Some 135 million children between the ages of 7 and 18 in the developing world have never been to school (Gordon 2003). Globally, over 100 million children aged 6–12 are not enrolled in primary school, while 137 million young people will begin their adult lives lacking the basic tools of literacy and numeracy (UNESCO 2004). The burden of illiteracy, like the burden of disease, falls overwhelmingly on those who are female, poor and rural. This chapter discusses why all this should concern health sector policy-makers and activists, and suggests how education and health activists could together address the common causes of inequality in health and education.

**Education as a determinant of health outcomes**

Education – particularly for girls and women – improves health outcomes. Even a few years of basic education is correlated with greater use of health services, increased social status and decision-making power for women, and better health outcomes. For example, education levels are strongly predictive of better knowledge, safer behaviour and reduced HIV infection rates – so much so that education has been described as ‘the single most effective preventive weapon against HIV/AIDS’ (UNAIDS 2002, World Bank 2002) (see Box D4.1).

Education improves health outcomes for two main reasons. It provides some protection from such shocks as ill health and disability, price and credit swings, and natural and environmental disasters by enabling more secure employment, higher incomes, and better access to economic assets and credit. Even among those with similar incomes, the educated are generally healthier than the uneducated (Pritchett and Summers 1996), because:

- education equips them to understand, evaluate and apply facts;
- it increases the ability to acquire and use health-related information and services (World Bank 1993, WHO 2003);
- it gives greater bargaining power in household decisions and personal relationships – particularly important for women, as it often translates into increased allocation of household resources to child health, schooling and nutrition (Thomas 1990, Herz and Sperling 2004); and
- it increases social status.

*Child and maternal mortality* Each extra year of maternal education in the
The wider health context | D4

The wider health context | D4

[39x481]The wider health context | D4

developing world reduces under-five child mortality by 5–10% (UNICEF 2004). Women’s educational attainment explained more than 80% of the decline in infant mortality from 1983–1999 in five Indian states, and was a far more powerful explanatory variable than public spending on health services or changes in household income (Bhalla et al. 2003). In Africa, children born to mothers with five years of primary education are 40% more likely to survive to age five (Summers 1994). Interestingly, child mortality is influenced by the extent of inequality between men’s and women’s education levels, and not just the absolute level of women’s education (Abu-Ghaida and Klasen 2004).

Women who have been to school are less likely to die during childbirth. Every additional year of education will prevent two maternal deaths in every 1000 women. Education also improves maternal health by increasing know-

Box D4.1 Education as a determinant of health outcomes: the example of HIV/AIDS

Research on the social determinants of HIV/AIDS has shown education levels to be strongly predictive of better knowledge, safer behaviour and, most importantly, reduced infection rates – so much so that education has been described as the ‘social vaccine’ and ‘the single most effective preventive weapon against HIV/AIDS’ (UNAIDS 2002, World Bank 2002).

Young people’s risk of contracting HIV in Uganda appears to halve when they have a complete primary school education, even without specific AIDS education (DeWalque 2004, Global Campaign for Education 2004a). This finding, echoed by similar research in other countries, provides strong evidence of the positive impact of primary school completion on actual HIV outcomes.

One reason that schooling reduces HIV risk is that it increases knowledge of the disease and is correlated with changes in sexual behaviour. Literate women are three times more likely than illiterate women to know that a healthy-looking person can have HIV, and four times more likely to know the main ways to avoid AIDS, according to a 32–country study (Vandemoortele and Delamonica 2000). Evidence from 17 countries in Africa and four in Latin America shows that better educated girls delay sexual activity longer, and are more likely to require their partners to use condoms (UNAIDS and WHO 2000). Education also accelerates behaviour change among young men, making them more receptive to prevention messages and more likely to adopt condom use.
ledge about health-care practices and the use of health services during pregnancy and birth; improving nutrition; and increasing birth spacing. For example, in Bangladesh – where women typically eat last and least – women with at least a fifth-grade education are more likely to eat more in pregnancy, improving chances for a healthy outcome for themselves as well as their infants (Karim et al. 2002).

