

Achieving health for all in Yemen A book of human stories

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Nine years and counting...

Achieving peace through health in conflict-ravaged Yemen

The conflict in Yemen has become a largely forgotten and neglected humanitarian crisis in which two-thirds of the population – more than 20 million people – are in present need of urgent health assistance. But as this protracted conflict now enters its ninth year, there is renewed hope for eventual peace and health, for all Yemenis.

"Arabia Felix", or "Happy Yemen" – as this beautiful and once-prospering country was called in ancient Roman times – is deeply suffering and impoverished today.

Since March 2014, long years of conflict have driven Yemen into a dark abyss of human deprivation and despair. Multiple life-threatening health risks, and a severely crippled and overwhelmed health system, have contributed to making Yemen home to one of the world's most protracted and dire humanitarian crises.

Currently, only 54 percent of health facilities are functioning, while 46 percent are closed or only partially operating. Facilities that are still open are badly overstretched and struggling to provide even most basic services, due to shortages of staff, electricity, medicines, supplies, and equipment. Most health workers are receiving reduced payments if any, compared to previous years – resulting in further deterioration of essential services.

According to the UN's Yemen Humanitarian Needs Overview 2023 (HNO), severe health risks and limited access to health services pose greatest threats to children and women who are most vulnerable to malnutrition and preventable diseases. At present, some 17.3 million people in Yemen are being driven to the brink of starvation. They include about 1.15 million acutely malnourished children under age five who face a 30–50% risk of death; and an estimated 540,000 children under five who presently suffer from severe acute malnutrition (SAM), with imminent risk of death.



Four different disease outbreaks (measles, diphtheria, pertussis, and poliomyelitis) are also sweeping across Yemen, accelerated by conflict, mass internal displacements, and disruptions of water and sanitation networks. More than 15 million people cannot presently access clean water and sanitation without humanitarian assistance.

Around one in four Yemenis are estimated to be suffering from mental illness and psychosocial problems exacerbated by violence, forced displacements, unemployment, and food shortages. Their health needs are predominantly stigmatized, if ever treated.

Critical health interventions, including community vaccination campaigns, are severely impeded not only by conflict, but also by as widely-circulating and fear-based misinformation that erodes community trust in life-saving vaccines.

"Despite their extreme difficulties and suffering, the Yemeni people remain determined and resilient," said Dr Adham Abdel Moneim, WHO Representative in Yemen. "But since there is no health without peace, and no peace without health, international solidarity and support are desperately needed in Yemen now. Only when the conflict in Yemen is ended will Yemen's health system be able to recover and rebuild."

WHO continues working around the clock with Yemen's Ministry of Public Health and Population (MoPHP) to shore up fragile health facilities and meet most urgent health needs of at-risk population groups including children under five and pregnant and breastfeeding women who are highly vulnerable to malnutrition and preventable diseases.

Yemen's largely female health workforce continues to play a central role in enabling WHO's efforts to support hospitals and health facilities with essential medicines, supplies, equipment, training and many other interventions, within WHO's integrated response to Yemen's health crisis, together with the MoPHP.

Although other major humanitarian crises have diverted much of the world's attention from Yemen, recent and positive political dialogues hold new promise for the country. Restoring health and well-being to communities is key to ending Yemen's unrelenting years of prolonged conflict and widespread human suffering.

Peace is possible in Yemen.



Vaccine-preventable diseases continue to spread in Yemen

Daunting challenges to immunization efforts are disproportionately affecting the youngest children

Four-year-old Mohammad contracted polio in late 2021. He spiked a high fever, recalls Bushra, and his right leg suddenly went floppy and weak. Acute flaccid paralysis is the primary sign of poliovirus infection, and it was confirmed in Mohammad's case by laboratory testing, making it one of the first cases in the ongoing outbreak.

"I will live all my life regretting seeing my son paralyzed," Mohammad's mother Bushra said.

In Yemen, 228 children have been paralyzed since 2021 by the ongoing polio outbreak. Eliminated in nearly all other parts of the world and on its way to

global eradication, the poliovirus case count in Yemen is expected to rise.

Spread of polio and other vaccine-preventable diseases in Yemen

It's not just polio. Against the backdrop of ongoing conflict, widespread malnutrition and shortages of food and medicine, one of Yemen's fastest growing problems, is, ironically, easily solvable: multiple outbreaks of vaccine-preventable diseases.

The numbers are daunting. Yemen recorded more than 22,000 measles cases in 2022, including 161 deaths. In 2023 to date, cases have already spiked to 9,418, with

77 children dead. Diphtheria and pertussis – whooping cough – cases are also on the rise, as are deaths from each disease.

Yemen's already fragile and severely over-burdened health system, combined with sub-optimal population immunity against vaccine-preventable diseases, increases the likelihood of further explosive outbreaks of these diseases. Moreover, the lack of immunization has major negative socio-economic impacts on households, which face unaffordable high hospitalization costs. The human cost of these outbreaks is particularly painful in that it is children, not adults, who bear the brunt.

Challenges to immunization efforts

Yemen's vaccine-preventable disease outbreaks are the direct consequence of increasingly low immunity levels in children. With the rapid decline in immunization coverage, an atypically high mortality rate is expected to increase, especially if malnutrition rates continue to rise.

