks that are comprised largely of other HIV-positive people, which is likely related to the stigmatization often experienced by this population due to society's negative perceptions of HIV. Within their social networks, friends were consistently identified as the most important source of support for HIV-positive older adults. Unfortunately, many barriers to receiving support were

revealed in the literature. One barrier that stood out as particularly problematic was the protective non-disclosure of one's HIV status. Fearing the reactions of others, many older adults expressed that they did not commonly tell others that they were living with HIV/AIDS and, therefore, could not ask for support of any kind related to their illness. More research will be needed to better understand the barriers to support faced by older adults living with HIV/AIDS and how they can be overcome.

Lastly, research findings have made it apparent that many differences between genders, races, and sexual orientations exist in terms of social support and psychosocial well-being in older adults living with HIV/AIDS. Many of these differences were inconsistent in the research, especially in regards to the African American population of HIV-positive older adults. For example it was reported that non-white participants used more adaptive coping strategies and that African Americans had more positive reactions to stress, but it was also reported by different researchers that African Americans were more socially isolated, experienced more stigma, and were more depressed (Emlet, 2006a; Heckman et al., 2000; Heckman et al., 2002). Adding to the confusion, other researchers reported that white men had higher levels of depression when compared to African American men and that most African Americans reported rarely or never experiencing stigma (Foster & Gaskins, 2009; Heckman et al, 2000). However, there were a few demographic differences that were consistently supported by the research. African Americans living with HIV/AIDS reported receiving more support from family than whites (Foster & Gaskins, 2009; Heckman et al., 2009). Women had larger social networks as well as greater emotional and social support levels (Emlet, 2006a; Shippy & Karpiak, 2005a). Older, homosexual adults living with HIV/AIDS were found to experience more difficulty with their social networks than older, heterosexual adults (Crystal et al., 2003; Emlet, 2006a). While the

determination that such demographic differences do actually exist was significant, researchers will need to explore this area further to better understand the complexities of this population and clear up the contradictions of the current research.

## **Limitations**

**Limitations of the research.** In addition to the inconsistencies in the literature, there was also a high degree of overlap in the research presented in this review. Several of the articles retrieved were written on the same studies; those articles are clearly marked in the matrix (see Table 1). Much of the research was conducted by the same authors and many of the researchers reported on very similar concepts, even across different studies. As a result, the findings of this literature review are potentially biased.

**Limitations of the literature review.** This review aimed to describe the social support of the population of older adults living with HIV/AIDS age 65 and over. However, it was discovered during the search for literature that there was almost no research on the topic of social support that focused entirely on adults age 65 and older. The majority of HIV/AIDS research defined older adults as age 50 and older. As a result, the studies included in this review are focused on participants age 50 and older living with HIV/AIDS or include younger persons solely as a comparison group. As stated in previous sections two studies had samples that included participants in their late forties and were included in the review due to particular relevance of the research. It is important to note that while the lower limit on age was adjusted, many of the studies included the review did have participants age 65 and over in their samples.

## **Implications**

**Implications for practice.** The message that can be taken away from the research presented in this review is that older adults are not immune to HIV or social issues. Healthcare

providers need to first understand that HIV is no longer a concern only of the young. An increase in the number of sexually active older adults and development of therapies that are extending the normal lifespan of person with HIV are contributing to the growing size of this population. Therefore, safer sex education, including the topic of HIV/AIDS, should be discussed with clients of all ages. Although it may be perceived by healthcare professionals as an uncomfortable topic of conversation, they need to talk with older adults about their sexual practices; it is never safe to assume based upon a client's age that they are no longer sexually active.

One approach to the discussion of sexuality with older adults is the PLISSIT model (Wallace, 2008). This model involves four steps. The first and most important step for healthcare providers guiding the discussion is to ask the older adult client for permission (P) to talk with them about his or her sexual health. It is also suggested by Wallace (2008) that in asking the client for permission to ask questions related to sexuality it may be helpful for the healthcare provider acknowledge the fact that it is natural for sexual needs and concerns to continue in the older adult years. The next step described in the model is to provide limited information (LI) about the physical and psychological changes that occur as one ages and that may affect sexual health. The third step is about making specific suggestions (SS) to help the client meet his or her sexual health needs, achieve sexual fulfillment, or to address any sexual health concerns. The last component of the model is to determine if intensive therapy (IT), such as psychotherapy, may be needed in relation to the client's past or current sexual health issues. No matter what approach to assessing sexual health is being used, the more at ease the person performing the assessment is the more comfortable and cooperative the older adult client will be in discussing his or her sexual health concerns (Wallace, 2008).

As for the care of those older clients who actually have contracted HIV/AIDS, the focus should not just be on medical treatment options. It has been established that social isolation, depression, stigma, and suicidal ideation are all major concerns for the population of older adults living with HIV/AIDS and it is imperative that their psychosocial health be assessed. Providers need to ask important questions about their support systems and overall mental health. The research tells us that older, gay men experience the most conflict in their social networks and that white, gay men have the highest rate of suicidal ideation. Also, injection drug users are the most disadvantaged group in regard to functional levels. Particular attention should be paid to persons within the aforementioned categories.

**Implications for research.** Of the 18 articles included in the literature review, there was only one intervention study. That study found that a support group conducted via teleconference technology was not particularly effective in providing support to older adults. Therefore, more interventions studies are need to determine what types of interventions are effective in providing social support and meeting the support needs of older adults with HIV/AIDS. Other suggested areas of focus for research include understanding the barriers to support for this population and how to overcome those barriers to support. This review has highlighted the impact that demographic characteristics have on the social support of older adults living with HIV/AIDS as well as the contradictions that exist in the current research in relation to those demographic differences. Keeping in mind the goal of understanding the social support of older adults living with HIV/AIDS, it may be beneficial in future research to conduct age comparison studies where subjects are matched based upon demographic traits such as race, gender, and sexual orientation. This will allow for greater control and provide a more accurate portrayal of specifically age-related differences.

## **Conclusions**

This review summarizes the existing research on the social support of older adults living with HIV/AIDS. The population of older adults living with HIV/AIDS is growing. HIV/AIDS is a costly and deadly disease, but perhaps more importantly for older adults is a mentally, emotionally, and socially debilitating condition. The experience of aging with HIV/AIDS can be socially isolating, depressing, and can negatively impact one's psychosocial well-being. Using the knowledge developed in this review, healthcare providers can take steps to: (1) prevent the transmission of HIV amongst older adults, (2) detect HIV/AIDS earlier with the older adult population, and (3) prevent psychosocial complications for those older adults who are living with HIV/AIDS. Now that the problem has been established, it is clear that further research will be needed to better define the barriers to social support in this population and to develop effective interventions for providing social support to older adults living with HIV/AIDS.

## References

References marked with an asterisk indicate studies that were included in the systematic literature review. The in-text citations for studies included in the review are not preceded by asterisks.

Centers for Disease Control and Prevention. (2008, February). *HIV/AIDS among persons aged 50 and older: CDC HIV/AIDS facts*. Retrieved November 16, 2009, from <http://www.cdc.gov/hiv/topics/over50/index.htm>

Centers for Disease Control and Prevention. (2009). *HIV/AIDS Surveillance Report, 2007*. Vol. 19. Retrieved April 5, 2010, from <http://www.cdc.gov/hiv/topics/surveillance/resources/reports/2007report/pdf/2007SurveillanceReport.pdf>

\*Crystal, S., Akincigil, A., Sambamoorthi, U., Wenger, N., Fleishman, J. A., Zingmond, D. S., ... Shapiro, M. F. (2003). The diverse older HIV-positive population: A national profile of economic circumstances, social support, and quality of life. *Journal of Acquired Immune Deficiency Syndrome*, 33(2), S76-S83. Retrieved September 27, 2010, from PubMed (12853856).

\*Emlet, C. A. (2006a). An examination of the social networks and social isolation in older and younger adults living with HIV/AIDS. *Health & Social Work*, 31(4), 299-308. Retrieved September 27, 2010, from PubMed (17176977).

\*Emlet, C. A. (2006b). A comparison of HIV stigma and disclosure patterns between older and younger adults living with HIV/AIDS. *AIDS Patient Care and STDs*, 20(5), 350-358. Retrieved September 27, 2010, from PubMed (16706709).