**Malnutrition** Improvements in women’s education explained nearly half the decline in child malnutrition in 63 developing countries between 1970 and 1990, with increased food availability a distant second. ‘Partly because a mother uses her new knowledge and the additional income she earns from it to improve diets, care, and sanitation for her children, female education is probably the strongest instrument we have for reducing infant mortality and child malnutrition’ (Smith and Haddad 1999). These results are echoed in other studies.

**Entitlement and empowerment** As mentioned above, educated women are more likely to make use of health services, including those that effectively prevent childhood disease (Sandiford et al. 1995). Globally, educated mothers are about 50% more likely to immunize their children than are uneducated mothers (Herz and Sperling 2004). They tend to be able to exercise greater autonomy in personal and sexual relationships, which allows them to delay first sexual activity, marry later, begin childbearing later, have fewer children, and resist practices such as female genital cutting, domestic violence and early marriage for their own daughters (see Box D4.2) (Jejeebhoy 1998, Sen 1999, Herz and Sperling 2004). Doubling the proportion of women with a secondary education would reduce average fertility rates from 5.3 to 3.9 children per woman, according to a 65–country analysis of fertility and secondary school attainment (Subbarao and Raney 1995). But it is not just the level of women’s education that matters: the lower the gap between men’s and women’s education, the lower the fertility rate (Klasen 1999).

**The impact of health on education** Of course, ill health also has a significant negative impact on education outcomes. Diseases such as malaria, tuberculosis, and HIV/AIDS keep millions of children – and teachers – away from the classroom temporarily or permanently. Millions more turn up at school every day suffering from problems like malnutrition, gastroenteritis and parasite infection, which impair their concentration and can diminish cognitive abilities in the long term. A school-based health and nutrition programme that provided
deworming, micronutrient supplementation, latrines and clean water, and health education resulted in a 20% increase in school attendance in Burkina Faso, as well as significant improvements in pupil health (UNESCO 2004).

Is universal education attainable?

The MDGs set two targets for education: gender parity in primary and secondary enrolments, preferably by 2005, and universal completion of primary education by 2015. Although they are described as the most attainable of the MDGs, the world is not on track to achieve either.

**Gender parity** 2005 will earn a particularly shameful place in history as the year when the world missed the first of all the MDG targets: a large majority of countries will not achieve gender parity in primary and secondary education in

---

**Box D4.2 Education and women’s health**

Educated women are less likely to have their daughters subjected to female genital cutting, and educated girls are less likely to undergo it, studies suggest. In Ivory Coast 55% of women with no education had undergone it, while the prevalence was 24% among those with a primary education or more (WHO 1998).

The increased earning capacity and social standing, later age of marriage, and access to information and health services that come along with education may help women resist domestic violence. Women with some formal schooling are more likely to leave abusive relationships than women with no schooling (Herz and Sperling 2004). Controlling for other influences, education does deter violence. Studies in India show that women’s education can affect the probability of being beaten; having had schooling can result in better physical outcomes (Sen 1999, Jejeebhoy 1998).

*PROGRESA (Programa Nacional de Educación, Salud y Alimentación)* has educated Mexican women on health and nutrition issues, provided new spaces in which to communicate with other women, educated girls to improve their position in the future, and increased self-confidence and self-esteem. It began in 1997 as a countrywide effort to fight extreme poverty in rural areas. With a budget of US$ 500 million, it provides monetary assistance, nutritional supplements, educational grants and a basic health package to poor families. One of its innovations is to provide money directly to women.
2005, and on present trends about 40% will not even make it by 2015 (UNESCO 2004). Failure to achieve it will cost the lives of over a million children under five in 2005 alone (Abu-Ghaida and Klasen 2004).

South Asia, Sub-Saharan Africa, the Middle East and North Africa all made progress on reducing these disparities in 1975–1999. South Asia remains the most educationally unequal region in the world; women average only about half as many years of education as men, and female secondary level enrolment rates are only two thirds of male rates. In Sub-Saharan Africa, the increases in equality in primary enrolment in 1980–1990 often tended to reflect absolute declines in boys' enrolment rather than improvements in girls'.

