Correspondence

Letter by Nabi Regarding Article, “Attained Educational Level and Incident Atherothrombotic Events in Low- and Middle-Income Compared With High-Income Countries”

To the Editor:

I read with great interest the recent study by Goyal et al,1 who examined the association between attained educational level and incident atherothrombotic events in men and women in low- and middle-income countries (LMICs) compared with high-income countries. The results revealed a clear inverse association between higher education and incidence of cardiovascular events in men from high-income countries, a modest inverse association in women from high-income countries, a modest positive association in men from LMICs, and no association in women from LMICs. The authors should be applauded for conducting this research that compares different regions of the world with regard to educational gradient in cardiovascular events.

However, I believe that the authors may have overinterpreted their findings. The inference that “in contrast to HICs, higher attained educational level may not be protective against cardiovascular events in LMICs, particularly in women” is not supported by the data. For instance, there is absolutely no evidence that suggests an educational gradient (in either direction) in cardiovascular events in women from LMICs, even in the model adjusted only for age (hazard ratios in all education strata in Table 3 were ~1).

Similarly, the statement, “these data suggest that promoting higher attained educational level among women in LMICs may be insufficient to protect them from cardiovascular disease, and interventions should be developed to ensure that women of all groups have adequate access to preventive measures and health care” is also not supported by the data. I was very surprised by this recommendation, since it has been shown that educated individuals make better use of health-related information than those who are less educated, even in LMICs.2

There are at least 2 reasons that call for better interpretation of the findings by Goyal et al.1 First, the LMIC entity includes countries that are at different stages of urbanization and industrialization. Furthermore, recent evidence suggests that the health gradient between the well educated and less educated changes as a function of economic development and the increase in the overall level of income of a country.3 Thus, it is not impossible that grouping all these countries together might have obscured the real association between attained educational level in LMICs and cardiovascular events in this study.

Second, recent evidence suggests that cardiovascular risk factors and events in LMICs are not more common among affluent and educated individuals. The INTERHEART study (a global study of risk factors for acute myocardial infarction),4 one of the references cited by the authors, shows that low education is consistently associated with increased risk for acute myocardial infarction globally. What is more, a recent review5 on the association between socioeconomic status, of which education is a marker, and obesity in adult populations in developing countries has observed that the burden of obesity in developing countries tends to shift toward the groups with lower socioeconomic status as the country’s economic development increases.

To conclude, although cautious interpretation of the findings is preferable, this work remains an important contribution to an underresearched topic.

Disclosures

None.

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References

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