Disaggregating Risks Profiles for HIV/AIDS Exposure, Infection and Survival Among Those Aged 50 and Older: Interpreting Bimodal Infection Models

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James W. McNally, PhD
Martha I. Sayre, MS
NACDA, Program on Aging
National Archive of Computerized Data in Aging
Institute for Social Research
University of Michigan
330 Perry Building
734-615-9520
jmcnally@umich.edu

Voon Chin Phau, PhD
Dept. of Sociology/Anthropology
Gettysburg College
300 North Washington Street
Gettysburg, PA 17325.
(717)337-6192
vphua@gettysburg.edu

Introduction

Current research in HIV/AIDS has focused on two core issues of concern related to this disease process and its impacts on older populations. The first concern is that of the social and economic costs of aged parents caring for children and younger relatives suffering from this disease. The elderly who engage in this type of family support not only face the increased burden of care giving for these sick and dying family members but they also face the loss of the very family members they would often depend upon for care in their later years. Work by Knodel et al (2001) and others have clearly laid out the issues relevant to this topic and they have established a research framework that is increasingly employed by other researchers in this area.

The research presented here addresses the second core issue, increasing our understanding of growing prevalence of late life exposure and contraction of HIV/AIDS among people aged 50 and older. Studies by numerous researchers have shown that the incidence of HIV/AIDS among the mid-life and aging populations has long represented 10 percent or more of the identified HIV positive population and is now increasing at an alarming rate. As of 2001, the decade long cumulative number of AIDS cases reported to the Centers for Disease Control and Prevention in adults aged 50 years or older quintupled, from 16,288 in 1990 to 90,513 by the end of 2001 (Mack and Ory, 2003).

Recent work by Henderson et al (2004) has found that the knowledge and understanding of risks associated with contracting HIV/AIDS among older women (50 plus) was surprisingly limited and this lack of knowledge contributes to the increased risk of contracting HIV. While a number of researchers are looking into these issues they lack a centralized resource where that can locate and obtain a wide array of research data on this important topic. NACDA proposes to work with MiCDA to address this limitation.

Data and Methods

This paper presents work that examines measures of risk developed from the existing collection of the National Archive of Computerized Data on Aging (NACDA) as well as existing and emerging resources outside of NACDA. This research explores and identifies secondary data resources that provide measures and variables which will contribute to our understanding of HIV/AIDS as a disease directly impacting the health of mature adults and the elderly and as a process impacting the health of family members and household residents of older persons. This data exploration provides summary findings from survey resources that measure issues such as the diagnosis, prevalence and treatment of this disease as well as data reflecting the mortality incidence among the older adult population or their family members. Currently NACDA possesses over 70 individual studies that explicitly address issues related to HIV/AIDS in the United States, Europe and Asia and contain information on midlife and older populations. This collection is unique both its breadth and its time frame as it spans data from the earliest recognition of HIV/AIDS health challenge in the early-1980's until the present time. This collection allows for research on changing attitudes and understandings of the risks of infliction and the disease process itself as well as the ability to measure change in prevalence of HIV/AIDS among the older population across an extended period of time. While long present in the broader NACDA archive, limitations in both time and resources have not previously allowed us to formally organize and catalogue this data in relation to the topic of HIV/AIDS among older individuals. Through NIA funding we have an important opportunity to begin this important work and to identify similar data resources existing outside of the archive and potentially available to the research community in the future.

Because this study examines multiple aspects of this disease process across time, it represents an expansion of much of the existing research that typically examines only one aspect (prevalence, knowledge) or single time-periods. As a related aspect of this proposed study, we examine the availability of other secondary resources on HIV/AIDS (particularly in terms of incidence reporting) and investigate opportunities to acquire this information.

Research Issues

This paper looks comparatively at specific measurement issues and health outcomes. We are interested in using existing data resources to help us examine three specific at risk populations.

- 1. Midlife and Elderly Individuals who are aging with pre-existing HIV/AIDS infections
- 2. Midlife and Elderly Individuals who are recently infected with HIV/AIDS
- 3. Midlife and Elderly Individuals who are at risk of infection

Populations found in these related by separate risk groups require us to employ different responses in acute treatment and in planning a long term strategy to maximize functional health and longevity. Pre-existing HIV/AIDS infections represent persons with health maintenance issues and a high degree of knowledge regarding the course of the disease and ways to minimize risks. Having survived for a decade or more with the HIV/AIDS infection they are long-term survivors and their understanding and approach to the disease represent a potential resource to help increase understanding. Persons 50 and older who have recently been diagnosed as having HIV/AIDS infection pose treatment and behavioral modification issues as they both need to address their health concerns to maximize longevity and they need to learn ways to safely negotiate intimate relations with partners and how to address the emotional and psychological challenges associated with the disease process in a healthy and productive manner. The final group are those midlife and elderly individuals who are not infected but who engage in behaviors that place them at risk of infection. This group, one of the fasting growing among newly infected poses specific education and behavior challenges as they are often reentering dating and meeting new sexual partners after extended periods of monogamy. They often lack knowledge of risks associated with HIV\AIDS and may engage in unprotected sexual activity as many of the female partners may be post-menopausal, offering a false sense of security if the risk of pregnancy is seen as the primary reason for condom use.

Preliminary Outcomes

The research presentation summarizes the work resulting from the analysis of existing secondary data on HIV\AIDs risks among mature and late life adults. Using relevant secondary data resources contained in the NACDA collections that provide insight into measuring the population characteristics of older adults at risk or infected with HIV/AIDS the results illustrate the different profiles, health trajectories and mortality outcomes for the over 50 population in the US. The paper also presents risk measure associated with the knowledge and understanding of mid-life and elderly groups regarding HIV\AIDS and risks of infection in comparison to other age groups. In many ways, the elderly resemble the young adult populations in their attitudes towards their personal risks of HIV\AIDS, though for very different reasons.

These finding are presented as part of a broader research framework meant to encourage other investigators to explore these issues in coming years using currently available data resources. This in turn is meant to encourage the development of more sophisticated research on adult risks of HIV/AIDS using secondary data resources as well as allowing the data to be distributed to interested researchers in a format that will facilitate the research process.

Bibliography

Henderson, Susan J, Lisa B Bernstein, Diane Marie St George, Joyce P Doyle. "Older women and HIV: How much do they know and where are they getting their information?". Journal of the American Geriatrics Society. New York: Sep 2004. Vol. 52, Iss. 9; p. 1549

- Knodel, John, Mark VanLandingham, Chanpen Saengtienchai, Wassana Im-em. "Older people and AIDS: Quantitative evidence of the impact in Thailand". Social Science & Medicine. Oxford: May 2001. Vol. 52, Iss. 9; p. 1313
- Mack, Karin A. and Marcia G. Ory. "AIDS and older Americans at the end of the twentieth century". Journal of Acquired Immune Deficiency Syndromes. Hagerstown: Jun 1, 2003. Vol. 33; p. S68