principles" or "social determinants of health" strike us as romantic but impracticable notions. To quote Kingsley Davis from 1956,[8]

[It] seems clear that the great reduction of mortality in underdeveloped areas since 1940 has been brought about mainly by the discovery of new methods of disease treatment applicable at reasonable cost [and] by the diffusion of these new methods … The reduction could be rapid because it did not depend on general economic development or social modernization … Though in the literature on public health there is still great lip service paid to the necessity of general economic improvement and community welfare in the control of disease, the truth is that many scourges can be stamped out with none of this…

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References
1. Jha P, Mills A. *Improving health of the global poor.* The report of Working Group 5 of the Commission on Macroeconomics and Health. Geneva and London: London School of Hygiene and Tropical Medicine; 2002.
2. Global IDEA Scientific Advisory Committee. Health and economic benefits of an accelerated program of research to combat global infectious diseases [editorial]. *CMAJ* 2004;171(10):1203-8.
3. Measham A, Rao K, Jamison DT, Wang J, Singh A. Reducing infant mortality and fertility, 1975-1990: performance at all-India and state levels. *Econ Political Wkly (India)* 1999;34(22): 1359-67.
4. Jha P. Avoidable mortality in India: past progress and future prospects. *Natl Med J India* 2002;15 (Suppl 1):32-6.
5. Pison G, Trape JF, Lefebvre M, Enel C. Rapid decline in child mortality in a rural area of Senegal. *Int J Epidemiol* 1993;22(1):72-80.
6. Zatonski W, Jha P. *The health transformation in Eastern Europe after 1990: a second look.* Warsaw: M. Sklodowska-Curie Memorial Cancer Center and Institute of Oncology; 2000.
7. Nagelkerke NJS, DeVlas SJ, MacDonald KS, Rieder HL. Tuberculosis and sexually transmitted infections. *Emerg Infect Dis* 2004;10:2055-6.
8. Davis K. The amazing decline of mortality in underdeveloped areas. *Am Econ Rev (Pap Proc)* 1956;46(2):305-18.

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The study of NOELs

As a member of the Biological Lecturers of Western Ontario (BLOW), I must respond to the study by Kenneth Rockwood and colleagues.[1]

I was frankly appalled at the aspersions cast upon the venerable tweed jacket. I can state categorically that while lecturing over many years, I have observed frequent NOELs (nod-off episodes per lecture) in my classes — whether or not I was wearing tweed! Nor should the authors seek to discredit our little friends, the insect-like creatures (ILC), who so nobly inhabit our tweed vestments.

The authors know (or ought to know) that there have been no well-defined, published studies (single-, 1½- or double-blinded) linking ILC dander to cerebral dysfunction. In fact, I am aware of a preliminary report (personal communication) using an innovative "triple-blinded" study design (both researchers and subjects were blinded, while the ILCs were fitted with bilateral, opaque compound-eye patches) that suggests for the first time that the dander is actually linked to vasodilatation in the basal ganglia, corpus callosum and elbows of those exposed. The implication for the study of upper-extremity, crossover movement disorders in tweed-wearing BLOWs is, of course, enormous.

Blame for NOELs should be placed squarely where it belongs: on the backs (or more precisely, on the back of the necks) of those in our audiences who persist in nodding off.

My own personal theory is that this tendency is actually due to hyperactive stretch reflexes (HSR) in the posterior paracervical musculature (PCM) of those in the medical community who are given to nodding off. Therefore, rather than sacrificing BLOWs or ILCs, it might be far more beneficial to sacrifice a few of the more compulsive nodders among our medical students — perhaps circumventing the thorny issue of ethical approval. Information thus obtained might allow the scientific evaluation of the twitch capabilities (TC) of the affected posterior muscle spindles (PMS).

Establishing the appropriate control group for this study will of course be critical. I agree with Rockwood and colleagues that it would be most appropriate to use as control subjects physician-blaming nodders. Perhaps a prospective, longitudinal trial should be undertaken to determine whether administrators, politicians or lawyers would be best suited. Ideally this study would last for 20 years or more; if well publicized, it could have the added benefit of reducing the frequency of nodding off within those groups. Yet such an outcome may be pure fantasy if the protocol fails to distinguish between simple nodders and those administrators and politicians who can sleep with open eyes and still heads (OESH). Under these circumstances any available data would be classed as superficial, unnecessary clinical knowledge (SUCK).

Finally, funding for such a trial could be pursued through the Canadian Medical Protective Association — at arms' length of course, lest any of the associated tweed-wearing lawyers (TWL) also demonstrate upper-extremity, crossover movement disorders during their closing arguments.

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Reference
1. Rockwood K, Hogan DB, Patterson CJ. Incidence of and risk factors for nodding off at scientific sessions. *CMAJ* 2004;171(12):1443-5.

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Kenneth Rockwood and colleagues[1] are to be congratulated for highlighting the problem of nodding off during scientific sessions, an unfortunate condition common among doctors