
LETTERS TO THE EDITOR

CORRESPONDANCE

The emerging international dominance of chronic diseases

Dear Editor,

The editorial by Ronald St. John in the most recent issue of the Journal (Volume 87, No.6, November/December 1996), entitled "Emerging infectious disease: Repeat of an old challenge", alerts readers to this important national and international public health concern, but his assertion that "infectious diseases are still the leading cause of death worldwide" is simply not true.

In fact, chronic non-communicable diseases (CNCDs) have superseded communicable, maternal and perinatal conditions as the leading causes of death in all regions of the world except Sub-Saharan Africa (SSA) and the Middle East. CNCDs now dominate in all ages over 14 years, except in SSA.

For example, in Latin America and the Caribbean (LAC), the ratio of deaths from chronic to infectious and parasitic diseases was 1.5 in 1985, projected at 3.4 in the year 2000, rising to 6.7 in 2015. In LAC, chronic diseases now account for 57.9% of mortality, with injuries an additional 9.8% (total 67.7%). These conditions also dominate estimates of years lost to disability, accounting for 54.2% of the impact, plus injuries 17.7% (total 71.9%). The majority occurs in persons younger than 45 years of age (men 62.7%, women 65%). Approximately 30% of this disability impact is among persons younger than 15 years of age.

Contrary to popular myth, therefore, the bulk of disease in the world today is due to chronic non-communicable diseases, more of which are found in developing as opposed to developed countries. These conditions (e.g., heart disease, cancer, diabetes, brain injuries) are not concentrated among the wealthy, but are actually more associated with poverty in all countries. Most of the burden is premature, and much is preventable. International recognition, at a level accorded to the infectious diseases despite their overall decline in most regions, would do a lot to promote

aid priorities that fully reflect the facts of the international health situation.

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REFERENCES

1. Murray CJL, Lopez AD (Eds.). Global Comparative Assessments in the Health Sector. Geneva: World Health Organization, 1994.
2. Pan American Health Organization. *Health Conditions in the Americas*, 1994 Edition. Volume 1. Washington, DC: PAHO, 1994 (Scientific Publication No. 549).

Response from author

My assertion that "infectious diseases are the leading cause of death worldwide", which is challenged by Dr. Frank White in the above letter, is taken directly from the World Health Organization's Annual Health Report for 1996.

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Qualitative and quantitative research methods

Dear Editor,

I am making a plea that the *CJPH* continue to publish a "range of research". Qualitative field research is relevant in a wide variety of public health activities where the distinguishing characteristic of the phenomena being studied involves a personal closeness and understanding between the public health practitioner and the client/citizen as an essential part of their interaction.

Criteria for assessing the validity and reliability of such field studies require that the investigators have:

- asked subjects if the observations about them are credible
- had prolonged engagement by the observers to minimize distortions caused by their presence

- conducted triangulations, which involved pitting against each other different data and theoretical interpretations, so as to provide crosschecks of observations and interpretations (Polgar S, Thomas SH. *Introduction to Research in the Health Sciences*. New York: Churchill Livingstone, 1995).

My colleagues involved with producing systematic reviews on public health topics are working with the Cochrane Health Promotion Field within the Cochrane Collaboration to develop criteria for research in this area. A number of issues are being pursued including development of criteria for assessing the impact when the health promotion intervention has multiple components. This work, like our paper on location of randomized controlled trials (RCTs) in the *CJPH*,¹ makes the plea that RCTs should be used in public health whenever possible.

Advocating for RCTs in public research, however, is not inconsistent with the fact that there are a number of reasons why research designs other than RCTs may be employed:

- Many variables are not amenable to experimental manipulation. For example, if the research question is concerned with gender differences in responses to a new vaccine, then gender cannot be manipulated by the researcher. Similarly, if the researcher is interested in age differences, the ages of the participants cannot be altered by him or her. Many such variables cannot be manipulated and hence cannot be incorporated in this way in an RCT.
- Often it is ethically inappropriate to investigate research questions using an RCT. For example, if a researcher wished to perform a study on the effects of smoking upon health, to do this in an RCT would require the experiment to randomly allocate participants to the smoking or non-smoking group, i.e., force people to smoke and others not to smoke. In RCTs using a non-intervention control group, valuable and effective intervention might be withheld from participants.
- RCTs are best used to study simple causal relationships between variables. Yet many human diseases and illnesses