- \*Emlet, C. A. (2007). Experiences of stigma in older adults living with HIV/AIDS: A mixed-methods analysis. *AIDS Patient Care and STDs*, 21(10), 740-752. Retrieved September 27, 2010, from PubMed (17949237).
- \*Emlet, C. A. (2008). Truth and consequences: A qualitative exploration of HIV disclosure in older adults. *AIDS Care*, 20(6), 710-717. Retrieved September 27, 2010, from PubMed (1876173).
- \*Emlet, C. A., & Farkas, K. J. (2002). Correlates of service utilization among midlife and older adults with HIV/AIDS; The role of age in the equation. *Journal of Aging and Health*, 14(3), 315-335. Retrieved September 27, 2010, from PubMed (12146509).
- \*Foster, P. P., & Gaskins, S. W. (2009). Older African Americans' management of HIV/AIDS stigma. *AIDS Care*, 21(10), 1306-1312. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=cin20&AN=2010443093&site=ehost-live>
- \*Heckman, T. G., Heckman, B. D., Kochman, A., Sikkema, K. J., Suhr, J., & Goodkin, K. (2002). Psychological symptoms among persons 50 years of age and older living with HIV disease. *Aging & Mental Health*, 6(2), 121-128. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=cin20&AN=2002115538&site=ehost-live>
- \*Heckman, T. G., Kochman, A., & Sikkema, K. J. (2002). Depressive symptoms in older adults living with HIV disease: Application of the chronic illness quality of life model. *Journal of Mental Health & Aging*, 8(4), 267-279. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=cin20&AN=2004043790&site=ehost-live>

- \*Heckman, T. G., Kochman, A., Sikkema, K. J., Kalichman, S. C., Masten, J., & Goodkin, K. (2000). Late middle-aged and older men living with HIV/AIDS; Race differences in coping, social support, and psychological distress. *Journal of the National Medical Association, 92*(9), 436-444. Retrieved September 27, 2010, from PubMed (11052457).
- \*Johnson, C. J., Heckman, T. G., Hansen, N. B., Kochman, A., & Sikkema, K. J. (2009). Adherence to antiretroviral medication in older adults living with HIV/AIDS: A comparison of alternative models. *AIDS Care, 21*(5), 541-551. Retrieved September 27, 2010, from PubMed (199444661).
- \*Kalichman, S. C., Heckman, T., Kochman, A., Sikkema, K., & Bergholte, J. (2000). Depression and thoughts of suicide among middle-aged and older persons living with HIV-AIDS. *Psychiatric Services, 51*(7), 903-907. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=cin20&AN=2000058137&site=ehost-live>
- \*Mavandadi, S., Zanjani, F., Ten Have, T. R., & Oslin, D. W. (2009). Psychological well-being among individuals aging with HIV: The value of social relationships. *Journal of Acquired Immune Deficiency Syndrome, 51*(1), 91-98. Retrieved September 27, 2010, from PubMed (19282781).
- \*Nokes, K. M., Chew, L., & Altman, C. (2003). Using a telephone support group for HIV-positive persons aged 50+ to increase social support and health-related knowledge. *AIDS Patient Care & STDs, 17*(7), 345-351. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=cin20&AN=2004054172&site=ehost-live>

- \*Poindexter, C., & Shippy, R. A. (2008). Networks of older new yorkers with HIV: Fragility, resilience, and transformation. *AIDS Patient Care & STDs*, 22(9), 723-733. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=cin20&AN=2010049446&site=ehost-live>
- \*Schrimshaw, E. W., & Siegel, K. (2003). Perceived barriers to social support from family and friends among older adults with HIV/AIDS. *Journal of Health Psychology*, 8(6), 738-752. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=cin20&AN=2009060936&site=ehost-live>
- \*Shippy, R. A., & Karpiak, S. E. (2005a). Perceptions of support among older adults with HIV. *Research on Aging*, 27(3), 290-306. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=cin20&AN=2009025534&site=ehost-live>
- \*Shippy, R. A., & Karpiak, S. E. (2005b). The aging HIV/AIDS population: Fragile social networks. *Aging & Mental Health*, 9(3), 246-254. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=cin20&AN=2009025237&site=ehost-live>
- Sinha, A., Rajan, M., Hoerger, T., & Pogach, L. (2010). Costs and consequences associated with newer medications for glycemic control in type 2 diabetes. *Diabetes Care*, 33(4), 695-700. Retrieved from November 16, 2009 CINAHL.

- Soni, A., & Gupta, R. (2009). Bridging the resource gap: improving value for money in HIV/AIDS treatment. *Health Affairs*, 28(6), 1617-1628. Retrieved November 16, 2009 from CINAHL.
- Vance, D.E. (2010). Aging with HIV: Clinical considerations for an emerging population. *American Journal of Nursing*, 110(3), 42-47.
- Vance, D. E., Childs, G., Moneyham, L., & McKie-Bell, P. (2009). Successful aging with HIV: A brief overview for nursing. *Journal of Gerontological Nursing*, 35(9), 19-25.
- Wallace, M. A. (2008). Assessment of sexual health in older adults. *American Journal of Nursing*, 108(7), 52-60.

## Appendix

Figure 1. Selection of Articles for Inclusion in the Review

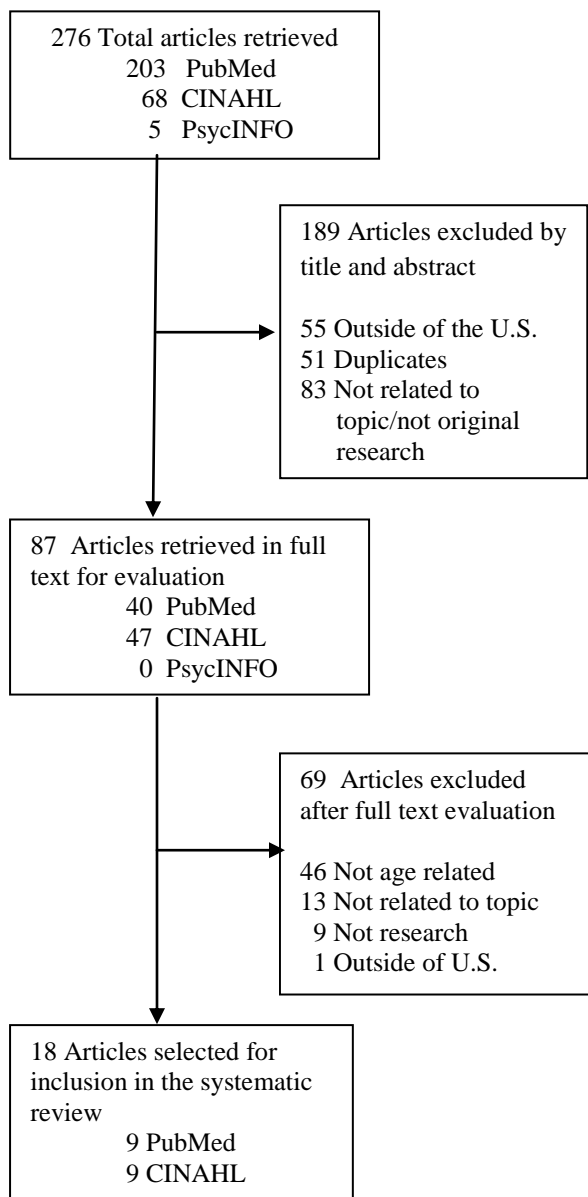


Table 1. Characteristics of articles included in the review of the literature on psychosocial issues in the aging HIV/AIDS population

