Tackling the Health-Poverty Nexus: Primary Care Medicine and Intersectoral Health Action

Namrata Kotwani, BA and Marion Danis, MD

Department of Bioethics, National Institutes of Health, Bethesda, MD, USA.

J Gen Intern Med 22(11):1632-3

DOI: 10.1007/s11606-007-0378-y

© Society of General Internal Medicine 2007

Appalled by the callous indifference of the Prussian bureaucracy and public health authorities during the simultaneous famine and typhus epidemic that ravaged Silesia in 1847, Rudolf Virchow concluded that the ills of the poor could not be cured solely by medicines and doctors but by ensuring full education, freedom, and prosperity of the entire population. Virchow's *Report on the Typhus Epidemic in Upper Silesia* emphasized that the ignorance and apathy of the poor were not moral failings but an inevitable consequence of centuries of systematic exploitation and persistent deprivation.

The intuitions of this prominent Prussian biomedical scientist and vociferous proponent of social medicine of the nineteenth century have been indisputably confirmed in the modern public health literature. In developing countries, poverty makes people more vulnerable to disease. The WHO estimates that diseases associated with poverty account for 45% of the disease burden in the poorest countries. Out of the current world population of about 6 billion, approximately 3 billion people live below the poverty line on less than \$2 per day, and an estimated 1.2 billion individuals live on less than \$1 per day. Infectious diseases kill more than 11 million people a year, virtually all of whom reside in low- and middle-income countries. Even in developed nations, a socioeconomic gradient in disease, health outcomes, health services utilization, and life-expectancy is apparent. For instance, the poor die 5–10 years before the rich in Finland, The Netherlands, and UK—all wealthy nations with a satisfactory health care infrastructure.

The most remarkably sophisticated health care delivery systems cannot confront the diseases of poverty in isolation. In 1976, the Declaration of the International Conference on Primary Health Care in Alma Ata recognized that robust population health could only be attained when a comprehensive and universally accessible primary health service coordinated its actions with related sectors of national and community development, especially agriculture, animal husbandry, food, industry, education, housing, public works, and communications. This approach is hardly surprising—the biggest strides in improving life expectancy and health status in the USA and Britain were made at the end of the nineteenth century before effective medical interventions such as safe surgeries, penicillin, dialysis, and hospital intensive care units

were available. Population health improved dramatically because clean drinking water, better sanitation and hygiene, improved nutrition, female education, higher wages, and labor legislation transformed hitherto squalid living and exploitative work conditions. Recently, the examples of Costa Rica, Sri Lanka, and the Indian state of Kerala show that major health improvements in poor economies can be accomplished if societies remain committed to equitable and astute social investments.

This month, 208 scientific journals are publishing thematic articles on poverty and human development. We take this occasion to suggest that primary care physicians may be able to contribute to initiatives that harness useful synergies between economic development, poverty reduction, and health promotion. Recently, several programs have innovatively addressed the nexus between health and poverty by coupling medical care with interventions that directly confront the socioeconomic influences on health. For instance, general physicians in the economically distressed seaside town of Blackpool, England, found that many of their patients were afflicted with sleeplessness, depression, and substance abuse problems related to indebtedness and financial insecurity. To address the medical, social, and psychological problems stemming from poverty, practitioners collaborated with a charitable organization, Citizens Advice Bureau, to create a “one-stop shop.”¹ Patients were referred to advisors on premise who assisted them in claiming a variety of benefits such as disability allowances, elder care supplements, and unemployment benefits available in the welfare system.

Intersectoral health programs that directly combine poverty reduction strategies with health promotion strategies are increasingly common in developing countries. Pan American Health Organization's productive and healthy municipalities initiative combines an improvement program for livestock production directed at small producers with rural primary health care. Since small farmers and livestock producers are especially vulnerable to morbidity and disability caused by neglected diseases such as Chagas disease and neurocysticercosis, the initiative includes a prevention and primary health services program tailored for producers and agricultural workers.² BRAC (formerly Bangladesh Rural Advancement Committee) is a microfinance organization for the poor that has recently developed a sustainable livelihood initiative for ultra-poor women. Participants receive a monthly ration of wheat for a period of 18 months, vocational training, along with access to BRAC's established credit facilities.³ As social discrimination and vulnerability to illness has traditionally impeded the economic independence of ultrapoor Bangladeshi women, the program links participants to BRAC's essential health care services package, which includes an annual check-up, basic curative care, and family planning education. The women also

Published online September 25, 2007

undertake human rights and legal education courses that empower them to remedy social injustices within their communities. Such programs recognize that optimal human development and voluntary participation in economic and political activities is possible only when individuals are guaranteed access to a broad array of instrumental freedoms such as health and education.

