Educational level as a key predictor of human wellbeing

John R. Weeks
San Diego State University

WITTGENSTEIN CENTRE CONFERENCE

DEMOGRAPHIC ASPECTS OF HUMAN WELLBEING

November 2019
Acknowledgments:

This research was funded in part by grant number R01 HD054906 from the Eunice Kennedy Shriver National Institute of Child Health and Human Development ("Health, Poverty and Place in Accra, Ghana," John R. Weeks, Project Director/Principal Investigator). The content is solely the responsibility of the author and does not necessarily represent the official views of the National Institute of Child Health and Human Development or the National Institutes of Health. Additional funding was provided by Hewlett/PRB ("Reproductive and Overall Health Outcomes and Their Economic Consequences for Households in Accra, Ghana," Allan G. Hill, Project Director/Principal Investigator).
“I think I may fairly make two postulata”

- Good health is the single best (albeit not the only) measure of human wellbeing;
- Education is the reason why health is better now than ever before, and it is a key to all modern demographic phenomena.
To this, we add the caveat that:

Your wellbeing is a function of "who you are" (your own level of education); and "where you are" (the local resource base).
A person’s wellbeing is apt to be lower in this location…

…than in this location, even if levels of education are identical
We apply these ideas to Ghana, with a special focus on its capital city, Accra.
We interviewed 2,800 women selected in a multi-stage cluster probability sample--Women’s Health Survey of Accra (WHSA)--to obtain data about their health.

Height represents elevation, color represents vegetation (a good predictor of SES), blue points are WHSA respondents.
Self-Reported Health by Educational Level, WHSA II (2008-2009)
Self-Reported Health by Educational Level (WHSA II), by Level of Neighborhood Wealth (from data on possessions)
Hypertension (measured directly or evidenced by taking medication) by Educational Level, WHSA II (2008-2009)
Hypertension (measured directly or evidenced by taking medication) by Educational Level (WHSA II), by Level of Neighborhood Wealth (from data on possessions)
“I think she will stay. They usually stay if they do not die before the age of six”


One in fifteen children in Ghana dies before age 5
Percent of Women Who Had Lost at Least One Child, by Educational Level, WHSA II (2008-2009)
Percent of Women Who Had Lost at Least One Child, by Educational Level (WHSA II), by Level of Neighborhood Wealth (from data on possessions)
Measuring Child Mortality for the Whole Country:

- We answer the question of who will “stay” by examining data at the district level (2nd administrative level) using census data for 2010.
- The lack of a vital registration system means that we must estimate child mortality using indirect methods, in this case basing it on responses that women gave in the census to the number of children ever born and the number surviving as of the census date.
- Our comparison data were drawn from the Demographic and Health Surveys (DHS) conducted in Ghana in 1988, 1993, 1998, 2003, 2008, and 2014. Since these surveys include complete reproductive histories, including data about child deaths, we related the DHS estimates of under-five mortality (5q0 or CMR) to data collected in those surveys on the percentage of mothers of a given age who had lost at least one child.
- Thus, for each region at each survey date we calculated the proportion of mothers aged 25-49 who had lost at least one child, and we calculated the regression equation in which we predict 5q0 based on the proportion of mothers having lost a child.
The single most important predictor of child mortality at the district level, based on 2010 census data, was the percentage of women aged 25 or older with no education ($R = .83$), followed by the percentage of men aged 25 or older with no education ($R = .80$).
Discussion

Not surprisingly, our results support the importance of education in the health of women and their children. Having no schooling is especially detrimental. Living in an area such as the north of Ghana, where education is less available than in the south, is not good for your health.
At the same time, the location of women was less clearly a factor in Accra. This is at least partly because in Accra the lower-income neighborhoods have higher percentages of young migrants to the city and both health and education are related to age. Younger people are more healthy and better educated, but less able to afford the better neighborhoods.
More information about our research is online at:
https://ipc.sdsu.edu
And of course you will want to stay caught up on demography here.