

Breaking down silos between health and education to improve adolescent wellbeing

Nicola Gray and colleagues examine the mutual reinforcement of adolescent health and education, the challenges of intersectoral working, and the joint investment needed to secure wellbeing during adolescence, into adult life, and for the next generation

Supporting adolescent wellbeing in schools is an intersectoral responsibility at local, regional, and national levels. Within the health sector, this includes healthcare professionals from different disciplines and specialists in health promotion and public health; within the education sector, this includes school management teams and teaching staff. The combined workforce can be effective only in the context of fully engaged health and education policy makers, national governments, financial institutions, and young people and families. Schools are where most of the world's adolescents spend much of their time,¹ and the potential benefits of intersectoral working between health and education sectors need greater recognition.

Triple dividend

In 2020, a new consensus framework for conceptualising adolescent wellbeing was defined,² with five interconnected domains (table 1). Wellbeing during middle childhood and adolescence is essential to optimal learning outcomes, and poor emotional wellbeing in adolescence is linked with lower educational attainment.³ Pro-

grammes which directly benefit students' physical and emotional wellbeing, such as school meals for the former and anti-bullying initiatives for the latter, achieve better school attendance and better exam results.⁴

A *Lancet* commission on adolescent health and wellbeing described the "triple dividend" of investing in adolescent wellbeing, comprising immediate gains to the adolescent as a young person; to their future lives as adults; and to the next generation, should they become parents (box 1).⁵ However, differing experiences in school, linked with intersecting factors and identities such as ethnicity, gender, location, health status or disability, neurodiversity, and socioeconomic status, all have consequences for wellbeing.^{6,7} Students need an inclusive curriculum that promotes wellbeing, and an optimised school environment,⁸ which can be achieved only if school staff are supported and empowered to see the coherence of a "whole school approach" to wellbeing with their everyday roles.⁹

Practical experiences of intersectoral working in schools

What are the realities of intersectoral activity that aims to reap this triple dividend? We will consider two examples to illustrate some of the opportunities and challenges.

The Health Bridges project in Adelaide, Australia,²⁰ is centred on a school based immunisation programme that has been running since 1994 and which introduced human papillomavirus vaccine for 13–14 year old girls in 2007. An ethnographic study evaluated the collaboration between health and education professionals in the programme. All stakeholders described a shared belief in the value of the programme for students. The longevity of the programme, largely due to the goodwill established over time by "champions," was commendable. Active participation of adolescents and parents in developing and evaluating intersectoral interventions was vital. Facilitators for successful collaboration included explicit responsibilities for different actors, clear

intersectoral communication channels, and recognition of different organisational cultures in education and health to deal with both groups' core values.

There were important weaknesses: schools saw the programme as a "favour" to the health sector, and it was noted that sustainability of schools' goodwill might be threatened if key individuals moved on. Tensions between the agendas of health and educational sectors existed—for example, after immunisation, teachers wanted students to return to class as quickly as possible, while nurses wanted time to monitor students for adverse reactions.

The second example is the Brazil School Health Programme (SHP),²¹ launched by the ministries of health and education in 2007 to deal with their growing recognition of the specific health promotion and healthcare needs of adolescents in schools and health services. The SHP was intended to convey messages about prevention, health promotion, and healthcare actions to students through schools, alongside active screening of their blood pressure, vision, oral health, and weight.²² Family health strategy teams within primary healthcare were meant to integrate with local schools to deliver these objectives.

Qualitative evaluation of the nature of the health-education interface of the SHP in 2015 entailed interviews with 17 health professionals and 22 education professionals.²¹ While some interviewees recognised the value of linking effective health promotion and referral to services in schools if there was a good structure to the programme, themes in this evaluation were generally negative. Health professionals reported competing tensions between everyday work and visiting schools for health related activities, with acute healthcare duties such as treating chronic illness and attending childbirth being their priority. Education professionals referred to a lack of human resources for this work, a lack of planning, and a disconnect between the school directors, who may have more

KEY MESSAGES

- Adolescent wellbeing and educational attainment are mutually reinforcing, and every student must be supported to achieve their best outcomes for both during their time at school
- There is a "triple dividend" from this approach: wellbeing as adolescents; wellbeing as they become adults; and, should they become parents, wellbeing for their children
- Health professionals can be powerful partners to promote intersectoral activities in schools, and aligned investments in health and education
- Meaningful participation of adolescents in these efforts is essential

Table 1 | Five domains of adolescent wellbeing defined within the UN H6+adolescent wellbeing framework²

Domain	Types of wellbeing
Good health and optimum nutrition	Physical, nutritional, emotional, sociocultural
Connectedness, positive values, and contribution to society	Emotional, sociocultural
Safety and a supportive environment	Physical, emotional, sociocultural
Learning, competence, education, skills, and employability	Emotional, cognitive
Agency and resilience	Emotional, cognitive

understanding about the SHP, and the teachers, who were expected to enact the programme.

Moreover, this case characterised health professionals as the sole custodians of health promoting knowledge; if they were not physically available for school visits, the programme could not be implemented. The concept of capacity building among education professionals by health professionals was absent and a threat to sustainability.