TITLE, AUTHORS, JOURNAL	PURPOSE, QUESTIONS, HYPOTHESIS	SAMPLE, SETTING	DESIGN	MEASUREMENTS, INTERVENTIONS	KEY FINDINGS	STRENGTHS, LIMITATIONS
<p>***Depression and thoughts of suicide among middle-aged and older persons living with HIV- AIDS</p> <p>S.C. Kalichman, T. Heckman, A. Kochman, K. Sikkema, and J. Bergholte</p> <p><i>Psychiatric Services (2000)</i></p> <p>(this study includes participants from age 47 to 69, which is outside the inclusion criteria for this review)</p>	<p>To examine the prevalence and characteristics of suicidal ideation among middle-aged and older persons living with HIV or AIDS</p> <p>Hypotheses:            (1) persons who were thinking of suicide would be experiencing greater emotional distress and poorer health-related quality of life (2) those persons who thought about suicide in the last week would be more likely to use avoidance and denial-related coping strategies in dealing with their HIV infection (3) middle-aged and older infected adults who had suicidal thoughts would be less likely to disclose their status to others, increasing their social isolation, and would perceive</p>	<p>113 men and women age 47 to 69 who were living with HIV/AIDS in Milwaukee, Wisconsin, and NYC</p> <p>Collaborated with ASO</p> <p>Compensated \$20</p>	<p>Descriptive correlational</p>	<p>Self-administered questionnaire</p> <p>Measures:            Demographic and health status</p> <p>Suicidal Ideation- measured by Beck Depression Inventory, divided into two groups (1) those who had no thoughts of suicide and (2) those who had had thoughts of suicide</p> <p>Emotional Distress- measured by The Symptom Checklist-90</p> <p>Health-related Quality of Life- measured by the Functional Assessment of HIV Infection</p> <p>Ways of Coping Questionnaire (WOC) used to measure coping strategies</p> <p>Provision of Social Relations Scale assesses perceive support of family and friends</p> <p>Disclosure of HIV infection to family, partners, and friends</p>	<p>26% had thoughts of taking their own life in the previous week, immediate risk of suicide was low for this group</p> <p>Male, white, and gay participants more likely to have suicidal thoughts</p> <p>Suicidal ideation most common among white gay males</p> <p>Those who were currently symptomatic were more likely than those who were asymptomatic to have considered suicide in the past week</p> <p>Those who had thoughts of suicide had significantly higher levels of depression</p> <p>Those with suicidal thoughts were significantly more likely to report anxiety, somatization, hostility, interpersonal sensitivity and depression</p> <p>Participants who contemplated suicide significantly more likely to report poorer physical and emotional well-being and diminished functional well-being compared to those who did not have suicidal ideations</p> <p>Those who did not have suicidal thoughts had significantly greater use of positive-reappraisal coping strategy than those who did; those who has suicidal were significantly more likely to employ avoidance and escape strategies than those who did not</p> <p>Those who had suicidal thoughts were significantly more likely to disclose status to close friends, but also reported having less social support from family and friends</p> <p>*results show that differences between two groups are independent of other symptoms of depression, however somatization, coping strategies, and physical functional can be accounted for by depression</p>	<p><i>Strengths:</i>            Reliable measurement tools were utilized</p> <p><i>Limitations:</i>            Self-selected small sample, only two cities, all participants receiving services from ASOs, role of bidirection-ality should be considered, spirituality and religion not assessed</p> <p>Definition of “older adult” open to interpretation</p> <p>All states of emotional and physical health were self-reported</p> <p>Single questionnaire item was used to determine suicidal ideation</p>

TITLE, AUTHORS, JOURNAL	PURPOSE, QUESTIONS, HYPOTHESIS	SAMPLE, SETTING	DESIGN	MEASUREMENTS, INTERVENTIONS	KEY FINDINGS	STRENGTHS, LIMITATIONS
<p>***Late middle-aged and older men living with HIV/AIDS: Race differences in coping , social support, and psychological distress</p> <p>T.G. Heckman, A. Kockman, K. J. Sikkema, S.C. Kalichman, J. Masten, and K. Goodkin</p> <p><i>Journal of the National Medical Association (2000)</i></p> <p>(this study includes participants from age 47 to 69, which is outside the inclusion criteria for this review)</p>	<p>To examine race differences in stressor burden, ways of coping, social support, and psychological distress among late middle-aged and older men living with HIV/AIDS</p>	<p>72 men between the ages of 48 and 66 living with HIV/AIDS in New York City and Milwaukee</p> <p>Conducted in 1997, in collaboration with AIDS Service Organizations in each city</p> <p>Potential participants contacted by ASO case managers</p> <p>Compensated \$20</p> <p>Hypothesis: (1) older African American men engage in more maladaptive coping strategies and have elevated levels of psychological distress</p>	<p>Comparative descriptive</p>	<p>Self-administered surveys</p> <p>Severity of HIV-related Life Problems Scale, 19 items, assesses severity of stressors, Likert scale, six domains or sub-scales (1) AIDS related discrimination (2)AIDS related bereavement (3) lack of finances/mobility (4) lack of information and support (5) relationship difficulties (6) domestic problems , very good internal consistency</p> <p>HIV Serostatus Disclosure assessed whether immediate family and close friends had been informed</p> <p>Severity of HIV Symptomatology extent and affect of HIV symptoms on level of functioning, Likert scale</p> <p>Provision of Social Relations (PSR) assessed perceived level of social support</p> <p>Ways of Coping Questionnaire (WOC) assessed thoughts and behaviors used to cope with stressor identified in previous scale, types of coping include distancing, confrontive, self-controlling, social support, future optimism, avoidance, planful problem solving, positive reappraisal</p> <p>Symptom Checklist 90-R measures psychological distress symptoms, internally consistent, presence or absence of anxiety, hostility, interpersonal sensitivity, phobic anxiety, and somatization</p> <p>Beck Depression Inventory (BDI) measures clinical depression and depressive symptomatology, higher scores indicate major depressive disorder</p> <p>Demographic data were collected</p>	<p>Older AA men were significantly more likely to identify themselves as heterosexual while white men were significantly more likely to be gay or bisexual</p> <p>No significant difference between White and AA men in HIV symptomatology</p> <p>No significant race-related differences in life stressors</p> <p>AA men were significantly more likely to find positives in stressful situation and report greater future optimism than white men</p> <p>Older white men reported significantly elevated levels of depression, anxiety, interpersonal sensitivity, and somatization; when sexual orientation was accounted for, white men still had significantly higher rates of depression, anxiety, and somatization</p> <p>AA and white men reported similar levels of support from friends; AAs reported having significantly more support from family</p> <p>HIV serostatus disclosure was related to race ; white and AA men disclose to family members at comparable rates, AA men significantly less likely to disclose to friends than white</p>	<p><i>Strengths:</i> Reliable measures utilized</p> <p><i>Limitations:</i> Self-selected sample, only two cities, all participants receiving services from ASOs, role of bidirection-ality should be considered, spirituality and religion not assessed</p> <p>Sexual orientation was the only covariate employed</p>

TITLE, AUTHORS, JOURNAL	PURPOSE, QUESTIONS, HYPOTHESIS	SAMPLE, SETTING	DESIGN	MEASUREMENTS, INTERVENTIONS	KEY FINDINGS	STRENGTHS, LIMITATIONS
<p>Correlates of service utilization among midlife and older adults with HIV/AIDS</p> <p>C. A. Emler and K. J. Farkas</p> <p><i>Journal of Aging and Health</i> (2002)</p>	<p>Determine the role of age on service utilization among persons with HIV/AIDS</p> <p>Hypothesis: (1) older persons would utilize higher rates of health and medical services and lower rates of psychosocial services</p>	<p>571 people with symptomatic HIV or AIDS ages 30 to 81, all were enrolled in an AIDS Case Management Program in California</p> <p>Age 60 and older: 63</p> <p>Age 50 and older: 190</p> <p>Ages 30-49: 318</p> <p>Data were provided by the California Department of Health Office of AIDS</p>	<p>Secondary analysis, cross-sectional analysis</p> <p>Descriptive correlational</p> <p>Comparison study</p>	<p>Three age groups (1) age 60 and over (2) age 50 and over (3) ages 30-49</p> <p>All independent variables were categorized as predisposing, enabling, or need</p> <p>Predisposing characteristics: Age, ethnicity, gender, living arrangements, HIV risk category, HIV exposure,</p> <p>Enabling characteristics: Poverty level, having private insurance, being a Medicaid recipient, living in a metropolitan area</p> <p>Need characteristics: Karnofsky Performance Scale (KPS) (functional status), whether or not AIDS was diagnosed, mortality</p> <p>Dependant variables were medical care received, psychosocial support used, and in-home services</p>	<p>Significantly higher proportions of older adults lived alone when compared with younger groups</p> <p>Statistically significant higher proportion of women in older age groups than in younger age groups</p> <p>50-59 years had smallest percentage of individuals below poverty line</p> <p>60 and older were less likely to be Medicaid recipients, not significant</p> <p>Over 60 significantly more likely to have private insurance</p> <p>Age did not have an effect on whether or not participants had been diagnosed with AIDS or not</p> <p>Age had no significant effect on service utilization</p> <p>Significant increase in mortality rate with age, twice as many participants over 60 died as compared to those age 30-49</p> <p>Significantly shorter time between diagnosis and death in the older age group</p> <p>Age did not significantly affect functional status (KPS)</p> <p>Differences in KPS scores for the age groups were not statistically significant</p>	<p><i>Strengths:</i> Internally valid, threats such as maturation and history were eliminated due to secondary analysis</p> <p><i>Limitations:</i> All cases were from the state of California</p> <p>All individuals were enrolled in a case management program, eliminated inequities in access to service</p> <p>All individuals had symptomatic HIV/AIDS</p> <p>Limited data, secondary analysis, could not know the knowledge of services by the users</p>



