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HEALTH REPORTER: focus on water, sanitation and health 7 August 2006

produced by the [IDS Health and Development Information](#) team
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This is our monthly email bulletin, bringing together research to inform policy debates on health in developing countries. The Health Reporter aims to provide readers with a more in-depth look at a particular area of health policy. This month's theme is [water, sanitation and health](#). The bulletin also features summaries of new documents and other additions to the [Health Resource Guide](#).

All documents listed below are available free on the web. If you are unable to access any of these materials online and would like to receive a copy of a document as an email attachment, please contact s.cameron@ids.ac.uk.

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Feature: water, sanitation and health

More than a quarter of all people in the developing world lack access to safe drinking water sources, and more than half lack sanitation facilities such as a simple pit latrine. The effect on health is profound, especially on diarrhoeal diseases amongst children: it is estimated that lack of drinking water and sanitation kills about 4500 children a day. Malaria, schistosomiasis, worm infection, and trachoma are amongst the other health problems linked to poor water supply and sanitation.

In recognition of these facts, the Millennium Development Goal (MDG) targets include halving, between 1990 and 2015, the proportion of people without sustainable access to safe drinking water and sanitation. The United Nations General Assembly also declared 2005-2015 to be the "International Decade for Action--Water for Life," in an attempt to galvanise action towards these goals. Currently the world is on track to meet the drinking water target -- although sub-Saharan Africa lags behind -- but will miss the sanitation target unless there is a sharp acceleration in the rate of progress. At the present rates, more than 2 billion people will remain unserved by sanitation facilities.

Barriers to improving water and sanitation include a lack of political will, insufficient and poorly used financial resources, and inappropriate approaches in designing and implementing new drinking water and basic sanitation systems. The use of community-led approaches may help in overcoming some of these barriers and facilitating community understanding of sanitation and hygiene may be a more effective use of resources than infrastructure investments such as construction of toilets. The need for more investment to achieve the MDG target is considerable, yet within the reach of most countries, and is likely to yield large economic benefits as well as reducing the toll of disease. Since the burden of disease associated with lack of access to water and sanitation is greatest for children under the age of 5, the World Health Organization calls for an emphasis on interventions which will improve the health of this group in an affordable and sustainable way.

For more information see:

- [Communicable diseases](#)
- [Health promotion](#)
- [World Health Organization: water, sanitation and health](#)
- Search the Health Resource Guide for documents on water, sanitation, and health: www.eldis.org/health/docs/watsan

World Water Week 2006, Stockholm, Sweden, 20-26 August

The World Water Week is an annual global meeting place for capacity-building, partnership-building and follow-up on the implementation of international processes and programmes in water and development. It includes topical plenary sessions and panel debates, scientific workshops, and independently organised seminars and side events.

Workshop topics will include water and trade; economic instruments; management of water and wastewater; large lakes as drivers for regional development; safe water storage and regulation during floods and droughts; and extreme events and sustainable water and sanitation services.

For more information see: www.eldis.org/cf/rdr/rdr.cfm?doc=DOC22436

Recommended readings on water, sanitation and health

1. Water for life: making it happen

Authors: World Health Organization (WHO); United Nations Children's Fund (UNICEF)

Produced by: World Health Organization (WHO) (2005)

This report, published by the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF), outlines the need for action to meet the Millennium Development Goal (MDG) target on water and sanitation. It notes that 2005-2015 has been declared by the United Nations General Assembly to be the "International Decade for Action" on water for life, and explains how improved water and sanitation will speed the achievement of all eight MDGs. Reaching the target -- to halve by 2015 the proportion of people without sustainable access to safe drinking water and basic sanitation -- would cost US\$11.3 billion per year, but the report argues that this investment would bring economic benefits worth US\$3 to US\$34 for each dollar invested.

