



A commentary on the interagency symposium: ‘Building a Healthier Future: A Human Capital Perspective on Health and Education’, presented at the European Congress of Tropical Medicine and International Health, Liverpool, UK, October 2019

Donald Bundy^a, Carmen Burbano^b, Edward Lloyd-Evans^{b,*}, Gaston Sorgho^c, Fernando Lavadenz^d, Zeinab Adam^e, Lesley Drake^f, Sarah Rowland-Jones^g and Peter Piot^h

^aInfectious and Tropical Diseases, London School of Hygiene & Tropical Medicine, London WC1E 7HT, UK; ^bSchool Feeding Services, United Nations World Food Programme, 00148 Rome, Italy; ^cHealth, Nutrition and Population Practice – West and Central Africa, World Bank Group, Abidjan, Côte d’Ivoire; ^dHealth, Nutrition and Population Practice, World Bank Group, Washington, DC 20009, USA; ^eCoordination, Development and Strategic Planning, Education Cannot Wait, New York, NY 10017, USA; ^fPartnership for Child Development, Imperial College, London SW7 2AZ, UK; ^gRoyal Society of Tropical Medicine and Hygiene, University of Oxford, Headington OX3 7FZ, UK; ^hLondon School of Hygiene and Tropical Medicine, London WC1E 7HT, UK

*Corresponding author: Tel: + 39 33 8898 8956; E-mail: Edward.lloyddevans@wfp.org

Received 4 December 2019; revised 4 December 2019; editorial decision 17 February 2020; accepted 6 February 2020

Good health and nutrition during childhood and adolescence are crucial to human development yet are currently areas of significant underinvestment by the health sector. This symposium brought together multisectoral perspectives on addressing this challenge.

Donald Bundy introduced the symposium by citing the latest evidence from the World Bank’s Disease Control Priorities, which for the first time includes a volume 8 on child and adolescent health and development. This analysis concludes that the current focus of health investment during the first 1000 d of life is an essential but insufficient investment in human development.^{1,2} Further investment during the next 7000 d, into the early 20s, is also essential, both to secure the gains from early intervention and to ensure good health at later vulnerable developmental periods, especially during the pubertal growth spurt and the brain reorganization during late adolescence. Continuing investment in health at those ages, which are most important for education, are crucial if individuals are to achieve their intellectual and skills potential as adults.

These conclusions have been reinforced by the recent Lancet Commission on Adolescent Health, the International Commission on Financing Global Education Opportunity and the World Bank’s Human Capital Project.^{3–5} The latest World Bank analyses show that the skills and knowledge acquired during school age and adolescence are crucial to human capital. It is human capital that contributes some 70% of the wealth of rich countries, while

in poor countries this figure is often <40%, implying that poor countries undervalue their people and do not do enough to help poor people to attain their potentials as adults.⁶ Economic analysis suggests a major mismatch in sectoral investments: the annual investment in education in low- and lower-middle-income countries is around US\$210 billion, while investment in the health of these children is a meagre US\$4 billion. To address these concerns, the United Nations Educational, Scientific and Cultural Organization and the United Nations World Food Programme (WFP) convened a meeting in July 2019 with the World Health Organization, the Food and Agriculture Organization, the United Nations System Standing Committee on Nutrition, the Global Partnership for Education and the World Bank to explore how the education and health development sectors could work better together to help countries create human capital.^{7,8}

Gaston Sorgho described the World Bank Group’s Human Capital Project (HCP), which was launched in October 2018 to raise awareness of the cost of inaction on human capital development.⁵ In an effort to encourage countries to invest in their people, the World Bank developed a Human Capital Index (HCI), which measures the amount of human capital that a child born today can expect to attain by age 18 y. For instance, at a regional level, Africa’s HCI score is currently 0.40, which puts the region at 40% of its potential due to shortfalls in education and health, suggesting a particular need to scale up cost-effective

interventions in these low- and middle-income countries.⁶ The focus on this issue during 2017–2019 has been associated with a 4% increase (from US\$2.9 billion to US\$4.5 billion) in World Bank International Development Association (IDA) investments in both sectors, reflecting the growing commitment from countries to accelerate investment in people.

Working with the countries, the health and education teams at the World Bank have identified the need for a multisectoral strategy. The Universal School Health and Nutrition Coverage Strategy is in development and includes an essential package to increase access to cost-effective health services (including school-based deworming, school feeding, menstrual hygiene management, sexual and reproductive health and socio-emotional skills) and serve as an entry point for adolescent health. These services will benefit the health of the learner, by helping reduce the burden of disease, while simultaneously benefitting education, by improving learning outcomes and reducing absenteeism, dropout rates and grade repetition. By promoting sufficient, yet modest investments, governments will be able to address public health threats in a more comprehensive and integrated way to promote human capital.

Zainab Adam explained how countries are seeking to maintain education during emergencies and protracted crises through a new fund hosted by the United Nations Children's Fund. Much of Education Cannot Wait's work today is a response to conflict in middle-income countries, where the focus is on ensuring that education does not stop during periods of social shock. Education Cannot Wait recognizes the importance of an intersectoral approach and is working with the WFP on the relationship between education and good nutrition and the stabilizing role of providing school meals even where schools themselves are temporary or unstable due to crises. A partnership between health and education is a key contributor to the Sustainable Development Goals.⁹

Edward Lloyd-Evans described how the WFP has recommitted to invest in school feeding as a key component of human capital creation. Recent benefit–cost analysis shows that there are double-digit returns to education from school feeding programmes and that the multisectoral returns are even greater, including substantial returns to agriculture and social protection.^{1,10}

Working with governments and partners, the WFP has undertaken a strategic analysis to explore the scale and cost of meeting the needs of the most disadvantaged school age children and adolescents in low- and middle-income countries globally. Of the 663 million school age children enrolled in school, 251 million have inadequate access to school meals and live in countries where there are significant nutrition deficits, and 73 million of these children in 60 countries are living in extreme poverty (<US\$1.97 per day). The WFP is creating a 10 y global strategy to respond to these needs, providing direct emergency support where countries are suffering social shocks and working with countries as they emerge from fragility to help them along the path to self-reliance. The WFP is placing special emphasis on Africa and on working with the African Union and the New Partnership for Africa's Development.

