to higher costs of subsequent outpatient health-care encounters.[4]

According to the US Centers for Disease Control and Prevention, most of these adverse drug events are caused by generic drugs,[3] for which no incentives exist for the private sector to invest in safety and efficacy research. By designating translational research on improved safety and efficacy of generic drugs among its key missions, the large foreseen public investment in the proposed NCATS might be offset by reduced health-care costs associated with adverse drug events and by improved efficacy. Besides, it will increase public trust in the government's concern for personal health and wellbeing.

We declare that we have no conflicts of interest.

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AFP/Getty Images

Cholera in Haiti: please do not forget zinc

We commend Louise Ivers and colleagues (Dec 18, p 2048)[1] for their thoughts around advocating for complementary public health interventions that could slow the cholera epidemic in Haiti. We are also particularly grateful to Partners In Health for the synergistic, helpful, and timely support provided to our medical action during the onset of the outbreak in the Artibonite region.

Ivers and colleagues highlight the enormous potential benefits (shorter duration of illness, decreased volume of diarrhoea, and decreased duration of pathogen shedding) associated with the proper use of antibiotics.[1] We concur, but would like to suggest the further need to add the systematic use of zinc for all paediatric patients (those younger than 15 years). Supplementation with zinc in children with cholera has been shown to present an additional benefit over antimicrobial treatment by reducing the duration of diarrhoea and overall stool output.[2] This effect can contribute substantially to decreased severity and a reduced overall burden of the disease. The US Centers for Disease Control and Prevention support the use of zinc for the paediatric population.[3]

Moreover, zinc has been proven to be effective in enhancing the T-cell and B-cell-driven seroconversion to vibriocidal antibodies in children given the oral inactivated cholera vaccine.[4,5] This aspect is particularly crucial if we want to improve vaccine effectiveness and achieve, in the years to come, a meaningful preventive protection rate, aimed at saving thousands of lives.

We declare that we have no conflicts of interest.

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Authors' reply

We would like to thank Gabriele Rossi and colleagues for drawing the reader's attention to the role of zinc in cholera treatment. We are also deeply grateful for the essential health services that their organisation, Médecins Sans Frontières, has provided to Haiti since the beginning of the cholera outbreak and for many years preceding.

We fully agree with the suggestion by Rossi and colleagues to include zinc supplementation as an integral part of the treatment for cholera patients, especially children. Zinc supplements have been shown to reduce the severity and duration of diarrhoea, particularly in children younger than 5 years, and are therefore recommended by WHO for patients with most diarrhoeal diseases, including cholera. In a study in Bangladeshi children with cholera, zinc reduced vomiting, stool output and duration, and hospital stay by 8 h.[1] A review of efficacy studies on this subject found zinc treatment to decrease diarrhoea-related mortality by 23%.[2]

WHO recommends that 10–20 mg of zinc be given every day for 10–14 days to all children with diarrhoea; short-course zinc supplementation reduces the incidence of diarrhoea for 2–3 months.[3] One study indicates that 5 days of treatment can be as efficacious as the 10-day treatment in preventing diarrhoea in the subsequent 3 months among children in Bangladesh.[4]

We are currently part of a collaborative academic effort of more than 40 individuals, including physicians, public health professionals, and other cholera experts, to synthesise a comprehensive strategy of integrated prevention and care for Haiti and elsewhere. Zinc is discussed in this joint statement as a crucial component of the treatment regimen for cholera. To respond to Haiti's current cholera epidemic, we must continue to scale up aggressive case finding and treatment efforts, including oral rehydration therapy, intravenous rehydration, antibiotic therapy, and complementary supplementation with zinc and vitamin A.

Treatment must be linked to prevention, including mass vaccination, expanded water and sanitation efforts, and public health messaging that is tied to delivery of needed resources (such as soap). All of this must be led by the Haitian Government to mitigate the acute problem of cholera in the short term while also strengthening Haiti's public water, sanitation, and health systems in the long term.

We declare that we have no conflicts of interest.

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Violence against Chinese health-care workers

The Lancet has kept a close watch on the situation of Chinese health-care workers who have been wounded, disabled, or even killed by patients or their relatives (Feb 19, p 639).[1,2] We give some possible causes of this situation.

First, under the family control policy, most Chinese families have only one child who becomes the core of the family. Thus parents and grandparents pay great attention to the health of their child. High-income and upper-middle-income parents particularly demand higher-quality health services for their children.

Second, out-of-pocket health-care payments are high. Starved of funds from the government, Chinese hospitals resort to prescribing expensive, and often unnecessary, drugs, diagnostics, and procedures. These growing out-of-pocket payments place a heavy burden on poor households. Poor workers and their dependants (children, spouses, and parents) have high expectations of the therapeutic efficacy of such expensive treatments.

The situation above stems from a common lack of medical understanding among the general public. Many patients, if a disease progresses, will instinctively blame doctors rather than taking a reasonable attitude to the disease. The Chinese mass media have reported many medical disputes in recent years, but they have not taken the opportunity to spread general medical knowledge.

Finally, the low quality of medical services in Chinese hospitals is universal. Some junior doctors receive little regular training, meaning that their clinical skills are inadequate. Additionally, many health-care workers are not medically qualified at all, and currently it is still a great challenge for hospitals to verify the qualifications of their staff.

We declare that we have no conflicts of interest.

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Medical disputes and tension between doctors and patients have increased in recent years in China, and doctors have become progressively demonised.[1] On Jan 31, 2011, 2 days before the Lunar New Year in China, six surgeons in Xinhua Hospital, Shanghai, were stabbed by about 20 relatives of a patient, who had undergone aortic valve replacement and died of mediastinitis 47 days after surgey.

A doctor posted a condemnation of this vicious crime on the Tianya Forum—a popular social media website in China. The author suggested that the children of these doctor victims would never become doctors themselves in China because of the escalating violence meted out by patients in recent years. The topic received more than 90 000 clicks and nearly 2000 replies within 2 weeks, and was reposted on hundreds of websites and personal blogs.

China has about 20% of the world's population, yet its national health expenditure is only 2% of the total world expenditure on health.[2] Although China's gross domestic product (GDP) has become one of the world's largest, the total expenditure on health is only 4·3% of GDP, only 44·7% of which is government expenditure.[3] Insufficient investment in public health has become a bottleneck in the development of Chinese society. Improving the financial input into public health and rebuilding a harmonious doctor–patient relationship are vital for China's health-system reform.

We declare that we have no conflicts of interest.

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Joined-up thinking in reduction of cardiovascular risk

Your Editorial highlighting an expected epidemic of premature cardiovascular mortality (Feb 12, p 527)[1] makes for interesting and rather frightening reading for any frontline clinician already labouring under this seemingly insurmountable burden.

But surely extraordinary circumstances call for extraordinary

For the **Tianya Forum** see http://www.tianya.cn/