The main outcome measure was a weight gain of children aged < between trade and individual weight status. Few empirical studies have investigated the relation between trade and individual weight status. This study aimed to evaluate the burden of rotavirus-associated mortality in order to encourage implementation of rotavirus vaccine. Methods Based on rotavirus-associated mortality in the pre-vaccination period, the effect of rotavirus vaccine to avert children deaths was calculated. Results In the Eastern Mediterranean Region more than 61,000 children aged <5 years died of rotavirus in 2004. Pakistan and Afghanistan, each with more than 15,000 deaths per year, were the countries with the highest rates of rotavirus-associated mortality; followed by Iraq, Somalia, Sudan, Yemen, Egypt and Morocco. Bahrain, Kuwait and Qatar with less than 10 deaths per year were the countries with the lowest rates of rotavirus-associated mortality. When the coverage of currently used vaccines was applied to a rotavirus vaccine, a minimum of 24,100 and maximum of 43,300 deaths would be averted with vaccine efficacy of 50% to 90%, respectively. Conclusion Rotavirus-associated mortality and morbidity varies considerably in the region. While in some countries reducing rotavirus-associated mortality is a great concern, in others reducing rotavirus-associated morbidity is the main benefit of rotavirus immunisation. Implementing comprehensive strategies to facilitate usage of rotavirus vaccine in the region is encouraged. Methods We used data from a sample of 81,449 adults from 24 low-and-middle-income countries who took part in the World Health Survey, a population-based survey of adults in 2002–2003, to examine the multilevel association between trade [i.e., levels of trade, imports, and foreign direct investment (FDI)] and individual-level weight status. Results The prevalence of underweight ranged from 2.51% (SE = 0.85) in Bosnia-Herzegovina to 34.03% (SE = 1.05) in India and the prevalence of overweight ranged from 7.74% (SE = 0.69) in India to 49.08% (SE = 1.98) in Russia. Marital, economic, and health statuses were among the most important individual-level predictors of weight. At the macro-level, FDI as a percent of GDP was associated with lower odds of underweight relative to normal weight for rural and urban residents, independently of individual-level covariates and country-level GDP and urbanisation. However, among rural men and women, FDI was positively associated with overweight compared to normal weight; a one unit increase in net inflow of FDI as a percent of GDP was associated with a 15% higher odds of overweight relative to normal weight among rural men (OR = 1.15, 95% CI 1.05 to 1.26) and women (OR = 1.15, 95% CI 1.07 to 1.23). Conclusion Trade may be associated with individual weight status.