Universal primary completion Between 104 and 121 million children are estimated to be out of school, the majority girls. Their numbers are declining only slowly (by about a million a year) and at current rates not only will the target be missed, but neither universal primary completion nor gender parity will be attained over the next decade (UNICEF 2004, UNESCO 2004), and Africa will not get all its children into school until 2130 at the earliest.

Spending per primary pupil is typically about US$ 110 per year across the developing world, much less in the poorest countries (Devarajan et al. 2002). Pupil-teacher ratios are high, hours of instruction insufficient, and learning achievements low. More than half the countries in Sub-Saharan Africa had more than 44 pupils per teacher in 2001, a significant deterioration on the 1990 figure of 40:1. More than half the countries of south Asia have ratios of more than 40:1 (UNESCO 2004).

Making education a right for all The current distribution of education, heavily skewed against girls and the poor, reinforces rather than counteracts the skewed distribution of other assets, including health. This represents an enormous loss of human potential, as well as a denial of fundamental rights. The burden of illiteracy, like the burden of disease, is concentrated not just among girls and women, but also among the poor, ethnic minorities and those in rural areas. There are only a few developing countries in which the rich have not already achieved universal primary education; but in many countries children from the poorest households receive little or no schooling. A more equitable distribution of educational opportunities could be achieved through increased investment in basic education, abolishing fees and charges, and affirmative action budgets giving priority to girls and the poorest. This would create new assets for the poor without making anyone else worse off (see the Mexican example in Box D4.2). Simply abolishing fees and other charges for
primary education is a very effective way to redistribute educational assets to the poor and women, as shown in Uganda, Malawi, Tanzania, Zambia and Kenya.

Education is unequally distributed not only within, but between countries. The average person in an OECD country receives about 15 years' schooling. In South Asia and Sub-Saharan Africa the average is less than three years for women, four for African men and five for south Asian men (Abu-Ghaida and Klasen 2004). Research strongly suggests that countries may be unable to make the leap from a low-returns economy to a high-skill, high-growth path until the population averages more than six years' schooling (Azariadis and Drazen 1990).

Rich countries and the international community must be held accountable for their promises to achieve Education for All by 2015. This, while only a starting point, is also essential to break the South's continuing dependency on the North. It would only cost about US$ 100 per child per year to achieve universal completion of primary school (Devarajan et al. 2002).

The classroom as a site of socialization

The classroom is the place where most children first learn to interact with external authority; it transmits attitudes and assumptions that will last for a lifetime. At school, they may learn that they, and others like them, are stupid, lazy and worthless. Activists in South Asia express deep concern about the role of schools in promoting patriarchy and caste prejudice. In India's public schools, for example, children from poor and lower caste backgrounds are beaten and verbally abused more often than other children (GCE 2003). Sexual abuse of girl pupils is a problem in many African, Asian and Latin American countries.

On the other hand, the very fact of attending school, mastering new knowledge, and being recognized by adults can give children a sense of agency and achievement that defies their subordinate circumstances in the world outside. Sangeeta, a 16-year-old from India, says: ‘I didn’t go to school because I had so much work at home. Here at school, I am learning so much. I am learning to think well of myself. I want to become a teacher, so that I can make others feel like me now’ (GCE 2003). There are many encouraging examples of the deliberate use of classrooms and other structured learning spaces to develop positive self-awareness and empower learners to take charge of their own bodies and health (see Boxes D4.3 and D4.4).

Socialization at school has acquired new urgency and importance in the context of HIV/AIDS. The self-image and psychological well-being of AIDS orphans in Zambia strongly depends on their ability to keep attending school,
not only for status reasons, but also because it is the only place where they experience positive affirmation from adults (USAID 2002).

Life skills education Spurred by the AIDS crisis, donors have invested significantly in the development of ‘life skills’ programmes and learning materials for schools. A recent UN survey of 71 countries found that 85% had established or were developing such programmes. The aim is to exploit the socializing power of the classroom to help children develop negotiation skills, critical thinking and self-esteem, so they are more likely to make decisions that reduce their HIV risk. However, a forthcoming 17–country study (GCE 2005) shows that implementation of such programmes has been quite patchy. Even where implementation has been attempted, lack of adequate training and support to educators has undermined success.