Although most clinicians are not affiliated with intersectoral health initiatives, assessing patients' socioeconomic status during clinic visits and making referrals outside the standard medical setting is an approach that deserves greater consideration. We should study the acceptability and effectiveness of brief intake questionnaires that focus on education and training, employment, and financial status that may be used as a basis for recommending additional supportive services. Although many disadvantaged patients are often aware that their medical problems are exacerbated by their social and economic circumstances, physician-directed conversations may help them to translate this awareness into solutions that promote health and well-being. We may find that referral to social welfare programs such as supplemental nutritional services, legal aid, community colleges, career counselors, employment agencies, homeless shelters, language training sites, community libraries, and other advocacy organizations for the underserved may be as effective as drugs and devices as part of the therapeutic armamentarium.

Adult primary health care researchers can also actively create a research agenda that might also assess strategies that combine conventional therapies and appropriate socioeconomic interventions to secure the well-being of poor individuals. Recently, a Hungarian special unit for tuberculosis treatment that targets homeless and alcoholic tuberculosis (TB) patients has dramatically curbed recidivism rates for disease and substance abuse by introducing a comprehensive program of recovery. The program includes therapy for alcohol abuse and a rehousing program, thereby, addressing the most intractable determinants of the disease—substance abuse and homelessness. Similar interventional studies can significantly enrich current scientific literature that provides only weak evidence on the impact of socioeconomic interventions on clinical outcomes.

Incorporating intersectoral collaborations within a community-based module in medical education may be a promising route to train PCPs attuned to confronting poverty within health care delivery systems. An imaginative collaboration between the residents of the economically deprived Wilcox and Lowndes counties and nursing instructors and students from Auburn University at Montgomery (AUM) may serve as a useful template in this regard.⁴ The partnership between the community and the AUM started with the Rural Elderly Enhancement Project (REEP), which aimed to provide better in-home care for the aged and devise a community-based curriculum for AUM nursing students. Because the county had essentially no access to running water, REEP managers determined that community health would benefit most from a new public water system. While new water towers were constructed, community volunteers repaired homes for the elderly, and many completed a 10-week course to become community health advocates. Advocates focused on the prevention and management of chronic diseases such as hypertension and cardiovascular disease (CVD), and emphasized the importance of healthful eating and physical exercise programs within their communities. Recreational opportunities and leadership activities for

youth and adults that were established as a result of the community-nursing school partnership served to prevent violence, crime, and substance abuse among young residents. The REEP also routed community volunteers toward higher-paying employment locally by training them as certified home health aides at AUM. REEP exemplifies a durable collaboration that provides both longitudinal primary care and engenders health-seeking behaviors within a disadvantaged community.

While we have argued for an innovative role for primary care providers in addressing poverty, we do not mean to overlook the role of high-quality primary care that can profoundly influence the health status of low-income patients by assiduously providing standard treatment, adhering to quality-improvement guidelines, performing recommended preventive care activities, deploying the plethora of evidence-based medical interventions and outreach strategies specifically designed for impoverished populations, and providing patient-centered care. To facilitate such care, the managed care model must take into account the time required for such efforts. Professional medical associations may be better suited to press for physician payment reform on behalf of their members. Furthermore, professional associations can advocate for their disadvantaged patients by examining research priorities, supporting expansion of health services for the poor, calling for public funding of effective social services, and formulating clinical practice guidelines for resource-poor settings.

Although practitioners cannot alter the socioeconomic circumstances their patients face, effective primary care can reduce avoidable ill health and mortality among impoverished adults. Unequivocal public support for general redistributive efforts that might produce substantive improvements in population health outcomes appears to be politically infeasible at this time. Thus, intersectoral collaborations focused around adult primary care may be the most pragmatic solution to secure good health—a constitutive element of human development and an indispensable tool to tackle poverty.

Disclaimer: The views expressed in this paper are those of the authors and not necessarily a reflection of the policies of the National Institutes of Health or the Department of Health and Human Services.

Corresponding Author: Marion Danis, MD; Department of Bioethics, National Institutes of Health, Building 10, Rm. 1C118, Bethesda, MD 20892-1156, USA (e-mail: mdanis@nih.gov).

REFERENCES

1. Ziglio E, Barberosa R, Charpak Y, Turner S, eds. Health Systems Confront Poverty. Copenhagen: World Health Organization; 2003.
2. Holveck JC, Ehrenberg JP, Ault SK, et al. Prevention, control, and elimination of neglected diseases in the Americas: pathways to integrated, inter-programmatic, inter-sectoral action for health and development. BMC Public Health. 2007;7:6.
3. Matin I, Yasmin R. Challenges of scaling-up a program for the poorest: BRAC's IGVGD program. Paper presented at the Global Conference on Scaling Up Poverty Reduction, 2004. Shanghai, People's Republic of China. <http://www.info.worldbank.org/etools/docs/reducingpoverty/case/109/summary/Bangladesh%20BRAC%20Microfinance%20Summary.pdf>.
4. W.K. Kellogg Foundation. Health program puts community in charge. Accessed August 2007 from <http://www.wkff.org/>.