The report charts the effect that lack of drinking water and sanitation has on people's lives at different stages (childhood, adolescence, adulthood and old age), highlighting the gender divide and threat posed by HIV and AIDS. It also looks at a range of interventions that are being advocated and analyses their potential impact on progress towards the MDG drinking water and sanitation targets. These include: meeting basic sanitation demand; increasing access to safe drinking water; focusing on changing key hygiene behaviours; promoting household water treatment and safe storage; and ensuring cost effectiveness.

Available online at: www.eldis.org/cf/rdr/rdr.cfm?doc=DOC22437

2. Water, sanitation and hygiene interventions to reduce diarrhoea in less developed countries: a systematic review and meta-analysis

Authors: Fewtrell, L.; Kaufmann, R.B.; Kay, D.; et al.

Produced by: The Lancet Infectious Diseases (2005)

This article, published in the Lancet Infectious Diseases, reviews and analyses the evidence on effectiveness of interventions to reduce illness through improvements in drinking water, sanitation facilities, and hygiene practices in developing countries. The review suggests that water, sanitation, and hygiene interventions, as well as combinations of these interventions, are effective at reducing diarrhoeal illness, and water quality interventions (treating water at the point of use) were more effective than had been previously acknowledged. Multiple interventions (combining water, sanitation and hygiene measures) were not more effective than interventions with a single focus.

The article concludes that, given that each of the interventions reviewed seems effective, it may be reasonable to select interventions for a given setting on the basis of their local desirability, feasibility, and cost-effectiveness. The worldwide commitment to the Millennium Development Goals on water, sanitation, and child health, should mean that careful selection of water, sanitation and hygiene interventions receive particular attention. However, many research questions that remain, including: the role of community versus household connections within water supply interventions; the role of sanitation interventions in the reduction of diarrhoeal illness; and the longevity of the health-related effects of individual interventions.

Available online at: www.eldis.org/cf/rdr/rdr.cfm?doc=DOC22438

Please note: To read this article, you will first need to register with The Lancet. This process and access to the article is free of charge.

See also: Reducing diarrhoea: what works best? (id21) www.eldis.org/cf/rdr/rdr.cfm?doc=ADOC2163

3. Water for life: community water security

Authors: Conant, J.

Produced by: Hesperian Foundation (2005)

This booklet, published by the Hesperian Foundation, provides practical guidance on how communities can achieve access to water. It explains the relationships between water security and health, including: health problems arising from a lack of water; problems such as diarrhoea and worm infections from unsafe water; and effects of toxic chemicals such as arsenic in water. It also outlines how to develop a plan for community water security, plan improvements to the water supply, protect groundwater sources, collect rainwater, transport and store water safely, and make water safe for drinking and cooking.

The booklet advocates partnerships between government and communities to provide water security. It argues that water privatisation can lead to raised prices, forcing people to reduce the amount of water they use, which leads to serious health risks -- or to find places where they can collect water for free, which takes time and hard work, and may not be safe. A final

section highlights international agreements that protect the human right to safe water. As water grows scarce and becomes a source of conflict, it calls for communities, governments and international agencies to work hard to defend the right to water for today and for the future.

Available online at: www.eldis.org/cf/rdr/rdr.cfm?doc=DOC22175

4. For her it's the big issue: putting women at the centre of water supply, sanitation and hygiene

Authors: Unicef; GWA; Norwegian Ministry for Foreign Affairs

Produced by: Water Supply and Sanitation Collaborative Council (WSSCC) (2006)

This report is a collection of evidence highlighting the effect and benefits of placing women at the core of planning, implementation and operations of water, sanitation and hygiene (WASH) programmes. The experiences show how women's empowerment and the improvement of water supply, sanitation facilities and hygiene practice are inextricably linked. One cannot be successfully achieved without the other.

The authors highlight how a woman could be empowered by having a nearby pump that conveniently supplies enough safe water for her family. Easier access to such basic services enables women to identify and grasp new opportunities for themselves, to grow in confidence and attain a greater sense of personal dignity.