Box D4.3 Programmes that aim to empower

*Mahila Samakhya*, the Education for Women’s Equality programme in Bihar, India, aims to change not only women’s and girls’ ideas about themselves, but also society’s notions about their traditional role. When the project was launched Bihar had the lowest female literacy rate in the country at 23%. There are now over 2000 local women’s groups with more than 50,000 members. As well as demanding adult literacy provision for themselves and getting hundreds of women elected to local government bodies, they have taken an active role in ensuring educational opportunities for their daughters. The centres offer girls a fast track not only to education but to empowerment. Girls learn how to take decisions, assume leadership and develop collective strategies to change their lives (GCE 2003).

*The REFLECT and Stepping Stones programmes* for adolescents and adults, now being implemented by NGOs in many countries, emphasize inspiring learners to take greater control over their lives and their communities (Renton 2004). They use simple participatory tools to help learners analyse concerns such as the causes and seasonality of common diseases, male and female workloads, and domestic violence.

*Lok Jumbish*, a participatory community-driven education initiative in India, soon realized that adolescent girls needed a lot more than reading, writing and arithmetic. Building their self-esteem and confidence, giving them information about their body, health and hygiene, and letting them discover the joys of childhood, was also important (GCE 2003).
However, evaluations show that behaviour change through school-based life skills education can be effective (Kirby et al. 1994, Bollinger et al. 2004). In Peru, for example, a skills-based education programme on sexuality and HIV/AIDS prevention in secondary school was found to have a significant effect on knowledge, sexuality, acceptance of contraception, tolerance of people with AIDS, and prevention-oriented behaviour (Caceres et al. 1994).

The politics of public services: Time for new alliances?

The trends currently threatening equitable provision of public health and education often have similar structural and political causes, as discussed in detail in part A. In some countries, public schools, like public clinics and hospitals, are fast becoming a ghetto for the poor. In others, many communities do not have access to any schools or clinics at all.

Often underlying a crisis of access and quality are some of the following trends:

---

**Box D4.4 Promoting life skills and better health through education**

_Focusing Resources on Effective School Health (FRESH) is a partnership that seeks to promote comprehensive policies for health in national education systems. The FRESH framework includes health-related school policies, provision of safe water and adequate sanitation in schools, skills-based health education, and school-based health and nutrition services. The aim is to put these components together in every school to create an environment that promotes learning and attendance. Students acquire skills needed for positive behavioural change, including interpersonal communication, value clarification, decision-making, negotiation, goal-setting, self-assertion, and stress management (FRESH 2003).

_Students Partnership Worldwide, working in partnership with education ministries and focusing on rural schools, is running youth-driven school health programmes in Zimbabwe, Tanzania, Uganda and South Africa – delivered by trained volunteers just a few years older than the students. The programmes are described as affirmative; uncontroversial; high profile; highly participatory; locally and community owned; holistic, and integrated with health services outside schools; and clearly targeted, with measurable outcomes (World Bank 2001)._
• per capita public spending falling behind increases in demand;
• disproportionate spending on services primarily used by affluent urban groups (universities and hospitals);
• gradual withdrawal of public support from schools (or clinics), and the introduction or escalation of user fees;
• private sector provision encouraged through hidden or explicit subsidies;
• failure to maintain infrastructure and supplies, so that public facilities can barely function (schools without books or chalk, clinics without drugs or electricity);
• replacement of trained professionals on permanent contracts with low-paid temporary workers, and/or gradual erosion of public sector wages.

While these trends may be deplorable, they are not unpredictable. Like public health services, public schools consume a relatively large share of government budgets, and create rationing issues (universal primary education, for example, fuels demand for free secondary education). The poor – typically the least organized and influential voters – have the most to gain from public spending on primary health care and primary and basic education. It is tempting to politicians to cut these services first and deepest when budgets are under strain – whether from an unsustainable debt burden, slow growth or high military spending. And embattled governments will undoubtedly find their load lessened if the public gradually stops expecting a right to quality health care and education from the state, and gets used to paying for private services instead.

