and identify interventions that can holistically target the experience of intimate partner violence as well as other forms of violence, building on new work rigorously evaluating prevention interventions for school-based violence.[8,9]

Another limitation of this analysis is that it does not provide estimates of violence for subpopulations that other literature has identified as particularly vulnerable to violence, including disabled girls and women[10], and girls and women living with HIV.[11,12] A focus on these vulnerable groups is also an important direction for future research; although data limitations and variations in how this information is collected across contexts might render more systematic estimates impossible at this stage, and therefore incorporating these dimensions into data surveillance systems might be a useful step moving forward.

The literature analysing the effectiveness of strategies to prevent and reduce intimate partner violence in low-income and middle-income countries has expanded rapidly in previous years. Much of this literature is now encapsulated in the RESPECT framework[13] and its implementation plan.[14] Clearly, given the scale of intimate partner violence in 2018, as summarised in this analysis, and the fact that evidence suggests that violence has increased further during the COVID-19 pandemic, it is crucial to focus on exploring methods by which prevention interventions for intimate partner violence can be deployed at scale using available human resources, and integrated into existing health, educational, and social protection systems. This comprehensive new data should only re-emphasise the urgency of developing, evaluating, and scaling strategies for the prevention and reduction of intimate partner violence for women around the world, particularly the most vulnerable.

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Waning effectiveness of COVID-19 vaccines

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In *The Lancet*, Peter Nordström and colleagues[1] report the effectiveness of several COVID-19 vaccines and different vaccine schedules against any documented SARS-CoV-2 infection and against severe COVID-19, for up to 9 months of follow-up. Data for 842 974 matched pairs of vaccinated and unvaccinated individuals in this retrospective cohort study were retrieved from the Swedish national registers. These registers track health outcomes for all registered individuals nationwide. Both cohorts had a median age of 52·7 years (IQR 37·0–67·5) and included mostly women (500 297 [59·3%] in each cohort)

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and individuals born in Sweden (703 666 [83·5%] in the vaccinated cohort *vs* 578 647 [68·6%] in the unvaccinated cohort). Follow-up started 14 days after the second dose for each person vaccinated with BNT162b2 (Pfizer–BioNTech), mRNA-1273 (Moderna), ChAdOx1 nCoV-19 (Oxford–AstraZeneca), or mixed ChAdOx1 nCoV-19 and an mRNA vaccine and their unvaccinated matches. Effectiveness estimates were adjusted for date of second dose, age, sex, domestic support (proxy for disability), education, place of birth, and comorbidities. The study was completed on Oct 4, 2021, before the advent of the omicron (B.1.1.529) variant.

Nordström and colleagues[1] found that although all vaccines elicited strong protection against SARS-CoV-2 infection in the first month after the second dose (>90% for BNT162b2 and mRNA-1273, >85% for mixed ChAdOx1 nCoV-19 plus an mRNA vaccine, and around 70% for ChAdOx1 nCoV-19), this protection waned to negligible levels within 7 months for BNT162b2 and 4 months for ChAdOx1 nCoV-19. Similar, but slower waning was noted for mRNA-1273 (effectiveness of 59% [95% CI 18–79] from day 181) and for ChAdOx1 nCoV-19 plus an mRNA vaccine (66% [41–80] from day 121).

Of greatest concern is waning effectiveness against severe COVID-19, which for all vaccines combined declined to 64% (95% CI 44–77) 121 days after the second dose, despite having been stable at around 90% initially. However, it remains unclear whether this combined statistic is exacerbated by accelerated waning of the ChAdOx1 nCoV-19 vaccine. The evidence from Nordström and colleagues' study[1] suggests lower effectiveness for older individuals and for men. The latter finding seems to be unique to this study and merits replication in other countries.

The importance of this study is that it had a longer follow-up period than most studies, it examined several vaccines and different schedules, and it captured a national population in its entirety. The study manifests the true meaning of real-world vaccine effectiveness and its findings are integral to our understanding of waning vaccine protection. This study also demonstrates the expanding power of biomedical research in the era of digitised health information platforms.

In the context of other evidence on COVID-19 vaccine effectiveness, Nordström and colleagues' study[1] highlights several patterns. Unlike natural immunity, which appears robust with little waning for a year following infection,[2–4] there is gradual but relatively rapid waning in vaccine immunity against infection following the second dose.[5–8] Vaccines differ in effectiveness and durability of protection, with mRNA-1273 showing the highest effectiveness and slowest waning, perhaps owing to its large dose.[8,9] Yet, vaccine-induced immunity against severe COVID-19 is more robust than that against infection and wanes more slowly. The gradient in effectiveness, highest against the most severe forms of infection and lowest against the least symptomatic forms, might explain the faster waning reported in studies that assessed effectiveness against infection of any severity,[5,6,8] such as Nordström and colleagues' study,[1] versus studies that assessed effectiveness against graded symptomatic infection.[7]

Although Nordström and colleagues' study[1] answered important questions, it raised concerns, especially with the emergence of the immune-evasive omicron variant. Omicron appears to accentuate the rapid waning of vaccine protection.[10] Effectiveness against this variant is also considerably lower than against earlier variants,

even in the first month after a booster dose, when protection is presumed to be highest.[10,11] Has the current generation of vaccines reached its maximum potential?

We believe that the Nordström and colleagues' study[1] and other supporting evidence constitute a wake-up call that the world's community are insufficiently prepared for future chapters in this evolving pandemic. For vaccines to have optimal value as public health tools, the rapid waning in vaccine immunity, in contrast to natural immunity, needs to be understood in order to develop vaccines that elicit durable protection. The ecological reality of new variants and perhaps an expanding enzootic viral reservoir demonstrate the need for vaccines that are protective against a broader spectrum of potential variants.[12] SARS-CoV-2 is unlikely to be eliminated soon, if ever, and as long as it continues to circulate, it remains a threat to human health, societies, and economies. It is urgent that we develop coronavirus vaccines that are more broadly protective, with durable protection against both infection and disease.

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Preventing relapse in schizophrenia needs better evidence

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Given the considerable contribution of schizophrenia spectrum disorders to the global burden of disease, implementing evidence-based treatments is a global health priority.[1,2] Building on a previous network meta-analysis of randomised trials of antipsychotics for acute symptoms of schizophrenia,[3] Johannes Schneider-Thoma and colleagues[4] assessed 32 oral and long-acting injectable antipsychotics for 14 different efficacy and tolerability outcomes in a systematic review and network meta-analysis published in *The Lancet*. The primary outcome was the number of participants who relapsed after clinical stabilisation.[4] The authors found that, for the prevention of relapse, most antipsychotics were superior to placebo, but there were no clinically relevant differences between antipsychotics, as most comparisons included a probability of no difference. Comparing side-effects between antipsychotics generally confirmed findings from trials of acute phase schizophrenia, showing the highest risk of extrapyramidal effects for first-generation antipsychotics, weight gain for second-generation antipsychotics, and hyperprolactinaemia for paliperidone and risperidone. However, for some important side-effects, such as tardive dyskinesia, imprecise results prevented clinical implications from being drawn.

Although network meta-analyses allow the identification of the best performing treatments and grade the confidence in the evidence, the potential risk of bias in the included primary studies should be