### Validation of Gender Differences in Disability, Health Status, and Care

### **Study objectives**

This study aimed to address the important methodological questions regarding the usefulness of health interview surveys to gather information on the elderly in developing country settings. In particular, this study attempted to answer questions about the applicability of health instruments that were designed in developed countries settings to measure health status among older populations in developing countries. This was carried out through providing some indication of the level of accuracy of self-reported data on health status and use of services among older populations in developing countries. It also allowed the investigation of gender disparities in health at old age in Egypt.

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### **Study team**

USA

* Principal investigator: Yount, Kathryn, Associate Professor International Health and Sociology and Associated Faculty of the Institute for Women’s Studies at Emory University
* Co-Principal investigator: Agree, Emily, Assistant Professor in the Department of Population and Family Health at the Johns Hopkins University Bloomberg School of Public Health.

Egypt

* Langsten, Ray: Research Associate Professor at the Social Research Center, American University in Cairo
* Khadr, Zeinab**:** Assistant Professor at the Department of Statistics, Faculty of Economic and Political Science and Assistant Research Professor at the Social Research Center,

### **Sample design**

The study was implemented in Ismailia Governorate in collaboration with Department of Family Medicine in Faculty of Medicine, Suez Canal University with logistic support provided by Hesham El Sayed: Professor of clinical epidemiology, human genetics and pediatrics. The target sample for this study was 450 women and 450 men distributed evenly across the ages of 50–59, 60–69, and 70 years and older. A complete household census was conducted in one rural and one urban district in Ismailia governorate to generate the sampling frame for the study. Within groups of women and men, the following sampling fractions were used to select participants for the study: 1:1 for adults aged 70 years or older, 1:2 for adults aged 60–69 years, and 1:3 for adults aged 50–59 years.

Based on the sampling frame developed from the household census, 1,182 age-eligible adults were invited to participate in the study. Of these 1,182, 1,053 (88.1%, including 527 men and 526 women) consented to participate and completed a baseline interview. The 511 men and 506 women who scored 10 or more points on a 20-point modified Mini Mental Status Exam [M-MMSE] participated in the interview on their own behalf. Twelve of the 15 men and 19 of the 21 women who scored less than 10 on the M-MMSE were invited to identify a person living nearby who knew them well and who could respond on their behalf. For 3 men and 2 women who scored less than 10 on the M-MMSE, the field supervisor deemed them able to respond for themselves based on responses, from someone knowing the older adult well, to questions about the older adult’s ability to care for himself or herself. Thus, ‘respondent’ refers to any self-reporting older adult or any proxy who reported on an older person’s behalf.

### **Questionnaires**

To address the above research questions, sections of standardized questionnaires that have been used to assess health status and use of services among elderly populations in the United States and other industrialized countries will be used in this project. Selected modules are drawn from the Behavioral Risk Factor Surveillance System questionnaire, the Women’s Health and Aging Study, the National Health Interview Survey and the 1996 Philippine and Taiwanese Elderly Surveys

* The Women’s Health and Aging Study
* The Behavioral Risk Factor Surveillance System (BRFSS).
* The 1996 Philippine Elderly.

### **Publications**

Several Publications have been produced using the data of this study. The following are examples of these publications

* Yount, K.M., Cunningham, S.A., Engelman, M. and Agree, E.M. (2012), Gender and Material Transfers Between Older Parents and Children in Ismailia, Egypt. Journal of Marriage and Family, 74: 116-131. <https://doi.org/10.1111/j.1741-3737.2011.00881.x>
* Cunningham, S.A., Yount, K.M., Engelman, M. et al. Returns on Lifetime Investments in Children in Egypt. Demography 50, 699–724 (2013). https://doi.org/10.1007/s13524-012-0147-3
* Khadr, Z., Yount, K.M., 2012. Differences in Self-Reported Physical Limitation Among Older Women and Men in Ismailia, Egypt , *The Journals of Gerontology: Series B*, Volume 67, Issue 5, , Pages 605–617, <https://doi.org/10.1093/geronb/gbs066>
* Engelman M, Agree EM, Yount KM, Bishai D. Parity and parents' health in later life: the gendered case of Ismailia, Egypt. Popul Stud (Camb). 2010 Jul;64(2):165-78. doi: 10.1080/00324721003660511. PMID: 20373210.
* Yount, K.M. Gender, resources across the life course, and cognitive functioning in Egypt. Demography 45, 907–926 (2008). <https://doi.org/10.1353/dem.0.0034>
* Yount KM, Khadr Z. A biosocial model of medication use among older women and men in Ismailia, Egypt. J Biosoc Sci. 2006 Sep;38(5):577-603. doi: 10.1017/S0021932005026763. PMID: 16867207.