**[Intersectoral health](https://www.dawn.com/news/1808718/intersectoral-health)**

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IN my [last column](https://www.dawn.com/news/1805172/essential-health-services), I discussed the Essential Health Services Package (EHSP).

I mentioned that healthcare systems act through three approaches: by preventing diseases and promoting health at population and individual levels; by providing curative health services at an individual level; and through intersectoral action addressing the determinants of health. All three are interconnected.

This is what we know about the third aspect — intersectoral health interventions.

The WHO Constitution (1948) and Ottawa Charter for Health Promotion (1986) have mentioned peace, shelter, education, food, income, a stable ecosystem, sustainable resources, social justice, and equity as fundamental prerequisites. These are considered the distal determinants of health.

According to the DCP-3 (Disease Control Priorities), the more proximal risk factors are grouped into two categories: environmental and behavioural. Environmental risks include lead and other chemical contamination, climate change, occupational hazards, unsafe roads and vehicles, outdoor air pollution, indoor air pollution, unsafe water, and poor sanitation.

Behavioural risks to health include inadequate nutrient intake, excessive nutrient intake, suboptimal breastfeeding, risky sexual behavior, physical inactivity, tobacco use, harmful alcohol use, harmful use of injectable drugs, and other addictive substances.

There are 30 high-priority intersectoral health interventions for Pakistan.

If not controlled, these risk factors result in a plethora of infections, injuries, cancers, cardiovascular, respiratory and other non-communicable diseases, and mental, neurological and substance use disorders.

Assessing the magnitude of health loss due to specific health risk factors is a complicated process. However, in 2015, it was estimated that one-fourth or more of the 57 million deaths globally could be attributed to one or more behavioural or environmental risk factors.

As specific evidence-based examples, air pollution studies have estimated life expectancy losses of 3.3 years in India in 2015 and 5.5 years in northern China. Losses from unsafe water and sanitation in Mexico were estimated to be one year.

Tobacco studies have estimated that smokers in India, Japan, the UK and US have their life expectancy lowered by about 10 years in comparison to their non-smoking peers. Likewise, a US study estimated that physical inactivity, defined as sitting for more than three hours a day, decreases life expectancy by three years.

Among the distal determinants of health, interestingly, education level has a much higher impact on health than income level. In 2017, a study concluded that about 14 per cent of the decline in under-five mortality between 1970 and 2010 resulted from improvements in education levels.

Likewise, about 30pc of the decline in adult mortality resulted from improvement in education. Female education was found to be much more important than male education in reducing child and adult mortality.

In order to meaningfully advance universal health coverage, DCP-3 has also proposed a package of intersectoral interventions along with 218 essential health services.

The DCP-3 intersectoral package consists of 71 essential policy/ fiscal interventions. These interventions are health taxes and subsidies, regulations, built environment (roads, parks, buildings, etc) and information provision. These four kinds of interventions are made in five risk domains: addictive substance use, diet, environment, injuries, and others. Out of these 71 essential interventions, 29 are shortlisted as the highest priority.

The analysis of health risks in Pakistan, conducted by the [Global Burden of Disease Study](https://www.healthdata.org/research-analysis/gbd) (1990-2019) by the Seattle-based Institute of Health Metrics and Evaluation, informs us that over half of Pakistan’s total burden of disease (53.5pc of total DALYs) is attributed to these risks. DALY is a metric that stands for Disability Adjusted Life Years, which presents years of life lost due to premature death plus years lived with disability.

Among the behavioural risk factors, child and maternal malnutrition is at the top (68.4pc), followed by dietary risks (13.2pc), and tobacco use (12.6pc). Forty per cent of stunted children under five reflect this particular behavioural risk. For the environmental/ occupational risk group, the major contribution to DALYs result from air pollution (64pc), followed by unsafe water, sanitation, handwashing (28pc), and occupational risks (8pc).

The [2020 World Air Quality Report](https://www.iqair.com/world-most-polluted-cities/world-air-quality-report-2020-en.pdf) ranks Pakistan as the second-most polluted country in the world; Lahore has the dubious distinction of the top polluted city in the world. Air pollution exposure is responsible for 15.7pc of the total deaths in Pakistan each year.

Risks related to unsafe water, and sanitation (including handwashing), are the third highest contributors of BoD (burden of disease) in Pakistan responsible for 79,813 deaths annually.

Occupational risks in Pakistan contribute to 22,690 deaths annually, out of which around 44pc are due to injuries at the workplace, 37pc due to occupational particulate matter, gases, and fumes, 12pc due to occupational carcinogens and 6pc due to occupational asthmagens. Lead exposure contributes to around 21,167 deaths annually in Pakistan.

The burden of injuries in Pakistan has increased from 10,641 per 100,000 in the year 2000 to 13,885 per 100,000 in 2019. Of these, more than one-fourth (27pc) are transport-related injuries; 31m injuries during 2019 resulted in 85,346 deaths, out of which 20,747 deaths were related to road accidents.

In Pakistan, the development of a package of intersectoral health interventions was part of our vision. After completing the development of EHSPs at the federal and provincial levels, the Health Planning, System Strengthening, and Inf­ormation Analysis Unit at the Ministry of National Health Service, Regulation and Coordination continued the work on the intersectoral package.

A draft ‘[Health Related Intersectoral Interventions Action Plan 2022-30](https://www.dcp-3.org/sites/default/files/resources/FINAL%20DRAFT%20ISPIs%20PAK%20July%202022%20Edited%20MK%20(1).pdf)’ consisting of 30 high-priority interventions recommended by DCP-3 has been developed. Considering COP26 commitments, the intervention of the Climate Resilient Health System has been added.

The package is to be implemented in a phased manner and will involve seven ministries including Nat­ional Health Service, Regulation and Coordi­nation (10 interventions), Climate Change (10), Planning, Development and Special Initiatives (4), Education (2), Communications (1), National Food Security and Research (1), and the National Disaster Management Authority (1).

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