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Southern Africa is good place to research role of fetal malnutrition in chronic diseases

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Abstract

Editor — We are interested in Scrimshaw's allusion to populations in Latin America in his editorial on the relation between fetal malnutrition and chronic disease in later life. There, in the 1960s, despite a high prevalence of low birth weight, the prevalence of atherosclerosis and of myocardial infarction was low.

Keywords

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obesity in African women five times higher than that in men? Why does coronary heart disease remain uncommon despite the relatively high presence of risk factors? Why is colon cancer absent in rural dwellers and uncommon in urban dwellers?² During this period health has improved: in urban areas 95-97% of infants survive, and life expectancy is about 60 years.

As to the future, in the continent of Africa the huge majority of people will remain impoverished for decades to come. Even should prosperity supervene, the percentage of babies with low birth weight is unlikely to be reduced: it is still 13% in African Americans.⁴

Certainly, the acquisition of "womb to tomb" data on health and ill health must be intensified. Our precise knowledge of causes of degenerative diseases is still so limited. Thus for coronary heart disease, the most researched of diseases, known risk factors explain only half of the variance in its occurrence.⁵ There can hardly be a more favourable venue for research into the subject at issue than southern Africa, with its wide range of communities of different ethnic origin, circumstance, and urbanisation.

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2 Walker ARP. The nutritional challenges in the new South Africa. *Nutr Res Rev* 1996;9:33-65.

3 The aged ailing African [editorial]. *Lancet* 1973;ii:1472.

4 Current trends: infant mortality—United States, 1992. *MMWR* 1994;43:905-9.

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EDITOR—We are interested in Scrimshaw's allusion to populations in Latin America in his editorial on the relation between fetal malnutrition and chronic disease in later life.¹ There, in the 1960s, despite a high prevalence of low birth weight, the prevalence of atherosclerosis and of myocardial infarction was low. Also in the 1960s, in villages in Africa, there was a high prevalence of low birth weight but little rise in weight and blood pressure with age.² Diabetes was near absent and coronary heart disease totally so. Cancers related to diet, especially in rural areas, were uncommon. Old Africans died mainly of infections.³ In this context, the Barker hypothesis would seem to operate minimally.

Nowadays, little more than a generation later, in South Africa the prevalence of low birth weight in African babies is still high, at about 15%. In the cities, obesity in women, hypertension, and diabetes have higher prevalences in Africans than in the white population.² Why is the prevalence of