The following areas are considered :

- awareness raising in the community
- women's health and well-being
- women as positive role models
- making an income from water

Available online at: www.eldis.org/cf/rdr/rdr.cfm?doc=DOC19010

5. The drinking water response to the Indian Ocean tsunami including the role of household water treatment

Authors: Clasen, T.; Smith, L.; London School of Hygiene & Tropical Medicine; Water, Sanitation and Health (WHO)

Produced by: World Health Organization (WHO) (2005)

This World Health Organization report investigates the organisation of drinking water supplies following the Indian Ocean tsunami. It finds that large water tanks, mobile treatment plants and emergency storage and distribution systems were used, while household-based approaches played a minimal role. Key reasons for this included an emphasis on quantity of water supply rather than quality; the unique conditions imposed by the tsunami which necessitated bulk treatment; the lack of human and other resources to carry out programmes; and concerns that use of established treatment methods might be compromised. Analysis showed high levels of faecal contamination in some water sources. However, there was little evidence of epidemic levels of any infectious diseases, including those that are frequently waterborne.

The authors argue that an exaggerated risk of waterborne diseases could divert attention from other priorities. However, they stress the importance of taking measures to minimise disease risks. They recommend developing practical solutions to address specific problems associated with tsunamis, including saline water intrusion; issuing clear guidelines for use of established household water treatment methods; ensuring water quality and surveillance match water quantity; and using the enormous resources committed to the tsunami response to make sustainable improvements in water, sanitation and hygiene in the affected areas.

Available online at: www.eldis.org/cf/rdr/rdr.cfm?doc=DOC19207

6. Community-driven development for water and sanitation in urban areas

Authors: Satterthwaite, D.; McGranahan, G.; Mitlin, D.

Produced by: Water Supply and Sanitation Collaborative Council (WSSCC) (2005)

This booklet presents a number of community-led initiatives to improve and extend provision for water and sanitation to low-income urban households and discusses their relevance for meeting the Millennium Development Goal (MDG) target for water and sanitation. At the core of most initiatives described in this booklet is the possibility for urban poor groups and their organizations to influence what is done and to be involved in doing it.

An analysis of these initiatives demonstrates that:

- a great number of development projects are designed and implemented by professionals which permit urban poor groups no influence and which rarely produce the hoped for improvements in water and sanitation
- the community-driven examples given in this booklet usually have much lower unit costs than professionally driven approaches and require much less external finance, also they are usually far more successful at ensuring benefits reach the poorest groups
- many professionals object to community-driven projects because their own role and importance is diminished -- and because their professional training did not equip them to know how to work with urban poor groups and to support their initiatives
- almost all the official development assistance agencies find it difficult to support community-driven development because their structures and procedures were never designed to do so
- most of the discussion on how to meet the MDGs is about national and international changes, but it is largely local governments that will determine whether most of the MDGs and their associated targets are met in urban areas -- including those relating to water and sanitation
- much emphasis is placed within the MDGs on the need for better monitoring of progress towards the targets. For water and sanitation provision, the emphasis is on more accurate and detailed national sample surveys. Yet while these surveys may serve global and national monitoring they do not identify where inadequacies in provision actually are and who suffers from them
- more attention should be given to the role of local "non-profit" organisations supplying water and sanitation services that work within market frameworks either within systems managed by private water utilities or as "private water utilities" themselves.

This study was commissioned by the Water Supply and Sanitation Collaborative Council (WSSCC) as an input to the 13th session of the Commission on Sustainable Development, April 2005, New York. It is the result of a collaboration between the WSSCC and the Human Settlements Programme at the International Institute for Environment and Development (IIED).

Available online at: www.eldis.org/cf/rdr/rdr.cfm?doc=DOC18162

7. Subsidy or self-respect? Participatory total community sanitation in Bangladesh

Authors: Kar, K.