Breaking down the silos: focusing on finance

Financing true multisectoral collaboration is a major challenge, especially in a mid-pandemic world where fiscal space is even more limited. Yet countries show real commitment to their children when they can afford to. Analysis of the \$43bn (£37bn; €43bn) support to 161 countries in 2020 for national school meals programmes showed that more than 90% of the funds were from domestic sources overall, but this proportion fell to 28% in low income countries.¹⁰ Importantly, 44 of the countries now supporting themselves on domestic funds had transitioned from previous reliance on official development assistance for most of the costs of school health and school meals programmes, typically when graduating from low income to middle income status.¹⁰

Domestic funding for national programmes is clearly the aspirational

future for all countries, but donors themselves often frustrate that goal by becoming bogged down in intersectoral wrangling: the health sector is often unwilling to fund education systems, and the education sector may not regard student wellbeing as their business. This is particularly perverse when separate health and education departments within the same donor are working in the same country with the same students but not coordinating with each other—a much too common experience. To simplify the most common paradigm, health largely focuses on the first 1000 days of life (in utero, neonates, and infants) and education on the next 7000 days (programmes for pre-school children, school aged children, and adolescents), with little overlap between the two phases. Most multilateral and bilateral donors continue to use this outdated and financially flawed model of separating sectoral investments, failing to capitalise on the value of co-investing in the learner and the learning.

Innovation in schools is highlighted in a global systematic review of financing intersectoral action for health.²³ Two school based programmes in Africa showed the education sector contributing resources to health promotion because they recognised the positive effect of good health on educational outcomes. In Kenya, the National School-Based Deworming Programme uses a cascade

implementation model that efficiently and cost effectively delivers training materials, deworming tablets, monitoring forms, and other programme materials and resources from the national level to schools.²⁴ Personnel from the two ministries cooperate through collaborative leadership responsibilities for planning, implementation, and monitoring. The National School Health Policy in Zambia is a comprehensive package including school feeding, deworming, micronutrient supplementation, school gardens, water, hygiene and sanitation education, nutrition education, and prevention programmes for malaria and HIV/AIDS.²⁵ There is a dedicated national school health and nutrition month that engages the wider community. Barriers for intersectoral co-financing initiatives included uncertainty of value, lack of evidence of effect, and uncertainty around objectives and scope, especially if imposed “top-down.”²³ Success came from co-financing well organised pilots, which could then be replicated and scaled up. Robust data, monitoring, and accountability frameworks were deemed important.

Schools reach millions of children and adolescents, and a recent cross agency UN report cites school health and nutrition programmes as a cost effective investment across a range of wellbeing interventions. For example, school feeding programmes deliver \$9 in returns for every \$1 invested, and school programmes tackling mental health can potentially provide a return on investment of \$21.5 for every \$1 invested over 80 years.²⁶

When economic decisions regarding national education budgets are being made, policy makers and funders should therefore note the risks of lower growth and prosperity, spiralling healthcare costs,

Box 1: Triple dividend from investing in adolescent wellbeing at school

• Better outcomes for adolescents now

Curriculums should include issues of immediate concern, including sexual and reproductive health, gender equality, violence, and bullying. Students need generic skills, including health literacy and effective self-expression, so that they can find, critique, and apply credible information to any decisions about their own wellbeing. In addition, a range of health and nutrition interventions, including school meals, are cost effective and benefit both wellbeing and learning outcomes.⁴

• Better outcomes for future adult lives

Promotion of wellbeing through educational interventions in adolescence can change adult health trajectories by, for example, reducing risky behaviours such as nicotine addiction or supporting development of coping strategies for anxiety and distress. School meal programmes establish lifelong dietary practices.^{10 11} School based vaccinations in adolescence can prevent later disease.¹² High quality education increases the likelihood of well paid, meaningful jobs, thereby improving living standards and adult wellbeing.^{13 14}

• Better outcomes for the next generation

Parental education is a protective factor for a range of wellbeing outcomes for children, including infant mortality,¹⁵ child health,¹⁶ and adolescent illicit drug use.¹⁷ School based referral systems to prevent early marriage offer the opportunity to delay childbearing to a more appropriate time.¹⁸ Educated parents secure jobs with stable family incomes, forming a positive upward spiral of achievement and expectation.¹⁹

and, fundamentally, challenges to human rights and dignity that will face future generations if today's adolescents are not equipped with the education and skills that they need. In 2017, it was estimated that low and middle income countries invest around \$210bn annually in education, but less than \$4bn in the health and wellbeing of the same students.²⁷ Gains can be made by maximising the wellbeing promoting assets of schools and thus the effectiveness of investment in education.²⁸

What should health and education systems do?

In some cases, positive intersectoral relations already exist, but they need to be more widespread and the role of social capital strengthened by consolidating and expanding local social networks.²⁹ They need to be made sustainable and less dependent on specific individuals in communities. No action is too small—every supportive relation forged between health professionals and their local schools and families can have a positive impact on adolescent wellbeing. This may be to optimise the care of individual students with disabilities; it may also be as advocates for the funding of wellbeing interventions and to build capacity among school staff.⁸

Intersectoral stakeholders, advocates, and decision makers should recognise adolescents' contributions and agency through supporting effective participation or co-production.³⁰ This can be done by meaningfully engaging adolescents in participatory research and context relevant content development for wellbeing topics, during which they can internalise the values for themselves and their peers. The UK James Lind Alliance Right People, Right Questions agenda setting inquiry into research questions for young people's mental health offers a relevant example of meaningful co-creation, in a respondent group comprising 40% young people, 40% parents, 12% education professionals, and 13% health professionals³¹ (some of these categories overlap).

Education and health, and their impacts on skills and employability, together represent the passport to wellbeing for the world's adolescents. Even for adolescents who have been born into poverty or national strife, live with disability, experience gender based discrimination, or are the target of systemic racism, access to a holistic secondary education offers the chance for them to change their life trajectories and achieve their own "triple

dividends." We can fully realise this potential only if policy makers from both the health and education sectors work better together and invest jointly in our adolescents.

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