TITLE, AUTHORS, JOURNAL	PURPOSE, QUESTIONS, HYPOTHESIS	SAMPLE, SETTING	DESIGN	MEASUREMENTS, INTERVENTIONS	KEY FINDINGS	STRENGTHS, LIMITATIONS
<p>***Depressive symptoms in older adults living with HIV Disease: Application of the chronic illness quality of life model</p> <p>T.G. Heckman, A. K. Kochman, and K.J. Sikkema</p> <p><i>Journal of Mental Health and Aging (2002)</i></p>	<p>To delineate rates and predictors of depressive symptomatology in older adults living with HIV</p> <p>Hypothesis: (1) older adults would report more depressive symptoms, higher stigma, more barriers to healthcare and social services, poorer physical health, less social support, and less use of engagement coping (active coping)</p>	<p>83 HIV infected persons over age 50 living in NYC and Milwaukee</p> <p>Collaborated with ASO</p> <p>Compensated \$20</p>	<p>Descriptive correlational</p> <p>Comparison study</p>	<p>Self-administered assessments</p> <p>Measures of Chronic Illness Quality of Life (CIQOL): Beck Depression Inventory (BDI) measures clinical depression and depressive symptomatology, higher scores indicate major depressive disorder</p> <p>Predictor Variables: AIDS-Related Stigma Scale- measures perceptions of stigma, higher scores indicate higher perceptions</p> <p>The Barriers to Care Scale- Rates problem severity of geographic, economic, and structural barriers preventing access to care and social services, higher scores indicate more barriers</p> <p>The Physical Well-Being Subscale of the Functional Assessment of HIV Infection Quality of Life Scale, higher scores indicate improved physical well-being</p> <p>Provision of Social Relations (PSR) assessed perceived level of social support (family and friends), higher scores equate more support</p> <p>Engagement Coping- Ways of Coping Questionnaire (WOC) assessed thoughts and behaviors used to cope with stressor identified in previous scale, types of coping include distancing, confrontive, self-controlling, social support, future optimism, avoidance, planful problem solving, positive reappraisal, higher scores indicate greater engagement coping</p> <p>Demographic characteristics</p>	<p>42% had minimal or no depression 33% had mild depression 21% had moderate depression 4% had severe depression (approx. 25% reported elevated levels)</p> <p>22% reported an elevated number of cognitive-affective symptoms associated with depression</p> <p>Compared to whites, Non-whites used engagement coping significantly more</p> <p>Chronic Illness Quality of Life (CIQOL) variables (AIDS stigma, barriers to healthcare and social services, physical well-being, social support, and engagement coping) explained half the variance in depressive symptoms, depressive symptoms most strongly predicted by physical well-being and social support</p>	<p><i>Strengths:</i> Reliable measures utilized</p> <p><i>Limitations:</i> Self-selected sample</p> <p>Only two cities, limiting the generalizability</p> <p>All participants receiving services from ASOs, could result in underestimated distress</p> <p>Study did not take into account the primary stressor with which the person was coping with when assessing their ways of coping</p>

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<p>***Psychological symptoms among persons 50 years of age and older living with HIV disease</p> <p>T.G. Heckman, B.D. Heckman, A. Kockman, K.J. Sikkema, J. Suhr, and K. Goodkin</p> <p><i>Aging and Mental Health (2002)</i></p>	<p>(1) To delineate patterns and predictors of psychological symptoms of late middle aged and older adults living with HIV/AIDS (2) to identify correlates of psychological symptomatology</p> <p>Hypothesis: (1) psychological symptomatology among older adults would fall along a broad continuum and that participants who endorsed a greater number of psychological symptoms would also report more characteristics indicative of lower quality of life, such as (1) more life stressor burden (2) less coping self-efficacy (3) more barriers to health care and social services (4) and less social support.</p>	<p>83 HIV-infected persons over age 50 living in NYC and Milwaukee</p> <p>Collaborated with AIDS Service Organization (ASO)</p> <p>Compensated \$20</p>	<p>Descriptive correlational</p>	<p>The Barriers to Care Scale</p> <p>HIV-Related Life Stressor Burden Scale</p> <p>Limitations Related to HIV Symptoms</p> <p>Provision of Social Relations (PSR) assessed perceived level of social support</p> <p>Symptom Checklist 90-R measures psychological distress symptoms, internally consistent, presence or absence of anxiety, hostility, interpersonal sensitivity, phobic anxiety, and somatization</p> <p>Beck Depression Inventory (BDI) measures clinical depression and depressive symptomatology, higher scores indicate major depressive disorder</p> <p>Demographic data were collected</p>	<p>83% were males</p> <p>42% had minimal or no depression 33% had mild depression 21% had moderate depression 4% had severe depression</p> <p>Most older adults did not report elevated levels of psychological symptoms, but variable results, majority well adjusted and 75% reported mild to no depression</p> <p>Psychological symptoms were significantly correlated with being white, being unemployed, experiencing more limitations in ADLs due to symptomatology, reporting less support from family and friends, having more HIV-related life stressor burden, and having more barriers to care related to (1) medical and mental health care inadequacies (2) stigma (3) insufficient personal resources</p> <p>Psychological symptoms were not associated with age, education, gender, annual income, sexual orientation, number of years living with HIV</p>	<p><i>Strengths:</i> Reliable measures were utilized</p> <p><i>Limitations:</i> Self-selected sample, only two cities, all participants receiving services from ASOs, role of bidirection-ality should be considered, spirituality and religion not assessed</p> <p>Sexual orientation was the only covariate employed</p> <p>Definition of “older adult” open to interpretation</p> <p>Included a disproportionate amount of men</p>

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<p>Perceived barriers to social support from family and friends among older adults with HIV/AIDS</p> <p>E.W. Schrimshaw and K. Siegel</p> <p><i>Journal of Health Psychology (2003)</i></p>	<p>To examine the perceived barriers of adults age 50 and older living with HIV to obtaining emotional and practical support from friends and family</p>	<p>63 adults age 50 and over living in New York City</p> <p>All participants must have been infected through sexual encounters or injection drug use, have been African American or white (non-Hispanic), born in the USA, and be cognitively intact (determined with a brief screening tool)</p> <p>Recruited from community-based health and social organizations, drug treatment centers, advocacy organizations, and support groups</p> <p>Compensated \$25 at each meeting, reimbursed for transportation costs</p>	<p>Mixed methods</p> <p>Comparative descriptive</p>	<p>Audio-taped semi-structured interviews, completed over two meetings</p> <p>Questions asked:            (1) “Do you receive as much emotional support as you need?” (this same question was also asked about practical support)            (2) participants were asked about the level of difficulty they had with asking others for emotional or practical support.</p> <p>Participants who reported not having as much support as they needed and having difficulty asking for support were given follow-up questions to understand why</p>	<p>42% reported not having enough emotional support</p> <p>27% reported not having enough practical support</p> <p>No statistical differences in perceived support by age (60+ vs. younger), gender, race, income, or education, it was also not affected by living alone or parental status</p> <p>Participants with an AIDS diagnosis reported not receiving enough emotional support (51%) more frequently than those who had not progressed to AIDS</p> <p>Those who had been diagnosed more than 5 yrs ago were significantly more likely to report less practical support (38%)</p> <p>Those who reported having adequate support often did so, not because they actually received more support, but because they were physically and emotionally healthier (not requiring as much support)</p> <p>Barriers (to support) Identified:            (1) non-disclosure of HIV-status, did not want to risk negative reactions, fear of others disclosing their status, fear of loss of privacy            (2) other individuals fear/ignorance of HIV/AIDS, many were stigmatized by others, did not want support from those who were prejudice against them, especially difficult for homosexual participants            (3) value taking responsibility for themselves and their own problems, did not want to rely on others, importance of independence            (4) fear of becoming a burden to others, did not want it to appear as though they were exploiting their illness for assistance, wanted to wait to ask for help until they felt they “really” needed it            (5) loss of available support persons from family, older relatives not functional enough to help, death of parents or siblings who could have provided support, geographic distance from family            (6) death of friends and partners due to HIV/AIDS (esp. gay men)            (7) ageism, received less sympathy, judged, devalued, marginalized, discussed importance of “youth and vitality” in communities</p>	<p><i>Strengths:</i>            Identified age as a perceived barrier to support</p> <p><i>Limitations:</i>            Only one barrier identified, ageism, was specifically related to old age</p> <p>No comparison group utilized</p> <p>Prevalence of each could not be determined due to semi-structured interviews</p> <p>Estimates of prevalence for perceived emotional and practical support should be considered true estimates due to an unrepresentative sample</p>