Produced by: Institute of Development Studies (IDS), Sussex, UK (2003)

This IDS working paper examines a new approach to improving environmental sanitation in Bangladesh by involving local communities in the analysis of risk of open defecation and building toilets without external subsidies. The success of agency projects in constructing latrines and toilets in Bangladesh has historically been measured in the number of latrines constructed, rather than the extent of open defecation, which often remains at the same level. The community-led effort had a huge impact, as open defecation was completely eliminated in more than 400 villages in Bangladesh, and is now being adopted throughout Asia and Africa.

The author argues that this approach has three major policy implications for the provision of services and infrastructure. Financial subsidies should be used to facilitate community understanding of open defecation and to train the community,

rather than invest in material and infrastructure. Agencies must be flexible in working with communities to allow the latter to take the lead in addressing problems. Success must be measured on the basis of the final impact (elimination of open defecation) rather than the final output (construction of toilets). This experience demonstrates the significant impact that a simple facilitative process can have on age-old practices. [adapted from author].

Available online at: www.eldis.org/cf/rdr/rdr.cfm?doc=DOC15248

Other recommended readings

1. Progress for children: a report card on nutrition

Authors: UNICEF

Produced by: United Nations (UN) Children's Fund (UNICEF) (2006)

Undernutrition contributes to the deaths of about 5.6 million children under five in the developing world each year. It can lead to poor school performance and dropout, it threatens girls' future ability to bear healthy children and it perpetuates a generational cycle of poverty.

This report card measures the world's performance on nutrition, taking the prevalence of underweight among children under five as its primary indicator. The global community promised to cut the proportion of underweight children by half between 1990 and 2015, but are still not on track to reach that target.

Findings from the paper include:

- South Asia has by far the highest levels of underweight, affecting 46 per cent of all under-five children in the region. In sub-Saharan Africa, 28 per cent of children are underweight. The lowest prevalences are in Central and Eastern Europe and the Commonwealth of Independent States (CEE/CIS, with 5 per cent) and Latin America/Caribbean (7 per cent)
- some progress has been made, and the proportion of underweight children in developing countries declined from 33 per cent to 28 per cent between 1990 and 2004. During this time, the sharpest decline occurred in the East Asia/Pacific region, where prevalence decreased from 25 per cent to 15 per cent. This improvement was primarily driven by gains in China, where underweight prevalence was reduced by more than half. South Asia has also made progress, although the current levels clearly remain high. Latin America/Caribbean, too, reduced the prevalence of underweight
- little improvement has been seen in sub-Saharan Africa, where underweight prevalence remained roughly the same over the 1990-2004 period. Given this lack of progress and due to population growth, the total number of underweight children actually increased in sub-Saharan Africa
- despite an overall improvement between 1990 and 2004, the present rate of decline in the proportion of underweight children in the developing world is not sufficient to reach the MDG target of reducing hunger by half between 1990 and 2015.

The authors conclude that:

- the priority of nutrition interventions must be children under two years old, when they are most vulnerable to disease and mortality
- interventions need to focus on women -- before they become pregnant, while pregnant and when lactating -- through antenatal care and other opportunities, because mothers deprived of good nutrition are likely to give birth to underweight babies
- the health and nutrition needs of children in complex emergencies must remain a priority. But there is an urgent need to focus on the major causes of death and undernutrition in "silent" emergencies -- outside camps, in stable environments and in communities affected by HIV/AIDS, particularly in southern Africa.

Available online at: www.eldis.org/cf/rdr/rdr.cfm?doc=DOC12593

2. 1 year after The Lancet Neonatal survival series: was the call for action heard?

Authors: Lawn, J.E.; Cousens, S.N.; Darmstadt, G.L.

Produced by: The Lancet (2006)

This Lancet article asks what progress has been made in policy, funding, and programmes to address newborn survival, since the publication in 2005 of a series of articles highlighting the huge number of newborn babies who die every year in developing countries. The author finds that, although more attention is being paid to newborn health, the issue was still absent from the agendas of high-level forums such as the G8 summit, and still receives relatively little funding compared to initiatives such as the Global Fund to fight AIDS, Tuberculosis and Malaria.

