opposite: While treatment and prevention are both important and should support each other, especially in the third world with great scarcity of resources, major public health achievements can take place only as a result of population based prevention.

The global problem is huge: Much firm evidence exists for prevention. It is time to act—with sound theoretical base and sufficient preventive dose—from demonstrations to national policy actions—not exporting, but working in global partnership—and also putting one’s heart into the action!

References

Developing effective and affordable models for non-communicable disease prevention and control

From FRANKLIN WHITE

Sir—The editorial on ‘Exporting failure? Coronary heart disease and stroke in developing countries’, although provocative, is stronger on rhetoric than on scientific reasoning. For example, just because ‘one enthusiast’ made an inaccurate and refutable statement, this should not be a cause célèbre. Critical reviews should be more constructive than this.

An assessment of trends reveals that non-communicable diseases (within which cardiovascular disease is a major category) are increasingly important, and indeed most public health professionals would agree that something should be done about it. The Burden of Disease study concluded that by 1990 non-communicable diseases (NCD) had overtaken communicable diseases as the leading cause of mortality worldwide (56% of all deaths, not including injuries which accounted then for 10%, the remaining 34% attributable to communicable diseases). By year 2020, NCD were projected to account for 73% of global mortality, with communicable diseases declining to 15%. The only region not yet heavily affected by this double burden is sub-Saharan Africa. This analysis of trends, incorporating the DALYS methodology, has been widely disseminated.

Other questionable assertions are also made, for example: ‘The prevention of cardiovascular disease traditionally relies on the control of risk factors among individuals as a major element of any strategy. Such approaches—generally termed health promotion—are well illustrated by ... the Ottawa Charter’. On the contrary, the Ottawa Charter (1986) was ground breaking in its advocacy of healthy public policy, which the editorial later extols as the preferred approach. The Charter makes no mention anywhere of ‘risk factors’. The following is a brief extract: ‘The fundamental conditions and resources for health are peace, shelter, education, food, income, a stable eco-system, sustainable resources, social justice and equity’.

The editorial later digresses into the central role of poverty in determining health and disease. Most public health professionals would agree that addressing the root causes of poverty would likely do more for the health of the poor in all countries, than any number of specific health programmes. However, beyond advocacy, our role requires that we must also develop and test a variety of options for disease control and prevention. The decision framework must be evidence-based, and take into account disease burden, prevention effectiveness, cost effectiveness and affordability.

Regarding the North Karelia project, the editorial takes pains to show that similar declines occurred in the comparison county. However, readers also might like to know more about what happened in Finland, in particular the important finding that the majority (about 75%) of the major decline in heart disease mortality (73% reduction over 25 years in North Karelia itself) was explained by reductions in three risk factors: smoking, total cholesterol concentration over five years in association with changes in fatty acid composition of cooking oil in Mauritius: cross-sectional survey. Br Med J 1996;313:1044–46.


would serve a useful purpose, one could promote flaws in the
work of John Snow.

Under the heading 'So, what do we do?' the editorial cites
the 53rd World Health Assembly resolution on the need for a
national policy framework. However, the resolution is fully
consistent with principles outlined in several earlier statements,
including the Alma Ata Declaration (1978). Coincident with the
Ottawa Charter (1986), for example, Canada released a policy
framework entitled ‘Achieving Health for All’. According to
its website, CINDI provides participating countries with such
a framework. Frameworks themselves of course are only a
beginning, and a scientifically sound and managerially feasible
approach is essential in order to transform them into practical
actions. While the CINDI network process has been ongoing
for many years (and now includes 24 countries), since 1995,
the Pan American Health Organization (PAHO/WHO) has been
promoting a similar integrated model for NCD programming
(CARMEN), piloted by Chile. CARMEN differs in emphasis from
CINDI, in the context-appropriate inclusion of diabetes, cervical
cancer and injury prevention, which are important issues for
Latin America and the Caribbean. Similarly, the Mauritius
project is a member of the INTERHEALTH group of projects,
another supportive network, similar conceptually and linked to
the other networks. The first step in all these models is a policy
framework.

The potential of such frameworks for NCD prevention and
control is broader than the editorial suggests: many risk factors
and underlying determinants for coronary heart disease and
stroke are equally applicable to other NCD outcomes. Measures
such as tobacco control, dietary and physical fitness approaches,
education regarding care seeking and even promoting quality of
care where service is already being provided, are scientifically
sound and potentially feasible in many developing countries.

Lessons from the now many CINDI, CARMEN and INTERHEALTH
projects around the world are valuable in helping to find a way
forward in the prevention and control of NCD.

From ROBERT BEAGLEHOLE

Sirs—I welcome your timely and perceptive views on the
prevention and control of the increasing burden of cardiovascular
disease in developing countries. Though your comments are
particularly addressed to the problems facing developing
countries, they are also relevant for wealthy countries. Despite
the limited successes in controlling the CVD epidemics in coun-
tries such as Australia, the USA, New Zealand and western
Europe, these epidemics are completely uncontrolled in many
Eastern European countries and CVD are still among the lead-
ing causes of premature death in most wealthy countries.

It is timely to encourage the development of surveillance
systems for the major CVD and especially their risk factors.
Estimates of the global burden of disease will be improved by
these data. The surveillance data are also needed to help coun-
tries develop, implement and evaluate their prevention and
control programmes. Several carefully chosen sentinel sites are
required in each region. Ideally these surveillance sites should
be based on public health training institutions. In most parts of
the world these institutions are vulnerable and need long-term
external support, especially for developing career pathways and
research experience of the junior faculty. Surveillance projects
could usefully connect these institutions to the communities
they serve and to the ministry of health. Critical decisions need
to be made about the choice of risk factors to be measured and
when to include disease endpoints. There is a danger in
overloading new systems and above all the utility of data to
policy and action needs to be demonstrated.

In terms of programmes and policies, there can be no serious
argument with the need to focus on the population approach to
primary prevention. In an ideal world, with unlimited resources,
covering the full spectrum of preventive strategies would be
useful. But nowhere do we have more than pitiful resources for
prevention. It behoves us to make the best use of these resources.
Working towards environmental change is the logical place to
start. It is difficult to convince our professional clinical colleagues
of the importance of this strategy and our lay constituency needs to
be actively involved in debates on the use of limited resources.

The primary goal is to shift the risk factor distributions towards
the left. Fortunately, we have evidence that this is possible
and likely to be highly effective in reducing the burden of
CVD. Furthermore, we know that the major risk factors are
qualitatively the same in all regions of the world and, that

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