First tentative results: please do not cite

Education and Adult health in Pakistan: a provincial perspective

Asif Wazir¹ Samir KC²

Extended abstract

The recent evidence shows that strong relationship between formal education and adult health exist, higher level of education is associated with lower level of mortality and disability. It is the first attempt to study relationship of education and adult health in Pakistan at provincial level, using sample data from World health survey. At national level, we find that education is negatively correlated with disability in both younger and older adults. Using the provincial level education-based differentials (Multi-state technique), we project the level of disability from 2010- 2060 to estimate the health and human capita l benefits obtained from investment in education. By considering the education in the projection, we find that, lower prevalence of disability in future and those scenarios with better education attainment lead to lower prevalence. It is evident that, the projections of adult health have illustrated the importance of including the education/health relationship in any human capital development planning.

Literature Review:

In recent years, the relationship between formal education and adult health considered as a measure of socio-economic status (KC et al. 2010; Aron Antonovsky 1967; Kitagawa and Hauser 1973). Kitagawa and Hauser (1973) showed that higher educated people have lower mortality (both male and female). In 21st century, the varieties of analysis based on western countries have examined the relationship between education and adult health and disability (Mackenbach et al. 1999, 2003). A very few studies have considered the education/mortality gradient in counties outside Europe and North America, particularly in South Asia because they have often been experienced dramatic advances in both education and health. Kurkure and yeole 2006) have identified a positive relationship between education and breast cancer among women in Greater Mumbai. It is the first attempt to study the relationship at micro level in Pakistan. Using the world health survey, we are try to attempt the construct prevalence rate at provincial level and using human capital population projection to project the disability prevalence into the future.

We are focused in these main points

• Impact of education on future public health or adaptive capacities.

¹ Research Scholar, International institute for Applied System Analysis (IIASA), Laxenburg, Austria, <u>wazir@iiasa.ac.at</u>; www.iiasa.ac.at

² Research Scholar, International institute for Applied System Analysis (IIASA), Laxenburg, Austria, kc@iiasa.ac.at

- As measure not only mortality and life expectancy, but we are also measure morbidity, disability and self assessed general health.
- The evidence supports the hypothesis of negative relationship between education and disability.

Methodology and data sources

We are used the world health survey for Pakistan, conducted in 2003. The several characteristics of WHS Pakistan are as follow:

- Household and individual questionnaire
- 18+ population
- Sample size of 6379 individuals.

Indicator

We construct ADL- mobility based on the following questions.

• Overall in the last 30 days, how much difficulty did you have with moving around?

The responses are categories as

- None
- Mild
- Moderate
- Severe
- Extreme/ cannot do

ADL-Self-care

- Overall in the last 30 days, how much difficulty did you have with selfcare, such as washing or dressing yourself?
 - o None
 - o Mild
 - Moderate
 - o Severe
 - o Extreme/cannot do

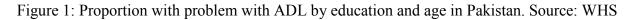
ADL-Disability: responses moderate, severe and Extreme/cannot do is considered disable. We are also disaggregating the sample by provinces and level of educational attainment (four levels) to explain the difference in disability status of individuals. We used the logistic regression to study the relationship between these variable. We assumed the disability as a dependent variable and age, sex and four level of educational attainment as explanatory variables.

Results and discussion

The projection methodology is divided into two steps, first we projection the total population by level of education. Secondly, we project the prevalence of ADL by using these educational attainment output. The steps are summarized as follows;

- Population projection by Age/sex/ four level of educational attainment for 2010-2060
- Trend Education scenario
- Age and sex profile of problem in ADL
- For total population
- For education specific total population
- By age 20-89
- By sex

Figure 1 shows that the proportion with problem with ADL by education and age in Pakistan. A black line shows the overall disability by age in Pakistan. The peoples are getting more disabled as they become old. On the other hand, the people with at least secondary education have face less disability in their daily life. Figure 2 represents the projection of proportion of disable people by level of education.



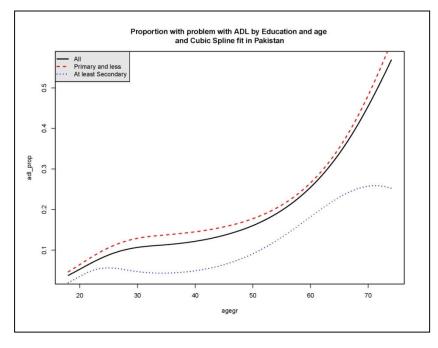
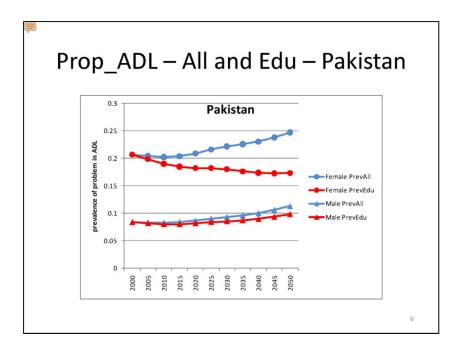


Figure 2: Proportion ADL with level of education by sex in Pakistan.



Conclusion

- Confirmed education/mortality gradient
- Better education leads the healthier life in the future
- Work on progress.....towards the provincial level in Pakistan