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<p>The diverse older HIV-positive population: A national profile of economic circumstances, social support, and quality of life</p> <p>S. Crystal, A. Akincigil, U. Sambamoorthi, N. Wenger, J. A. Fleishman, D. S. Zingmond, R. D. Hays, S. A. Bozzette, and M. F. Shapiro</p> <p><i>Journal of Acquired Immune Deficiency Syndromes (2003)</i></p>	<p>Describe the relationship between old age, social support, and quality of life in relation to socioeconomic status</p>	<p>Nationally representative probability sample, HIV Cost and Services Utilization Survey (HCSUS)</p> <p>All participants were over the age of 18 and receiving care in the U.S.</p> <p>Final sample 2857, after excluding the women who were exposed through men who have sex with men (MSM)</p>	<p>Descriptive correlational</p> <p>Comparison study, age 50 and older vs. younger than 50</p>	<p>All participants categorized into 3 groups (1) MSM (2) injection drug users (IDUs) (3) others</p> <p>91% of interviews conducted in person, all other via phone</p> <p>Data were collected on socioeconomic circumstances, clinical characteristics, social support indicators, and quality of life indicators</p>	<p>11% (n= 284) were age 50 or older</p> <p>Older age associated with living alone</p> <p>No significant difference for tangible support and number of close friends</p> <p>Older subjects experienced significantly more conflict within their social networks, older gay men experienced the most conflict</p> <p>Older IDUs had significantly lower scores for emotional support and social contact when compared to younger IDUs</p> <p>No statistical difference in emotional support between older and younger gay men</p> <p>No significant differences for self-reported quality of life scores detected between the age groups</p> <p>Older MSM reported significantly better overall health</p> <p>Older gay men scored similarly to their younger counterparts on physical and role functioning scores</p> <p>Older IDUs had significantly lower physical and role functioning scores than their younger counterparts; older IDUs were most “disadvantaged” in physical and role functioning when compared to other exposure groups</p> <p>Emotional well being was significantly greater for older adults in the MSM and other categories</p>	<p><i>Strengths:</i> Nationally representative sample</p> <p><i>Limitations:</i> Relied on self reports, only included those receiving care, majority of participants were male</p>

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<p>Using a telephone support group for HIV-positive persons aged 50+ to increase social support and health-related knowledge</p> <p>K. Nokes, L. Chew, and C. Altman</p> <p><i>AIDS Patient Care &amp; STDs (2003)</i></p>	<p>To evaluate the effectiveness of a telephone support group in increasing social support and level of health-related knowledge</p>	<p>9 adults over the age of 50, living with HIV/AIDS, and GLBT</p> <p>Advertised as an educational opportunity for individuals living with HIV/AIDS to learn more about coping with their disease and current treatment plans</p>	<p>Intervention study</p>	<p>Two support groups were conducted by a female registered nurse and male social worker</p> <p>The group members would connect via telephone for approx. 50-60 min once each Friday for 10 weeks, members were not required to attend every session, there was an average of 3 participants in each session</p> <p>The facilitators often started each session by asking about the prior week, as health-related issues were brought up they would be further explored by the facilitators</p> <p>Topics addressed during group discussions:  (1) staying healthy, (2) symptom management, (3) chronic illnesses, (4) diagnostic tests, (5) strategies for effective interaction with healthcare providers, (6) HIV/AIDS medication use, (7) new developments in the treatment of HIV/AIDS, (8) coping with loss, and (9) finding commonalities</p>	<p>Effectiveness of support group was evaluated and determined by facilitators</p> <p>First group- 5 gay men with a mean age of 67, all lived alone, all had multiple comorbid conditions, were taking multiple medications, and were members of a social service and advocacy organization (one man had a hearing impairment that forced him to leave the group)</p> <p>Second group- two of the men from the first group participated in the second group, there was one 56-year-old female whose son died of AIDS who participated, all other 5 participants were gay men</p> <p>Having older female (who was not gay or HIV-positive) did not pose a problem for group cohesiveness</p> <p>Members expressed concern over the welfare over other members when they were missing from the sessions</p> <p>Non-verbal cue (except silence) could not be detected over the phone, heightened sensitivity was needed</p> <p>Boundaries of respect were more difficult to maintain over phone</p> <p>All group members were disappointed when the group sessions ended</p> <p>The social worker who facilitated the sessions revealed that he was HIV-positive, could have unified the group or have made some member feel less important</p> <p>Concluded that it was difficult to determine if all group members experienced a connectedness to the group, esp. due to the lack of non-verbal cues</p> <p>Teleconference technology makes creating a “cohesive community” more challenging</p>	<p><i>Strengths:</i></p> <p>Determined that it was difficult to create a “cohesive community” that fosters sharing and feeling of connectedness via telephone</p> <p>Facilitators had experience in working with people living with HIV</p> <p><i>Limitations:</i></p> <p>One subject did not meet inclusion criteria</p> <p>Older adults have difficulty hearing (one subject had to drop out due to hearing issues)</p> <p>Support group members and size were not consistent</p> <p>No reliable measures utilized</p>

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<p>****</p> <p>Perceptions of support among older adults with HIV</p> <p>R.A. Shippy and S.E. Karpiak</p> <p><i>Research on Aging (2005)</i></p>	<p>To examine the factors that contribute to older adult's perceptions of inadequate emotional and instrumental support</p> <p>Hypotheses:</p> <p>(1) women's perceptions of adequacy of support will be greater than that of men</p> <p>(2) those who report more feelings of depression and decrease life satisfaction will report having unmet support needs</p> <p>(3) those who report poorer physical health will also report more unmet support needs</p> <p>(4) participants with smaller social networks will report more unmet needs</p>	<p>160 participants age 50 and older who were HIV-positive, living in the community, and fluent in English</p> <p>Sample recruited from AIDS Community Research Initiative of America (ACRIA) in New York City</p> <p>Compensated \$25</p>	<p>Descriptive correlational</p>	<p>Self-administered questionnaire</p> <p>Demographic data</p> <p>HIV-related information- date of diagnosis, CD4 count, transmission</p> <p>Disclosure of status was measured by a 6-item scale, higher scores indicate more disclosure</p> <p>The negative impact of HIV was measure by the experience of stress and strain in financial, emotional, and physical domains, higher scores indicate more strain</p> <p>Self-reported physical health was report based upon a 5 point Likert scale, a 26-item checklist of health problems was also used</p> <p>Depression screening- participants were asked if they "had often felt sad or depressed in the past month"</p> <p>Life satisfaction- measured with one question, "All things considered, how satisfied are you with your life?"</p> <p>Information on social networks was collected by 5 clusters of items related to five different groups of people (parents, children, siblings, other relatives, and friends)</p> <p>Support adequacy and availability was assessed with 4-items</p>	<p>58% had been diagnosed with depression</p> <p>Women had significantly larger informal social networks than men</p> <p>75% had more friends than any other support element</p> <p>64% identified at least one individual available for instrumental support</p> <p>75% identified at least one individual available for emotional support</p> <p>79% reported having unmet instrumental support needs</p> <p>57% said that they need more emotional support</p> <p>Sex, the number of comorbid disease, the previous need for assistance, and physical strain were all significant predictors of emotional support adequacy; subjects who were women, had multiple comorbid illnesses, needed assistance previously, and experienced higher levels of physical strain were significantly more likely to perceive having adequate emotional support</p> <p>Comorbid illnesses and physical strain were significant predictors of instrumental support adequacy; individuals with more comorbid illnesses and physical strain were significantly more likely to report adequate instrumental support</p> <p>Size of networks did not have significant effect on perceived adequacy of emotional support or instrumental support</p>	<p><i>Strengths:</i></p> <p>Identified a positive relationship between poorer physical health and support adequacy</p> <p><i>Limitations:</i></p> <p>Cross-sectional design prevents determination of causality</p> <p>Findings not generalizable, sample only representative of New York City HIV-positive population</p>

