



Impact of long-term political conflict on population health in Nepal

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Nepal is a small Himalayan kingdom sandwiched between India and China. With a population of 25 million, of whom 90% live in rural areas, it ranks as one of the poorest countries in the world.¹ In 2001 Nepal's gross domestic product (GDP) was US\$236 per capita, and nearly two-fifths of the population lived on less than a dollar a day.¹ The socioeconomic situation has been worsening since 1996 under the stress of frequent natural disasters and political conflict.³ In 1990 Nepal switched from monarchic rule to multi-party democracy, raising hopes for an economic revival. But this did not happen. Six years later the Communist Party of Nepal (CNP) launched the Maoist movement, mostly in response to the failure of the government to improve living conditions in the rural parts of the country. That conflict has now spread to most of the 75 provinces — including the capital, Katmandu — and has so far claimed almost 20 000 lives.² It has disrupted all aspects of Nepalese life, including its fragile health care system.

Health care in Nepal is delivered through hospitals in the urban areas, and through health centres and health posts in the rural areas.³ The Maoist-armed insurgency has made provision of adequate health care services to the rural population very difficult. According to the Ministry of Health, hundreds of community health posts have been destroyed, dozens of health care workers have lost their lives, and many have fled their posts since the beginning of the conflict.⁴ Delivery of health services has been completely disrupted in the far western regions and severely restricted in other parts of the country.⁵ In addition to the lack of health care providers at peripheral health care facilities, the distribution of essential commodities and drugs has been extremely difficult or impossible, and cold-chain delivery of vaccines has not been sustainable.⁴

The Maoist motto of "Destruction before construction" is inscribed on walls all over the country.⁶

Women and children are particularly vulnerable to the effects of the conflict.

The woman had visited the health post with her sick baby. The health worker gave her some tablets and told her to give them to the child after meals. Two days later, the health worker asked her how the baby was doing. "I haven't been able to give her the medicine because you had told me to give it after food," the woman replied. "I have no food at home, and we haven't eaten for days."⁷

There are very few men in the villages in Rukum and Rolpa region, the hotbeds of the insurgency in the mid-western heartland of Nepal. They fled the conflict, leaving women to face the aggression of the Royal Nepal Army, the harassment by the police and the Maoist recruitment methods.⁸ As the Maoist rebels' policy is to have at least 2 women guerillas in each of its squads, women comprise more than a third of their ranks today. Many children have been killed in the crossfire. More have been abducted by Maoists to become child soldiers.⁹

According to the Save the Children mothers' index scale, Nepal ranks 100 out of 117 countries.¹⁰ Because of the high maternal mortality rate of 539 per 100 000 live births, life expectancy for women in Nepal in 2002 was 60 years — the lowest in the South-Asian region.¹¹ In rural areas, over 90% of births occur at home, and 53% of women cannot read.¹² The healthy life expectancy at birth for men was 59.9 years in 2002.¹¹ Over half of children below 5 years of age have stunted growth, and 47% are underweight.¹³ The estimated infant mortality rate is 64 per 1000 live births, the neonatal mortality rate is 39 per 1000 live births, and the perinatal mortality rate is 47 per 1000 births.¹⁴ Although children under 5 represent only 14% of the total population, they account for 50% of all lost disability-adjusted life years (DALYs) in Nepal.

The disparities between rural and urban areas are con-



Women left alone after the men have gone.



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Children at work.

siderable. The under-5 mortality rate in urban areas is 93.6 per 1000, whereas in rural and mountainous regions it increases to 147 and 201 per 1000, respectively.¹⁵ There are also differences in immunization coverage and in nutrition. Infectious diseases, nutritional disorders, and maternal and perinatal diseases contribute to nearly half of all deaths and two-thirds of all DALYs in Nepal.¹⁶

There are about 3200 physicians in Nepal, but their number per 100 000 population is only 4.¹ In remote areas the ratio is even greater: only 1 physician per 150 000 people.

