Reconstruction of health care in Afghanistan

Sir—In you Dec 15 editorial,[1] on reconstruction of health care in Afghanistan, you mention that women's health is a clear priority. Our experience in tuberculosis control in Afghanistan strongly supports this statement and provides insights into the health condition of Afghan women.

Tuberculosis in Afghanistan is a serious public-health problem, with an incidence of 325 per 100 000 population;[2] 70 000 new cases are expected every year. National data collected by WHO between 1997 and 2000 show that 67% of all registered smear-positive cases are women. The number of smear-positive women registered in Afghanistan is higher than men in every region for every age-group except older than 65 years (figure). In the rest of the eastern Mediterranean region, women account for 40% of the total cases notified, and worldwide represent only 37%.

The higher proportion of women in Afghanistan cannot be explained by sex differences in the general population, since women comprise only 48% of the total Afghan population.[3] It may be related to other features, such as factors predisposing women to infection, different access to health care for the two sexes, and misreporting or under-reporting.

Among the factors predisposing to infection, overcrowding and malnutrition may play an important part. Traditionally, Afghan women generally stay in one section of the house, reportedly with poor ventilation and heavy smoke produced during cooking. Malnutrition is common among women. The limited data available show a body-mass index of less than 17·0 kg/m^2 in 21% of women aged 18–50 years in Kabul.

Women's access to health care has been limited because of severe shortages of female health workers and restrictions on travel. Stigma associated with tuberculosis is common. These factors have led to women refraining from seeking care, and accessing tuberculosis facilities late with more severe disease. This delay may have facilitated transmission of *Mycobacterium tuberculosis*.

The weakness of the reporting system could also account partly for the sex differences. Private-sector health care is used mainly by men, whereas women access the cheaper public sector. Since tuberculosis patients in the private sector are not reported, a high number of male cases may not enter the national statistics.

All these elements are not conclusive and require further research. However, they do suggest that tuberculosis in Afghan women is intrinsically linked to social, economic, and political constituents. As WHO have noted, health, at this crucial moment, is the key to the future stability and socioeconomic development of Afghanistan. Therefore, the new government, with the help of the international community, should concentrate their efforts on seriously tackling the problem of tuberculosis, especially in women. As the theme of the World Tuberculosis Day, 2002 (stop tuberculosis, fight poverty) underlines, confronting this disease is one important way to achieve greater prosperity in Afghanistan.

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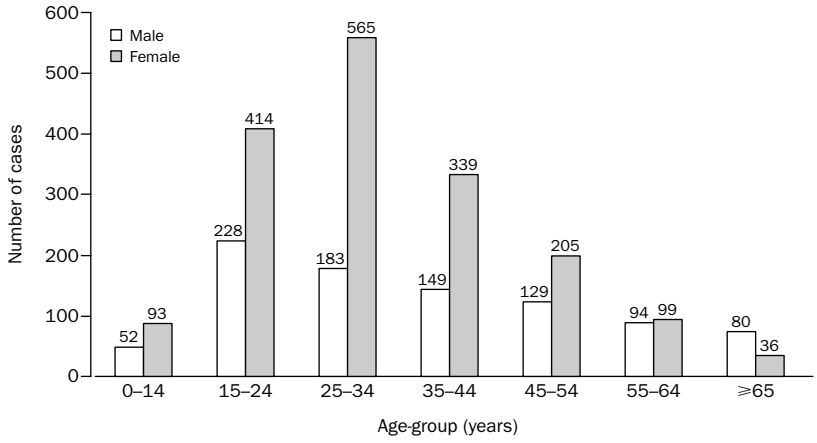

Age distribution of smear-positive tuberculosis cases in areas of Afghanistan, 2000, that use directly observed therapy short course system,

1 Editorial. Reconstruction of health care in Afghanistan. *Lancet* 2001; **358:** 2009.
2 Global tuberculosis control report (WHO/CDS/TB/2001·287). Geneva: WHO, 2001.
3 The world's women 2000: statistics and trends. New York: United Nations Statistics Division, 2001.