The article argues that no country that is serious about the Millennium Development Goal on infant mortality can afford to omit newborn health interventions. It repeats the call made in 2005 for countries to develop newborn health plans by the end of 2007, and calls for these to be integrated with other relevant programmes. It also calls for governmental commitment and leadership, to ensure that plans are translated into actions. More funding is needed, and should be spent strategically, including investment in human resources. The article concludes with a call for donors and national governments to invest in programmes for maternal, neonatal and child care as a cornerstone for development and poverty alleviation.

Available online at: www.eldis.org/cf/rdr/rdr.cfm?doc=DOC22091

Please note: To read this article, you will first need to register with The Lancet. This process and access to the article is free of charge.

3. Women's health groups to improve perinatal care in rural Nepal

Authors: Morrison, J.; Tamang, S.; Mesko, N.; Standing, H.; Costello, A.

Produced by: BMC Pregnancy and Childbirth (2005)

This article, published in BMC Pregnancy and Childbirth, examines the development of women's groups in rural Nepal as a way of reducing maternal and neonatal mortality. It reports that the groups developed varied strategies to tackle problems of maternal and newborn care: establishing mother and child health funds, producing clean home delivery kits, and operating stretcher schemes. Close linkages with community leaders and community health workers improved implementation of these strategies. Most groups remained active for at least 30 months, and outcomes included a 30 per cent reduction in neonatal mortality, and an even larger effect on maternal mortality.

The authors argue that, although there were contextual, cultural and security challenges in implementation, the participatory approach used in this intervention could be a powerful tool to address maternal and newborn health problems in communities. Noting that most deliveries occur at home in populations where maternal and newborn mortality rates are highest, they emphasise the need for interventions which reach out to the poorest groups in order to change care practices at home, and care seeking for illness or complications of childbirth. They suggest that this intervention provides a model that can be scaled up rapidly in even the poorest and most remote communities.

Available online at: www.eldis.org/cf/rdr/rdr.cfm?doc=DOC22143

4. Strengthening accountability to sexual and reproductive health and rights and community participation in the context of reforms

Authors: Murthy, R.K.; Initiative for Sexual & Reproductive Rights in Health Reforms (2005)

This policy brief, published by the Initiative for Sexual & Reproductive Rights in Health Reforms, examines the ways in which community participation and accountability have been implemented in developing country health sector reforms, focusing on sexual and reproductive health services. Findings include that community participation has usually been restricted to health programme management and service delivery, and has not been extended to the design of policies, legislation, and allocation of budgets. Community representatives have at best been consulted, but have not had decision-making powers.

Marginalised groups, and sexual and reproductive rights groups, have not been consulted as much as mainstream health organisations.

The brief argues that the World Bank, national governments and donors need to move beyond paying lip service to issues of community participation and service accountability in health sector reforms. It recommends setting up new structures to strengthen participation and accountability mechanisms within policy, planning and implementation. Such structures could be either independent commissions, which might have more scope for promoting participation and accountability, or task forces within governments, which would be easier to set up. Participants should include women's health and rights groups -- especially those led by marginalised groups; health researchers; progressive members of professional associations; consumer rights groups; and health policy makers.

Available online at: www.eldis.org/cf/rdr/rdr.cfm?doc=DOC22445

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- Health Resource Guide - www.eldis.org/health
- Health Systems Resource Guide - www.eldis.org/healthsystems
- HIV and AIDS Resource Guide - www.eldis.org/hiv aids

The HRC provides access to technical assistance and information for the Department for International Development (DFID UK), and its partners, in support of pro-poor health policies as well as health systems, service delivery and public health topics and programmes.

Eldis currently includes descriptions and links to over 4,500 organisations and over 16,000 full-text online documents covering development and environmental issues. It can be searched or browsed free over the Internet.

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