Lesley Drake drew on the three decades of work to explain how school health and school feeding can provide high returns

and sustainable investments due to the stability of the school platform. Thanks to the success of the Millennium Development Goals, school participation and access today are greater than at any time in human history. Even in low-income areas, schools are now ubiquitous and have exceptional reach into the communities: there are more schools than health centres and more teachers than nurses. Well-designed school health programmes avoid a 'tax' on teachers' time that detracts from their real work of providing education and are instead a cost-effective investment in education outcomes. New-generation school health programmes are more related to real needs and, in particular, address gender inequities. For example, menstrual hygiene management can make a huge difference, at low cost, to the school participation of adolescent girls, yet it is often forgotten in developing school health packages.¹¹

Sarah Rowland-Jones discussed clinical perspectives in targeting health services towards school children and adolescents. Adolescent health gained prominence due to the human immunodeficiency virus/acquired immune deficiency syndrome pandemic, but an overly exclusive focus on sexual health can be detrimental to other key areas. Mental health is a particularly important issue in adolescence since lifelong behaviours affecting health (including tobacco, alcohol and diet) are typically established then, and this is also when mental health issues first emerge. The Lancet Commission on Adolescence highlighted the neglect of access to adolescent health services, especially in low-income countries and for girls.³

Peter Piot wrapped up the discussion. In today's world of competing financial demands and rising health costs it is no longer sufficient to assume that investing in health can be justified for the returns to health alone: health for health's sake is no longer a sufficient argument. The symposium showed that health has benefits that go far beyond individual well-being and contribute to individual and national economic growth, especially through the creation of human capital. Current investments in health are not always well targeted, and higher returns could be achieved if adequate investment is made in school health and school feeding to support children and adolescents at all the vulnerable stages of their development.

References

- 1 Burbano C, Ryckembusch D, Fernandes M, Mitchell A, Drake L. Re-imagining school feeding: a high return investment in human capital and local economies. In: Bundy DAP, de Silva N, Horton S, Jamison DT, Patton G, editors. Disease control priorities, third edition. Volume 8: Child and adolescent health and development. Washington, DC: World Bank; 2017. Available from: http://dcp-3.org/sites/default/files/resources/CAHD_eBook.pdf [accessed 18 February 2020].
- 2 Bundy DAP, de Silva N, Horton S, Patton GC, Schultz L, Jamison DT. Child and adolescent health and development: realizing neglected potential. In: Bundy DAP, de Silva N, Horton S, Jamison DT, Patton GC, editors. Disease control priorities, third edition. Volume 8: Child and adolescent health and development. Washington, DC: World Bank; 2017. Available from: <https://openknowledge.worldbank.org/bitstream/handle/10986/28876/9781464804236.pdf?sequence=3&isAllowed=y> [accessed 18 February 2020].
- 3 Patton GC, Sawyer SM, Santelli JS, et al. Our future: a Lancet commission on adolescent health and wellbeing. *Lancet*. 2016;387(10036):2423–78.

- 4 International Commission on Financing Global Education Opportunity. The learning generation: investing in education for a changing world. New York: International Commission on Financing Global Education Opportunity; 2016. Available from: https://report.educationcommission.org/wp-content/uploads/2016/09/Learning_Generation_Full_Report.pdf [accessed 18 February 2020].
- 5 World Bank. The Human Capital Project. Washington, DC: World Bank; 2018. Available from: <http://documents.worldbank.org/curated/en/363661540826242921/pdf/131462-PublicHCPReportCompleteBooklet.pdf> [accessed 18 February 2020].
- 6 World Bank. Africa Human Capital Plan: powering Africa's potential through its people. Washington, DC: World Bank; 2019. Available from: <http://pubdocs.worldbank.org/en/562231555089594602/HCP-Africa-Plan.pdf> [accessed 18 February 2020].
- 7 United Nations System Standing Committee on Nutrition. Schools as a system to improve nutrition: a new statement for school-based food and nutrition intervention. Rome: UNSCN Secretariat; 2017. Available from: <https://www.unscn.org/uploads/web/news/document/School-Paper-EN-WEB.pdf> [accessed 18 February 2020].
- 8 Mundy K, Proulx K, Manion C. Making evaluation work for the achievement of SDG 4 Target 5: equity and inclusion in education. Paris: UNESCO Internal Oversight Service Evaluation Office; 2019.
- 9 Albright A, Bundy DAP. The Global Partnership for Education: forging a stronger partnership between health and education sectors to achieve the Sustainable Development Goals. *Lancet Child Adolesc Health*. 2018;2(7):473–4.
- 10 World Food Programme. The state of school feeding worldwide 2013. Rome: World Food Programme; 2013. Available from: https://documents.wfp.org/stellent/groups/public/documents/communications/wfp257481.pdf?_ga=2.84605977.1491961294.1564494036-1398024210.1564494036 [accessed 18 February 2020].
- 11 Schultz L, Appleby L, Drake L. Maximizing human capital by aligning investments in health and education. Bethesda, MD: USAID Health Finance & Governance Project, Abt Associates; 2018. Available from: <https://www.hfgproject.org/maximizing-human-capital-by-aligning-investments-in-health-and-education/> [accessed 18 February 2020].