Sir—You discuss reconstruction of health care in Afghanistan.[1] I believe various lessons can be learned from other postconflict settings.

Rwanda has had to rebuild its health system entirely. The 1994 war and genocide in Rwanda led to severe destruction or harm of 90% of infrastructures, loss of more than half of qualified human resources, complete dismantlement of administrative capacities, and a huge burden of diseases. The government of Rwanda adopted a global reform of the country's health system and developed integrated care and health districts as reconstruction units.

The country was separated into 35 health districts providing integrated care to the population. Massively funded by external aid, the implementation of the reformed health system led to some rapid results for accessibility and performance. In 1999, the population of Rwanda was about 8 million people. There was one health centre for every 23 000 inhabitants, and one first-reference hospital for about every 250 000 inhabitants. The rate of use for curative care was 0·25 new cases per inhabitant yearly; immunisation coverage reached 40–60% according to antigens, and antenatal care coverage reached 65%.[2] More than 60% of local health committees were in place. Given the huge lack of human resources, results were satisfactory when compared with sub-Saharan countries.[3]

There are several key elements that could be applied in Afghanistan. First, the Ministry of Health must define a rational and equitable basis on which infrastructure, and human and financial resources should be allocated. Second, needs assessments should be based as closely as possible to community expectations. Third, the Ministry of Health needs to set up assessment procedures, especially for health-system performances in defined populations.

Fourth, important flows of external aid need to be controlled to avoid dispersion of resources, which will already be scarce. Provision of an overarching strategy for health-care delivery is crucial. This strategy will avoid agencies organising local health services according to their own guidelines, which will not necessarily correspond with the government's will.

Fifth, health-district implementation can constitute a useful initial step

towards decentralisation. Health committees implemented at health-centre, hospital, and district level could become the starting point for development committees or local governments in charge of social or economic matters. As members are elected, the committees require involvement of all actors, including women, whose responsibilities in organising Afghan society could be consequently increased.

Situations are not comparable throughout the world. But, because of the acuteness of the situation, the Afghan authorities should look at as many experiences as possible to give themselves as many chances as possible to succeed.

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1 Editorial. Reconstruction of health care in Afghanistan. *Lancet* 2001; **358:** 2009.
2 1999 Annual Report. Kigali: Ministry of Health, 2000.
3 Evaluation of the implementation of the global strategy for Health for All by 2000: a selective review of progress and constraints (1979–1996). Geneva: WHO/HST/98.2, 1998.

Sir—On Dec 11–13, 2001, I attended the non-governmental organisation conference on reconstruction of Afghanistan, whose health system you discuss,[1] in Tokyo, Japan. Afghan experts of public health, agriculture, education, landmines, and so on attended. The conference's main aim was to identify real needs at grass root level to be presented at a ministerial-level meeting on reconstruction assistance for Afghanistan.

The 23 years of conflict has severely damaged the health system and the political, social, and economic infrastructures in Afghanistan. Although there are no reliable statistics since Sept 11, 2001, people's health status is obviously extremely poor. There are many direct and indirect causes for the devastated health situations.

First, the long-lasting war has led to deaths and disability from physical traumas. Second, many people have developed psychological trauma.[1,2] Increased use of narcotic drugs, which are domestically available in Afghanistan, has also contributed to worsening mental health. Third, malnourishment has risen because of food shortage. Fourth, many kinds of infectious diseases, such as tuberculosis, malaria, leishmania, and helmintic diseases have become uncontrollable. Also, many suspected cases of HIV infection and AIDS have been reported; this is plausible given the reported incidents of sexual violence, prevalent narcotic drug use, and poverty, although no seroprevalence data are yet available. Fifth, the conflict and cultural barriers have limited women's accesses to public-health facilities, even obstetric care. Consequently maternal mortality is extremely high. All these features are inter-related.