As a result of the conflict, nearly 200 000 people have been displaced.¹⁷ The massive displacement has contributed to the propagation of HIV infection and AIDS. The Joint United Nations Programme on HIV/AIDS (UNAIDS) has declared Nepal a "concentrated epidemic" region, as 30 new cases of AIDS are being diagnosed in Nepal every day.¹⁸

Torture and sexual abuse as a consequence of the insurgency have also become prominent.^{19–21} More than 70% of Nepalese prisoners claim to have been tortured while in custody, and sexual abuse is reported on both sides of the conflict.²¹

In 1998, only 1% of the health care budget was spent on mental health care services, while the health care system itself was allocated less than 3% GDP.²² In 2000, there were only 27 psychiatrists in Nepal. In addition to the Nepalese people, there were 100 000 Bhutanese refugees in the eastern parts of the country who also needed access to health care services.

Despite this deepening crisis, both Maoists and government forces have made it difficult for international agencies to provide help. Some observers believe that international agencies might have inadvertently contributed to the conflict by raising the expectations of the rural poor while benefiting mainly the urban minority.²³ The Maoists have forced several international agencies to leave remote western regions, where help is needed the most, while the government has put several administrative roadblocks in the way of international agencies working in rural Nepal.

Although the Maoists have denied occasional attacks on foreign aid workers, the workers report being forced to pay a security deposit to the Maoists to allow them to work in the rural hinterlands. Appeals by Amnesty International and the International Society of the Red Cross to both sides to respect human rights have been to no avail.^{19,20}

According to the UN Development Programme's Human Development Report 2004,²⁴ Nepal moved from the ranking of "low" to "medium" in its index of development. Its human development index — a combined measure of long and healthy life, education level and standard of living, with a possible value between 0 and 1 — is now 0.504. Canada's is 0.943. The water supply and sanitation, childhood vaccination, and diagnosis and treatment of malaria and tuberculosis have also improved. However, major challenges and disparities still remain, and help from the international medical community, donors, non-governmental organizations and the United Nations is still needed.

A combined approach of immediate emergency relief and humanitarian aid with increasing funding for the poor is essential, as well as a long-term strategy focused on addressing the underlying causes of poverty and social exclusion. The 10th Five Year Plan 2002–2007 aims to meet these objectives by making health care services available in rural areas, establishing a decentralized health care system with a participatory approach, establishing public-private partnerships and improving the quality of health care provided.²⁵

Health care professionals can play an important role in peace-building efforts at the local, regional and international level by disseminating the facts, healing the traumatized population and contributing to conflict resolution.²⁶ The need to intervene is not ideological but humanitarian.

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United Nations Development Programme — Nepal

Deserted streets of Kathmandu after a strike.