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<p>****</p> <p>The aging HIV/AIDS population: Fragile social networks</p> <p>R. Shippy and S. Karpiak</p> <p><i>Aging &amp; Mental Health (2005)</i></p>	<p>To describe the support resources and need of older adults living with HIV/AIDS</p>	<p>160 participants age 50 and older who were HIV-positive, living in the community, and fluent in English</p> <p>Sample recruited from AIDS Community Research Initiative of America (ACRIA) in New York City</p> <p>Compensated \$25</p>	<p>Descriptive</p>	<p>Self-administered questionnaires</p> <p>Data on demographics, HIV-related information, physical and mental health, informal support networks, and support availability and adequacy was collected</p> <p>Access and utilization of formal health and social services was assessed, higher scores indicated an increased use of formal services, a barrier to services checklist was included</p> <p>Informal support preferences were assessed by asking participants to identify the person they would ask for support (parent, child, sibling, other relative, partner, friend, social agency, self) in certain situations</p>	<p>Most participants lived alone</p> <p>Depression was the most common health issue reported (58%)</p> <p>Participants reported an average of 10 people in their informal networks, range 0-36</p> <p>Friends were present in 85% of networks, and half of those friends (56%) were also older adults with HIV</p> <p>33% identified friends and partners as the preferred source of support, family was next with 23%</p> <p>Only 16% said that no one was available for instrumental support, 6% said no one was available for emotional support</p> <p>79% reported unmet instrumental support needs</p> <p>57% reported having unmet emotional support needs</p> <p>24% utilized AIDS Service Organization (ASO) facilities, 18% used private physicians</p> <p>40% reported difficulty accessing care, 23% said they “feel out of place because of age”</p> <p>91% disclosed their status to healthcare providers, 61% to biological family members, and 49% to most of their friends</p>	<p><i>Strengths:</i></p> <p>Demonstrated that older adults have inadequate social support resources</p> <p>Demonstrates the isolation of older adults as evidenced by their small social networks and high rates of depression</p> <p><i>Limitations:</i></p> <p>All information was self reported</p> <p>Cross-sectional design prevents determination of causality</p> <p>Findings not generalizable, sample only representative of New York City HIV-positive population</p>

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<p>*A comparison of HIV stigma and disclosure patterns between older and younger adults living with HIV/AIDS</p> <p>C. A. Emlet</p> <p><i>AIDS Patient Care and STDs (2006)</i></p>	<p>Understand the relationship between age, HIV-related stigma, and disclosure patterns</p>	<p>88 participants, 44 aged 50 and older, 44 age 20-39</p> <p>Recruited through AIDS service organization (ASO) in the Pacific Northwest</p>	<p>Descriptive correlational</p> <p>Comparison study, each person age 50 and older was matched with a person between the ages of 20 and 39 of the same gender, ethnicity, mode of HIV transmission, and diagnosis</p>	<p>Face to face interviews, 45 min to 1 hour</p> <p>Information was obtained on sociodemographic characteristics, Medicaid eligibility, HIV diagnosis</p> <p>HIV stigma questionnaire (13 item stigma scale) and disclosure inventory completed (related to categories of people they had and had not disclosed their status to)</p> <p>Lubben Social Network Scale (18-item), quantity of social contacts and frequency of contact (friends, relatives, and neighbors)</p>	<p>Older adults were significantly more likely to live alone than their younger counterparts</p> <p>No statistical differences in stigma scores amongst age groups</p> <p>Younger individuals reported significantly greater fear of losing their job when compared to their older counterparts</p> <p>50% of older group felt ashamed “sometimes” or “often”</p> <p>African Americans had significantly higher stigma scores</p> <p>Tendency was for older adults to disclose status less, did not reach statistical significance</p> <p>Disclosure significantly and positively correlated with time since diagnosis of HIV, use of services, and having a confidant</p> <p>Disclosure was significantly and negatively correlated with being African American and being exposed to HIV through heterosexual contact (ethnicity not maintained as a significant predictor after examination with disclosure as a dependant variable)</p> <p>Higher stigma scores were significantly and positively associated with being African American (not maintained in analysis with stigma as dependant variable)</p> <p>Higher stigma scores were significantly and negatively associated with social support in the form of a confidant and having someone you can call on for help</p> <p>Age was not significantly correlated with stigma or disclosure; age was significantly correlated with greater levels of education and income</p>	<p><i>Strengths:</i></p> <p>Provides a well focused comparison of social networks and social isolation between younger and older adults living with HIV</p> <p>Older subjects were matched with a younger counterpart with similar characteristics</p> <p><i>Limitations:</i></p> <p>Purposive and nonrandomized sample</p> <p>All participants members of ASO, support group</p> <p>All from same geographic region</p>



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<p>*An examination of the social networks and social isolation in older and younger adults living with HIV/AIDS</p> <p>C. A. Emlet</p> <p><i>Health &amp; Social Work (2006)</i></p>	<p>Examine the social networks and social isolation in older and younger persons living with HIV/AIDS</p>	<p>88 participants, 44 aged 50 and older, 44 age 20-39</p> <p>Recruited through AIDS service organization (ASO) in the Pacific Northwest</p>	<p>Descriptive correlational</p> <p>Comparison study, each person age 50 and older was matched with a person between the age of 20 and 39 of the same gender, ethnicity, mode of HIV transmission, and diagnosis</p>	<p>Face to face interviews, 45 min to 1 hour</p> <p>Information was obtained on sociodemographic characteristics, Medicaid eligibility, HIV diagnosis</p> <p>HIV stigma questionnaire (13 item stigma scale) and disclosure inventory completed (related to categories of people they had and had not disclosed their status to)</p> <p>Lubben Social Network Scale (LSNS) (18-item), quantity of social contacts and frequency of contact (friends, relatives, and neighbors), lower scores indicate smaller networks</p>	<p>No significant difference in size and relative importance of support sources between age groups</p> <p>Friends and relatives were seen as significantly more important sources of support, friends greater than family; neighbors played lesser role than friends and relatives</p> <p>Older men had significantly lower scores on social network measures than younger males (more socially isolated) and scored significantly lower on instrumental support measure than their younger counterparts</p> <p>Older females tended to have higher LSNS scores than their younger counter parts, results not statistically significant</p> <p>The social networks of those over 50 were similar for heterosexual and homosexual groups</p> <p>Older gay and bisexual participants had lower LSNS scores in most domains than their younger counterparts, differences not significant; in both age groups homosexuals had higher scores on the friend subscale (results not significant in over 50 group)</p> <p>African Americans had significantly lower scores for the support of friends subscale, the availability of a confidant, and for instrumental support, differences significant in both younger and older age groups</p> <p>Gender, heterosexual transmission, and racial background impact the availability of social support (explained by above results)</p> <p>Those age 50 or older with an AIDS diagnosis had significantly higher scores on the confidant item</p> <p>32% of all participants were socially isolated as indicated by their LSNS scores in those age 50 and older it was 38.6% (not significant), in older adults of color it was 53.8% (significant when compared to younger adults of color)</p> <p>None of the LSNS subscale significantly correlated with stigma; confidant score was significantly and negatively related to stigma</p>	<p><i>Strengths:</i> Provides a well focused comparison of social networks and social isolation between younger and older adults living with HIV</p> <p><i>Limitations:</i> This study only examined differences in social networks over time, to examine how social networks change over time a longitudinal design would have to be used</p>

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<p>**</p> <p>Experiences of stigma in older adults living with HIV/AIDS: A mixed methods analysis</p> <p>C. A. Emler</p> <p><i>AIDS Patient Care and STDs (2007)</i></p>	<p>Examine the stigma in adults age 50 and over who are living with HIV/AIDS</p>	<p>25 adults age 50 and older with a diagnosis of HIV or AIDS</p> <p>Purposive sampling, however, due to difficulty identifying and locating potential participants, African Americans and women were over represented</p> <p>Recruited from ASO (AIDS service org), county public health, infectious disease clinics, and medical centers</p> <p>Compensated \$25</p>	<p>Mixed methods</p> <p>Descriptive</p> <p>Interviews, 1-2 hours, audio-taped</p>	<p>Socio-Demographic variables, including Medicaid and HIV status</p> <p>HIV stigma instrument developed by Berger and colleagues was used, 40 items, 4 subscales (1) personalized stigma (2) disclosure (3) negative self-image (4) public attitudes</p> <p>Center for Epidemiological Studies Depression Scale (CES-D), 20 items</p> <p>Semi-structured questions, "Can you tell me about a time that you felt discriminated against or mistreated because of being older and having HIV disease?" and "What do you think society should know about being older and having HIV disease?"</p>	<p>52% lived alone</p> <p>Men had significantly higher stigma scores</p> <p>Non-whites had significantly higher scores on the personalized stigma scale, the disclosure scale, and the negative self-image scale</p> <p>36% (8 men and 1 woman) had CES-D scores above 16, at risk for depression, non-whites significantly more likely to exceed depression cut-off; significant and positive relationship between CES-D scores and stigma scores</p> <p>56% reported experiencing rejection</p> <p>40% experienced what was labeled fear of contagion</p> <p>40% talked about issues of being alone</p> <p>32% expressed feeling of being separate from the rest of society, what was described as feeling "other," issue that relates to disease as well as age; two participants reported feelings of low self-esteem and lack of self worth</p> <p>40% made comments about the public opinion of sexuality, aging, and HIV/AIDS</p> <p>12% of the individuals interviewed reported stigma related to sexual orientation</p> <p>All six of those who reported limited stigma were white and five out of the six had been diagnosed with AIDS</p> <p>Disclosure Results: 15 people used non-disclosure /silence used as a protective mechanism 32% expressed a fear of sharing their HIV status 16% had anxiety over unintended disclosure 24% talked about a violation of confidentiality</p>	<p><i>Strengths:</i> Determined stigma to be prominent issue, linked stigma with depression</p> <p><i>Limitations:</i> Small sample size, staff used to recruit, limited geographical area, compensation may have enticed people</p>