With the assumption of political stability and security in the near future, we discussed how the Afghans could emerge from this health catastrophe. Provisions of food, water, shelter, and emergency care for physical trauma are needed immediately. As the next step, from emergency measures to reconstruction, provision of basic health services, including mental health care, should be guaranteed to all individuals, irrespective of sex, religion, and ethnic orgin. One obstacle is the critical shortage of health staff at all levels. Currently there is one physician per 50 000 people,[3] and only eight psychiatrists in the entire country.[2] Therefore, to achieve universal access to basic health-care services, manpower must be increased. Particularly, psychiatrist, psychologists, obstetricians, and gynaecologists, especially female health professionals, need to be trained.

We discussed keys to successful implementation, such as international organisations' attitude and the necessity of linkage between sections in health and agriculture, education, landmine clearance, and so on. Through drawing on experience of humanitarian relief activities in Cambodia, we decided to add two points into the appeal: any international agencies and organisations, bilateral and multilateral agencies, and non-governmental organisations should refrain from inflating salaries so that the local price level can be maintained; and headhunting by the agencies should be prohibited and partnership with local agencies sought so that the local people can establish a sustainable foundation by themselves for their future.

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1 Rasekh Z, Bauer HM, Manos MM, Iacopino V. Women's health and human rights in Afghanistan. *JAMA* 1998; **280:** 449–55.
2 WHO. The invisible wounds: the mental health crisis in Afghanistan. Geneva: WHO Central Asia crisis unit, November 6, 2001. www.who.int/disasters/repo/7399.pdf (accessed Dec 26, 2001).
3 WHO. A population at risk: communicable diseases in the Afghan crisis, Geneva: WHO Central Asia crisis unit, October 29, 2001. www.who.int/disasters/repo/7391.pdf (accessed Dec 26, 2001).

An old meaning of the word apoptosis

Sir—After the foundation of the cell theory by Schleiden and Schwann, the embryologists of the 19th century focused on the phenomenon of programmed cell death. More than 100 reports were published in that century.[1]

Nevertheless, as we all know, the term apoptosis was not introduced until 1972, when John Kerr, who was studying ischaemically induced hepatic cell death, moved to Aberdeen to continue his investigations with the team of Alastair Currie.[2]

That same year, their findings were published, with help from Currie's PhD student, Andrew Wylie, in a report for the *British Journal of Cancer*. In it, they coined the term apoptosis, from the Greek (apo plus ptosis), meaning falling off, in the same way that fruit falls from a tree when it becomes ripe.[3]

We were, therefore, astonished to see, when revising a Spanish dictionary of medicine, surgery, and auxiliary sciences from the 19th century, the term apoptosis.[4] The book was written in 1878 by J Cuesta y Ckerner who, at that time, was the founder, director, and owner of the newspaper *La Correspondencia Medica*.

The word apoptosis appeared nearly 100 years before it was coined by Kerr, Wylie, and Currie, but more surprising is its meaning. According to the author, apoptosis is nothing more than the act of easing or loosening a bandage.

How would we have explained to Ckerner that a century later, so many hours of molecular study and laboratory practice and years of multidisciplinary investigation, would be necessary to learn correctly the mysteries and secrets related to what he considered the art of slackening a bandage? He simply would not have believed it.

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1 Clarke PG, Clarke S. Nineteenth century research on naturally occurring cell death and related phenomena. *Anat Embryol (Berl)* 1996; **193:** 81–99.
2 Cummings MC, Winterford CK, Walker NI. Apoptosis. In: Sternberg SS, ed. Histology for pathologists. 2nd edn. New York: Lippincott Raven, 1997: 3–24.
3 Kerr JFF, Wylie AH, Currie AR. Apoptosis: a basic biological phenomenon with wide-ranging implications in tissue kinetics. *Br J Cancer* 1972; **26:** 239–57.
4 Cuesta y Ckerner J. Vocabulario tecnoftico de medicina, cirugia y ciencias auxiliares, 1st edn. Madrid: Iniprenta de Gregorio Juste, 1878.