

not make much sense,⁹ but it has become a contentious issue because, by contrast with the European Medicines Association, the US Food and Drug Administration has not accepted non-radiographic axial spondyloarthritis as an indication for the use of bDMARDs to date.

In conclusion, it is good to have another alternative for the management of patients with radiographic axial spondyloarthritis. It will be interesting to see anti-IL-17 data in non-radiographic axial spondyloarthritis, and to learn more about the relative effect of IL-17 inhibition in patients with and without an increased C-reactive protein concentration at baseline.¹⁰ Finally, similar to previous studies, the expectation is that the efficacy of ixekizumab will also be sustained over several years with relatively high retention and limited radiographic progression.^{10,11} Nevertheless, there is still an unmet need for head-to-head and strategy trials to provide better and scientifically based care to patients with axial spondyloarthritis.

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Changing school climates to promote adolescent wellbeing: two trials with one goal

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It is easy to use the word “unprecedented” when reviewing recent statistics about young people. We have the largest generation of adolescents in human history, their prospects for formal education are escalating, and previously tenacious disparities in school attendance between boys and girls are dwindling.¹ From 1985 to 2016, the proportion of young people enrolled in secondary schools increased from an estimated 47% to 76%.² Schools are consequently increasingly accessible for learning and socialisation. Yet a UNICEF report published in 2018 notes: “For millions of students around the world, the school environment is not a safe space to study and grow.”³ The authors estimate that approximately 150 million 13–15-year-old students experience peer-to-peer violence in and around school,

with at least a third of students being bullied in the previous month and a third involved in physical fights in the previous 12 months.³

As environments where students, teachers, parents, and communities can come together, schools are fertile settings to address these negative experiences, which often have lifelong consequences.^{3–5} However, schools are often reluctant to divert resources from education to wider social influences, and experimental evidence linking such efforts with improved adolescent health is sparse.^{6,7}

The two cluster-randomised controlled trials reported by Sachin Shinde and colleagues⁸ and Chris Bonell and colleagues⁹ in *The Lancet* are highly salient in this context. Done in two very different settings (India and the UK), both trials used rigorous public health and youth engagement

strategies to change the overall school climate (rather than individual behaviour change) and found remarkably similar effects on students' health and wellbeing.

Shinde and colleagues⁸ evaluated the SEHER intervention involving whole school, classroom, and individual activities directed at grade 9 students (mean age 13 years) in 74 government-run schools in the state of Bihar, India. Relative to students in control schools receiving standard state-wide adolescent education, students in schools where the intervention was delivered by lay counsellors reported substantial benefits to the overall school climate, assessed by the Beyond Blue School Climate Questionnaire. The baseline-adjusted mean difference was 7.57 (95% CI 6.11–9.03) compared with the control group. The investigators also reported reductions in bullying, violence, symptoms of depression, and smoking; and improved sexual health knowledge and attitudes towards gender equity. These benefits were not evident in the group in which teachers delivered the intervention.

The INCLUSIVE trial,⁹ involving 40 schools in southeast England, evaluated the Learning Together intervention, a whole-school programme incorporating restorative practice commencing in year 7 (11–12-year-olds). Compared with the control group, who were exposed to usual practice, students in the intervention group were less likely to report bullying (as measured by the Gatehouse Bullying Scale at 3 years; adjusted mean difference -0.03 , 95% CI -0.06 to -0.001), although there was no effect on aggression (assessed by the Edinburgh Study of Youth Transitions and Crime score; adjusted mean difference -0.13 , -0.43 to 0.18). They noted improvements in smoking, drinking alcohol, drug use, and police contact. They also reported better quality of life, and psychological and general wellbeing. Many intervention effects were stronger among students with higher baseline levels of bullying. However, the benefits were evident only in the third year of the study and not earlier, indicating the need for long-term investments that provide time to embed interventions within school procedures.

The novel insights from these studies have several implications. First, the positive findings from these relatively low-cost interventions are heartening given the increasing demand for evidence-based approaches to promote adolescent wellbeing. The similar effects of the two interventions targeting the same factor (school

climate) in very different settings also supports the generalisability of the findings. However, it would be useful to replicate these studies in other contexts and address place-based factors within and outside school.¹⁰ Could these approaches be effective in low performing schools (excluded from the INCLUSIVE trial)? And could they improve school attendance (relatively low in the Bihar study, at 50.7%)?

Second, the effective intervention arms in both studies engaged external facilitators. Using teachers to deliver the intervention reduces costs, but their other responsibilities (eg, giving assessments or disciplining students), prevailing power dynamics, and work pressures could undermine the ethos of these interventions. A survey done in England found that 93% of teachers and school leaders viewed their workload as a “very” or “fairly” serious problem.¹ In low-income settings where secondary education is being scaled up quickly and infrastructure more constrained, teachers could find the implementation of extracurricular interventions particularly challenging. A passionate well-trained



Ami Vitale/Panos Pictures

layperson could be more influential and less threatening in changing students' and teachers' practices.

This option raises implications for resourcing. With schools increasingly employing nurses, social workers, and school counsellors, is there potential to employ youth workers, health promoters, or cultural support workers to enhance school wellbeing? Could these non-teaching staff lose their ability to challenge the status quo in schools if they become internal employees with teachers as their managers? Careful negotiation of these roles and management will be needed to ensure the legitimacy of their roles as part of the school environment while maintaining their independence and ability to challenge.

Third, there are several aspects that require further development and evaluation. For example, can the programme be enhanced to improve areas that were relatively resistant to change—eg, aggressive behaviours and perpetration of bullying in the INCLUSIVE trial? What might explain the different effects by gender in these trials, and to what extent might intervention effects vary by age, ethnicity, religion, or other differences?

Finally, some school health promotion messages can appear incongruous, and be less effective, in the context of wider societal norms. About 720 million school-aged children live in countries where corporal punishment at school is not fully prohibited.³ Although they found favourable effects on drinking, the investigators of the INCLUSIVE trial suggest that the lack of effect on sexual health could be due to these behaviours typically occurring outside school. The difficulties in improving sexual health might lie in social taboos and cultural norms that prevent open and honest discussions with adolescents about relationships, consent, and safer sexual behaviour without resorting to shaming or use of scare tactics.

Notwithstanding issues that require further attention, both trials provide compelling evidence to

target investments and resources to enhance school environments as a social determinant of health amenable to modification.

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A global accountability mechanism for access to essential medicines

Access to affordable, quality-assured essential medicines is a prerequisite for effective universal health coverage.^{1,2} Efforts to ensure comprehensive access to essential medicines have been hindered by a dearth of information. Most monitoring efforts have focused on

measurement of a prespecified list of essential medicines in health facilities. Measures of affordability in private and public health facilities have relied on periodic surveys, usually by non-governmental organisations (NGOs) or academia.³ The quality of medicine products

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