In response to these political realities, stronger alliances are needed at the national level to pressure governments for more and better spending on basic services. NGOs, social movements, unions and faith-based organizations need to come together in a far more concerted and strategic effort to mobilize the public and gain politicians’ interest and support, particularly ahead of key moments such as elections.

However, while the main responsibility for achieving education and health for all rests with national governments, in some cases the actions (or lack of action) of the international financial institutions and donor community have left national governments without the means to finance and staff such services. Joined-up advocacy and campaigning – linking national and global levels, and bridging sectoral divides – are essential to change this balance of forces.

The rest of this chapter looks at policy issues needing urgent attention in both the health and education sectors.
Opposing wage caps and user fees

Rather than competing for a share of the same tightly constrained and inadequate budget, health and education activists should join forces to advocate universal and free provision of basic services, and to help find sustainable ways to finance such services.

After determined campaigning by civil society, the World Bank recently reversed its policy on user fees in primary education, and is now pledged to oppose education fees actively and work with governments to dismantle them. Under similar pressure from national civil society, a string of developing country governments have abolished primary education fees following Uganda’s pioneering example in 1996, with the result that enrolments have gone up by 50–250% and government spending on education has increased.

However, there is an urgent need for further pressure on donors to cancel debt and increase aid, so that governments can afford to expand services and personnel adequately in response to the massive increases in demand that follow removal of fees.

Macro-economic conditionalities imposed by international financial institutions are also an issue of concern, as they sometimes restrict badly-need investment in health and education provision. One very direct way in which IFI conditionalities impinge on public services is through caps on the public sector wage bill, a favourite IFI recipe for cutting deficits and restraining inflation. In practice this means either a freeze on hiring, a freeze on wages or both; Zambia’s IMF-recommended wage cap, for example, meant it was
unable to recruit 9000 badly needed primary teachers or to implement long-overdue salary increases (GCE 2004b). Such policies have proven particularly disastrous in countries facing high rates of AIDS-related attrition, and may also contribute to an outflow of teachers and nurses from the public sector to better paid jobs elsewhere.

Recommendations

Mobilize the public around the right to free, good quality services for all. Doctors, nurses, and teachers can participate in local actions organized by health and education networks. Examples include Global Action Week and the White Band Days (see Resources). They can also talk with teachers’ organizations and education NGOs to explore possible cross-sectoral programmes such as school-based health, nutrition and life skills interventions, or education programmes for adolescents and adults that also empower them to make better health choices.

Build a common voice on issues of shared concern. At national level, health sector groups should make links with education coalitions to tackle issues like user fees, privatization, donor and lender policies affecting the public sector workforce, and lack of participation and transparency in national budgetary processes or donor/government negotiations.

Challenge governments to put quality public services for poverty eradication at the top of the international agenda, and ensure that health and education are a major focus of the upcoming UN five-year review of progress on the MDGs in September. At regional level, health networks can collaborate with education networks, other networks and trade unions on joint events, press statements, research reports launched just before key meetings, and campaign actions.

Internationally, major campaigns, networks, faith-based organizations and trade unions are coming together in the Global Call to Action Against Poverty to demand debt cancellation, fair trade, more and better aid, and national government policies and budgets giving priority to the eradication of poverty and fair trade. By rallying tens of millions of people in support of a single bold message, it is possible to create a noise too big for politicians to ignore. The costs of silence are too great to contemplate.

Resources

The Global Campaign for Education brings together teachers’ unions, Southern NGO networks, international NGOs and civil society coalitions on the right to education (see www.campaignforeducation.org for a list of national contacts). Its annual Global Action Week on the right to education, held every
April, mobilizes millions of people at school and community level (see www.campaignforeducation.org/action or e-mail actionweek@campaignforeducation.org).

The White Band Days being organized by the Global Call to Action Against Poverty involve wearing a simple white band to show your support for debt cancellation, more aid and fair trade (see www.whiteband.org).

Monitoring state budgets and tracking expenditure on health, education and other services has proven a very effective advocacy tool in many countries (see www.internationalbudget.org for case studies and how-to guides).

References