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<p>Networks of older New Yorkers with HIV: Fragility, resilience, and transformation</p> <p>C. Poindexter and R. Shippy</p> <p><i>AIDS Patient Care &amp; STDs (2008)</i></p>	<p>To understand the ways that older adults living with HIV receive and perceive social support</p>	<p>34 adults over the age of 50 diagnosed with HIV/AIDS living in New York City (all subjects were also participants in a previous study done by Shippy in 2005)</p> <p>Conducted at and funded by the AIDS Community Research Initiative of America (ACRIA)</p> <p>Compensated \$40</p>	<p>Focus group study</p> <p>Descriptive</p>	<p>Subjects were separated into five homogenous focus groups: (1) 8 African American women, (2) 6 women of other demographic groups, (3) 3 white men, (4) 8 African American men, (9) 9 Latino men</p> <p>Focus group interviews were conducted, facilitated by author Poindexter, semi-structured, limited in time, audio-taped, and transcribed</p>	<p>All of the five focus group, except for one, reported social networks made up of mostly HIV-positive persons</p> <p>8 African Am. women- family members were not trusted due to stigma, intentionally formed networks mostly other HIV-positive women, developed networks through seeking services at AIDS Service Organizations (ASO), benefits included commonality and empowerment</p> <p>6 non-African American women- formed networks of mostly NOT HIV-positive persons, recognized that the cost of this was loss of support due to death, said privacy was the reason for not knowing the status of their networks, recognized that commonality would be benefit of HIV-positive network</p> <p>3 white gay men- unintentionally formed networks of mostly HIV-positive persons, developed through services sought or Gay networks, recognized cost as loss of support related to death, benefits included commonality and empowerment</p> <p>8 African American men- unintentionally formed networks of mostly HIV-positive people, developed through services, identified cost as loss due to death, benefits mentioned were commonality and empowerment</p> <p>9 Latino men- unintentionally formed networks of mostly HIV-positive persons, developed through services or drug-using networks became HIV-positive, did not identify a cost, identified commonality and empowerment as benefits</p> <p>Social networks of HIV-positive people are fragile because of illness and death</p> <p>Many found informal support through formal support</p> <p>Advantages to an HIV-positive network were noted, many said it helped them to manage stigma and disclosure, they described it as empowering and as being a strength</p>	<p><i>Strengths:</i></p> <p>Participants may have felt more comfortable to disclose honestly and freely as a part of a homogenous focus group</p> <p><i>Limitations:</i></p> <p>Poor researcher control due to group interview methodology</p> <p>Participants may have responded based upon expectations rather than reality</p> <p>Difficult to separate effects of having HIV from effect of aging and being a member of an oppressed group</p>

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<p>**Truth and consequences: A qualitative exploration of HIV disclosure in older adults</p> <p>C.A. Emlet</p> <p><i>AIDS Care (2008)</i></p>	<p>To communicate the findings of Emlet's previous study (2007) that related to the "importance and complexity" of disclosure within the older adult population</p>	<p>25 adults age 50 and older with a diagnosis of HIV or AIDS</p> <p>Purposive sampling, however, due to difficulty identifying and locating potential participants, African Americans and women were over represented</p> <p>Recruited from ASO (AIDS service org), county public health, infectious disease clinics, and medical centers</p> <p>Compensated \$25</p>	<p>Mixed methods</p> <p>Descriptive</p> <p>Interviews, 1-2 hours, audio-taped</p>	<p>Socio-Demographic variables, including Medicaid and HIV status</p> <p>HIV stigma instrument developed by Berger and colleagues was used, 40 items, 4 subscales (1) personalized stigma (2) disclosure (3) negative self-image (4) public attitudes</p> <p>Center for Epidemiological Studies Depression Scale (CES-D), 20 items</p> <p>Semi-structured questions, "Can you tell me about a time that you felt discriminated against or mistreated because of being older and having HIV disease?" and "What do you think society should know about being older and having HIV disease?"</p> <p>Open coding system, 25 codes, 5 relating to disclosure</p> <p>All codes fell into two categories (1) disclosure (2) non-disclosure</p>	<p>Non-disclosure- protective silence, anticipatory disclosure, and violations of confidentiality</p> <p>60% used protective silence, non-disclosure due to fear of stigmatization or rejection</p> <p>Participants described a period of anticipatory disclosure where they desire to disclose their status, but they are still weighing risks and benefits of disclosure</p> <p>Six participants experienced violations of confidentiality or an "unauthorized sharing" of their HIV status by others</p> <p>Disclosure occurred through three modes (1) violations of confidentiality (2) intentional (3) unintentional</p> <p>Unintentional disclosure was discussed as others finding out about their status in inadvertent ways such as noticing their medications or by picking up on their illnesses</p> <p>Intentional disclosure was sometimes calculated and limited, other times intentional disclosure was made public</p> <p>Several people said that they disclose their status as an educational tool</p> <p>One participant suggested that age freed her from the fear of rejection by others, age made her more open and self-confident</p>	<p><i>Strengths:</i></p> <p>Determined stigma to be prominent issue, linked stigma with depression</p> <p><i>Limitations:</i></p> <p>Small sample size, staff used to recruit, limited geographical area, compensation may have enticed people</p>

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<p>Adherence to antiretroviral medication in older adults living with HIV/AIDS: A comparison of alternative models</p> <p>C. J. Johnson, T.G. Heckman, N.B. Hansen, A. Kochman, and K. J. Sikkema</p> <p><i>AIDS Care (2009)</i></p>	<p>Examined two ART adherence conceptual frameworks to determine if they can be applied to the population of HIV positive older adults and explored neuropsychological functioning (NPF) and adherence</p>	<p>244 HIV-positive adults over the age of 50</p> <p>Recruited from ASOs in Ohio and New York</p> <p>Compensated \$30</p>	<p>Data collected as part of a randomized clinical trial</p> <p>Descriptive correlational</p>	<p>Audio computer-assisted self-interview (ACASI)</p> <p>Neuropsychological (NPF) testing- assessed executive functioning, verbal fluency, and global functioning, demographic differences accounted for, higher scores equate less impairment</p> <p>Antiretroviral (ARV) adherence- two questions regarding medication adherence, Likert scale</p> <p>Viral load- pts self-reported most recent viral load count</p> <p>Functional Assessment of Chronic Illness Therapy (FACIT)-evaluated social support, Social Well-Being (SWB) subscale measured perceived support</p> <p>Provision of Social Relations Scale (PSR)-measures support from friends and family</p> <p>Ways of Coping Questionnaire (WOC)- evaluates coping strategies used for stressors related to HIV</p> <p>Geriatric Depression Scale (GDS)- 30-items, symptoms of depression</p> <p>Beck Anxiety Inventory (BAI)- 21-items, symptoms of anxiety</p> <p>Psychological General Well-Being Schedule- psychological health levels</p> <p>Demographic data</p>	<p>No significant relationship between NPF and adherence was discovered</p> <p>Participants self-reports of adherence results- - 80% compliant with meds, and 83% compliant with instructions</p> <p>The belief that maladaptive coping mediates the associations between negative affect, social support, and adherence was not supported</p> <p>The relationship between social support and maladaptive coping was not statistically significant</p> <p>Affect was found to mediate the relationships of social support, maladaptive coping, and adherence, all paths were statistically significant</p> <p>100% of the statistically significant effect of both social support and maladaptive coping on adherence is mediated indirectly by negative affect-- (1) significant bivariate relationships between adherence and social support and coping (2) there is an independent and significant relationship between negative affect and adherence (3) no significant relationship between adherence and social support and coping</p> <p>100% of the effects of the psychosocial constructs (social support, maladaptive coping, and negative affect) on viral load were mediated indirectly through adherence</p>	<p><i>Strengths:</i> Included NPF in adherence research</p> <p><i>Limitations:</i> Participants from large urban cities—not generalizable,</p> <p>Sample had limited variability-- all participants were members of an ASO, had high NPF, and had some depressive symptomatology</p>