References

1. United Nations Development Programme. Human development indicators 2003: Nepal. In: *Human Development Report 2003*. Oxford: Oxford University Press; 2003. Available: www.undp.org/hdr2003/indicator/cty_f_NPL.html (accessed 2004 Sept 11).
2. Nepal: kingdom in the clouds. CBC News Online. 2004 Aug 19. Available: www.cbc.ca/news/background/nepal (accessed 2004 Sept 11).
3. Health. In: *Nepal: country studies*. Washington: Federal Research Division, Library of Congress. Available: <http://countrystudies.us/nepal/35.htm>. (accessed 2004 Sept 11).
4. Poudel K. Health a casualty of Maoist attacks in Nepal. Kathmandu: One World South Asia 2004 Apr 27. Available: <http://southasia.oneworld.net/article/view/84604/1> (accessed 2004 Nov 15).
5. Martinez EC, Koirala H. Primary health care in rural Nepal. A field report. US Agency for International Development; 2002.
6. Loneen J. Nepal: "destruction before construction": civil war grips western Nepal, making humanitarian aid difficult, but essential. Médecins Sans Frontières Australia. Jan 2004. Available: www.msf.org.au/tw-project/027twp.html (accessed 2004 Sept 11).
7. Upreti A. Sick of war. *Nepali Times* (Kathmandu) 2002;103(July 19–25). www.nepalitimes.com/issue103/headline_1.htm (accessed 2004 May 16).
8. South Asia Forum for Human Rights (SAFHR). People's war in Nepal. *SAFHR's E-Briefs* 2000;1(3). Available: www.safhr.org/e-brief3.htm (accessed 2004 Sept 9).
9. Coalition to Stop the Use of Child Soldiers. Nepal. In: *Child soldier use 2003. A briefing for the 4th UN Security Council Open Debate on Children and Armed Conflict*. London (UK): The Coalition; Jan 2004. p. 30–1. Available: www.hrw.org/reports/2004/childsoldiers0104 (accessed Nov 15).
10. The complete mothers' index and country rankings. In: *State of the world's mothers 2003: protecting women and children in war and conflict*. Westport (CT): Save the Children; 2003. Available: www.savethechildren.org/publications/MothersIndex.pdf (accessed 2004 May 16).
11. Pradhan A, Aryal R, Regmi G, Ban B, Govindasamy P. Nepal family health survey 1996. Kathmandu: His Majesty's Government of Nepal, Ministry of Health; 1997.
12. Core health indicators Nepal. Geneva: World Health Organization. Available: www3.who.int/whosis/country/indicators.cfm?country=npl (accessed 2004 Sept 11).
13. Central Bureau of Statistics. Statistical yearbook of Nepal, 2001. Kathmandu: His Majesty's Government of Nepal, National Planning Commission Secretariat; 2001.
14. Nepal micronutrient status survey 1998. Kathmandu: His Majesty's Government of Nepal, Ministry of Health, Child Health Division; 1999.
15. Nepal demographic and health survey 2001. Kathmandu: His Majesty's Government of Nepal, Ministry of Health, Family Health Division; 2002.
16. Health sector strategy: an agenda for change (reform). Kathmandu: His Majesty's Government of Nepal, Ministry of Health; 2002.
17. Global IDP Project, Norwegian Refugee Council. Nepal, up to 200,000 people displaced by fighting remain largely unassisted. Geneva: The Council; 2004 Sept 8. Available: www.db.idpproject.org/Sites/idpSurvey.nsf/wCountries/Nepal (accessed 2004 Sept 9).
18. Nepal country brief, 2004. World Bank; May 2004.
19. *Nepal: a spiralling human rights crisis*. London (UK): Amnesty International; 2002 Apr 4. Available: web.amnesty.org/library/index/engasa310162002 (accessed 2004 Sept 9).
20. *Nepal: a deepening human rights crisis*. London (UK): Amnesty International. 2002 Dec 19. Available: web.amnesty.org/library/index/engasa310722002 (accessed 2004 Sept 9).
21. Stevenson PC. The torturous road to democracy — domestic crisis in Nepal. *Lancet* 2001;358:752–6.
22. Regmi SK, Pokharel A, Ojha SP, Pradhan SN, Chapagain G. Nepal mental health country profile. *Int Rev Psychiatr* 2004;16(1–2):142–9.
23. *Setting priorities for preventive action in Nepal. Final report of the Conflict Prevention Initiative Web Conference*. Cambridge (MA): Program on Humanitarian Policy and Conflict Research, Harvard School of Public Health; 2001. Available: www.preventconflict.org/portal/nepal/nepal_finalreport.pdf (accessed 2004 May 16).
24. Human development indicators. In: *Human development report 2004: cultural liberty in today's diverse world*. New York: UN Development Programme; 2004. Available: http://hdr.undp.org/docs/statistics/indices/hdi_2004.pdf (accessed 2004 Sept 9).
25. The tenth plan. Poverty reduction strategy paper 2002/03–2006/07. Kathmandu: His Majesty's Government of Nepal National Planning Commission; 2002.
26. Santa Barbara J, MacQueen G. Peace through health: key concepts. *Lancet* 2004;364:384–6.

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