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<p>Older African Americans' management of HIV/AIDS stigma</p> <p>P. P. Foster and S. W. Gaskins</p> <p><i>AIDS Care (2009)</i></p>	<p>To describe the experience of stigma in older African American adults</p>	<p>Purposive sample of 24 African Americans over the age of 50 and living in on particular state in the south</p> <p>Confirmed diagnosis over 6 mos.</p> <p>Recruited from four AIDS Service Organizations</p> <p>Compensated \$50</p>	<p>Mixed methods</p> <p>Descriptive</p>	<p>Qualitative- four focus groups conducted, an average of 6 participants attended each session, lasted 1.5-2 hours, audio-taped, semi-structured interviewing to elicit information about stigma experiences</p> <p>Quantitative- Self Perceptions of HIV Stigma Scale and the Stigma Impact of HIV Scale, completed at the start of each session</p> <p>Self-Perceptions of HIV Stigma Scale- 13 item questionnaire, Likert type scale used, higher scores indicate higher perceived stigma,</p> <p>Sigma Impact of HIV- 24 item scale, four subscales (1) social rejection (2) financial insecurity (3) internalized shame (4) social isolation, Likert type scale, higher scores indicate greater perceived stigma</p>	<p>Quantitative results</p> <p>Self Perceptions Scale- results showed that participants rarely or did not at all experience stigma</p> <p>Stigma Impact of HIV Scale- participants only reported experiencing stigma on the Internalized Shame Subscale, 60% responded by agreeing or strongly agreeing to all but one question on this scale; no significant difference in stigma scores by gender</p> <p>Qualitative results</p> <p>Four themes emerged (1) disclosure (2) stigma experiences (3) need for HIV/AIDS education (4) acceptance of disease</p> <p>Most participants disclosed their status to family members, especially mothers and sisters</p> <p>Many acknowledged need to tell sexual partners but were no longer sexually active</p> <p>Friends were not identified as a group to disclose to, several said they did not have friends; none of the participants disclosed their HIV/AIDS status to church members</p> <p>Many expressed a concern that people could not be trusted to keep it confidential</p> <p>Disclosure determined sources of social support for participants; most had not experienced direct stigma because they had not disclosed their status</p> <p>Families were the most likely source of support reported</p> <p>It was expressed by participants that there is a need for HIV/AIDS education in communities, many felt that negative reactions were due to lack of education</p> <p>It was reported that acceptance of their disease helped manage the negative aspects, participants chose to view their disease as a chronic illness, spirituality was mentioned as source of support</p>	<p><i>Strengths:</i></p> <p>Both quantitative and qualitative methods were used to evaluate stigma</p> <p><i>Limitations:</i></p> <p>Participants were willing to share experiences, those who are stigmatized would not be willing, wide range of time since diagnosis, mode of transmission sexual orientation were not identified</p>

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<p>Psychological wellbeing among individuals aging with HIV; the value of social relationships</p> <p>S. Mavandadi, F. Zanjani, T.R. Ten Have, and D.W. Oslin</p> <p><i>Journal of Acquired Immune Deficiency Syndrome (2009)</i></p>	<p>To explore the relationship among age, social support, psychological and functional well-being</p> <p>Question: To what extent do functional and structural aspects of social ties account for age differences in depressive symptoms and positive affect?</p> <p>What role do structural and functional aspects of social ties play in age differences in psychological wellbeing?</p> <p>Hypotheses: (1) older adults with HIV will have less depressive symptoms and more positive affect despite increased pain and comorbidity (2) older adults will report having more subjective support, or higher perceived quality of social support, and this would account for age differences in depressive symptoms and positive affect</p>	<p>109 participants, all were HIV positive, 18 years or older, speak English, and cognitively intact</p> <p>Data from HIV-Aging Study</p> <p>Stratified random sampling done from Philadelphia Center for AIDS Research (CFAR) clinical registry and coordinating clinics</p> <p>Compensated \$40</p>	<p>Cross-sectional</p> <p>Comparative study, grouped into age 55 and older vs. age 54 and younger</p> <p>Descriptive correlational</p>	<p>Interviews</p> <p>Sociodemographic data</p> <p>The Medical History Checklist subscale of the Multilevel Assessment Instrument (MAI)- assessment medical comorbidity</p> <p>Pain severity- measured using one item from the Medical Outcomes Study, Likert scale</p> <p>Functional and Structural Support- abbreviated Duke Social Support Index was used, measures 3 areas of social support (1) subjective support (2) instrumental support (3) and frequency of social interactions</p> <p>Patient Health Questionnaire (PHQ-9) depression module- measured depressive symptoms</p> <p>Profile of Mood Stress (POMS)- Vigor subscale, assessed positive affect, adjective checklist</p> <p>Behavioral health service utilization- participants were asked if they seen a behavioral health specialist in the previous 90 days</p>	<p>Older adults were significantly more likely to be men</p> <p>Older adults reported having significantly more medical conditions, but were also significantly less likely to have visited a behavioral health specialist and have depressive symptoms and more likely to display greater vigor compared to their younger counterparts</p> <p>No significant age differences in social interactions or instrumental support; instrumental support was not significantly associated with any of the psychological variables</p> <p>Older adults had significantly more subjective support; having greater subjective support was found to be significantly associated with less depressive symptoms, greater vigor, and lower odds of being seen by a behavioral health specialist</p> <p>Greater social interaction was significantly associated with greater vigor</p> <p>Findings suggest that subjective support may have accounted for the associations of age with depressive symptoms and vigor, but not behavioral health utilization</p> <p>Social interactions and instrumental support were not found to mediate the relationship between age and any of the psychosocial variables</p>	<p><i>Strengths:</i> Hypotheses were validated</p> <p><i>Limitations:</i> Older women were not equally represented</p> <p>Variables not accounted for such as age-related differences in coping styles, life experiences, and healthcare expectancies may have played a role</p> <p>Due to cross-sectional design causal effects cannot be inferred and the order of the relationships could not be determined</p> <p>Inconsistent with work that has shown older adults to be socially isolated, have smaller social networks, and a decrease in psychosocial health</p>

- \* These two articles are both written on the same study conducted by Charles A. Emlet. Differences amongst the findings reported within each article are reflected in the table.
- \*\* These two articles are both written on the same study conducted by Charles A. Emlet. Differences amongst the findings reported within each article are reflected in the table.
- \*\*\* These four articles were all written on the same study conducted by Timothy G. Heckman et. al. Differences amongst sample size, measurements, types of analyses utilized, and findings reported within each article are reflected in the table.
- \*\*\*\* These two articles were written on the same study conducted by R. Andrew Shippy and Stephen E. Karpiak. Differences amongst measurements and findings reported in each articles are reflected in the table.



## ACADEMIC VITA of Alexandra Cortese

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**Education:**                    **Bachelor of Science Degree in Nursing**  
The Schreyer Honors College  
The Pennsylvania State University  
**Thesis Title:** The Social Support of Older Adults Living with HIV/AIDS:  
A Systematic Literature Review  
**Thesis Supervisor:** Susan J. Loeb, Ph.D., R.N.

**Related Experience:** **Summer Nurse Internship**  
Neonatal Intensive Care Unit  
Children's Hospital of Pittsburgh of UPMC  
Summer 2010 (May through August)

**HIV Prevention Counselor**  
Certified by the Pennsylvania Department of Health  
Health Promotion and Wellness Department  
University Health Services, The Pennsylvania State University  
April 2009 to present

**Pediatric Nursing Teaching Assistant**  
The Pennsylvania State University  
**Course Instructor:** Maureen Jones  
January 2011 to present

**Awards:**                        Dean's List (all semesters)  
President's Freshman Award  
President's Sparks Award  
Phi Eta Sigma, National Honor Society  
Student Marshall

**Sigma Theta Tau International, Honor Society of Nursing**  
Beta Sigma Chapter  
The Pennsylvania State University  
November 2010 to present

**Activities:**                   **Student Nurses Association of Pennsylvania (SNAP)**  
The Pennsylvania State University  
January 2008 to present