For decades, Yemen's high coverage rates for childhood immunization were amongst the best in the region, kept high by a steady stream of state-funded risk communications and a robust public health system. Conflict has decimated both.

Since confirmation of the outbreak of circulating variant poliovirus in November 2021, the Global Polio Eradication Initiative has been unable to obtain house-to-house access to children in Yemen's northern governorates. As a result, the polio outbreak there has continued, and even spread to other countries in the region. Of Yemen's 228 paralytic polio cases, 86 per cent (197) are from the northern governorates.

While multiple measles and polio vaccination campaigns have been implemented in the southern governorates over the past two years, the ongoing deadlock in the northern governorates over supplementary immunization activities puts children there at particular risk. The restriction of vaccination campaigns to only fixed-site health facilities, combined with prohibition of integrated community outreach services in all northern governorates, has led to continued multiple outbreaks of polio and other vaccine-preventable diseases, specifically measles and diphtheria. The current measles outbreak, ongoing since 2019, is disproportionately affecting children there.



For Bushra, the lack of a "pull" to immunize her children shaped the choices her household made around the children's health. Mohammad is a zero-dose child, meaning he is completely unvaccinated.

"We didn't know we were supposed to take them to the hospital to get vaccinated, and I wasn't aware of the seriousness of these diseases or thinking that any of my children would get sick," she said. Bushra's three older children, two boys and a girl, received a few vaccinations during house-to-house campaigns. However, between Mohammad's birth and the onset of his paralysis, Bushra notes there had been no houseto-house campaigns. This is why the polio programme advocates for house-to-house vaccination: it is the method that delivers the highest coverage, delivering vaccines even to children who may have until then missed out on routine immunization.

Other challenges remain. Insecurity in parts of the country—particularly in some districts in Yemen's southern governorates—makes accessing them difficult. The result is that most children in these districts are not vaccinated.

Disinformation undermines immunization coverage

Over the past year or so, the lack of a "pull" towards vaccination has been joined by an aggressive "push" away from it. An escalating campaign of anti-vaccine propaganda has taken root on YouTube, television, radio and social media, calling into question established scientific fact and sowing fear and doubt in parents' minds.

While the material is produced and broadcast in the northern governorates, its effects are increasingly felt in the country's southern governorates. Parental refusals in the March 2023 house-to-house polio vaccination campaign there were markedly higher than in other recent rounds. The driver, according to post-campaign monitoring activities and conversations with parents, is overwhelmingly all the fear-based rumors and disinformation parents take in on social media and in WhatsApp groups. The result is a combination of mistrust, vaccine hesitancy and refusals that undermine immunization coverage.



The longer the current disinformation campaign persists, the greater the risk that parents will opt out of vaccines for their children when they are finally offered that protection, based on misguided, if well-intentioned, fears.

Immunizations are essential to prevent the further spread of these vaccine-preventable diseases and others. For Bushra, the cost of missing out on Mohammad's childhood immunizations is a price she and her son will pay forever – and one she urges other parents to guard against.



Surviving hunger in Yemen

Therapeutic feeding centers give hope and help to thousands of families

Families in Yemen who endure prolonged exposure to armed conflict and grinding poverty are forced to live on the thinnest margins of survival – especially when displaced from their homes and lacking access to food, clean water, and basic nutrition and medical services.

Om Salim confronts the cruel realities of hunger every day as a mother of two young children living in extreme poverty. The family must routinely skip meals, and often has nothing to eat for a day if not longer. When Om Salim's youngest child recently began showing signs of malnutrition including severe wasting and swelling, she brought him to a WHO-supported therapeutic feeding center (TFC) with nothing but her anguished prayers that he would pull through.

"When I first brought my baby to this feeding center, he was so thin, and my heart was breaking" Om Salim said. "But now I can see that he is doing much better, and for that I am so grateful."



Dr. Athmar Al Saqqaf is the director of the Al-Sadaqa Hospital TFC in Aden governorate. A large number of families arrive to this TFC from surrounding governorates including Abyan and Al Hodeidah. Consequently, it is continuously filled to capacity and beyond with malnourished children and their caregivers.

"We treat children for a number of critical medical complications caused by severe acute malnutrition [SAM] – requiring that we also operate as a pediatric intensive care unit -- so we need skilled staff and adequate equipment," Dr. Athmar explained.

Dr Athmar said, adding: "We need this support to continue so we can carry on with preventing the deaths of potentially thousands of children." Ohod Jomay, age 22, has experienced the torment of seeing her 8-month-old daughter Maryam nearly succumb to severe acute malnutrition before she could get her to the Al-Sadaqa Hospital TFC for life-saving therapeutic feeding and emergency medical care.

"My daughter began receiving treatment four days ago, and the staff here are very kind to us," said Ohod. "She is already feeling much better, and nothing could make me happier."

WHO has been providing emergency therapeutic feeding and medical care to about 18,000 infants and children under age five, at eight TFCs in tertiary teaching hospitals located across eight governorates of Yemen. Parents and caregivers arriving to the TFCs are also educated about what they can do to prevent malnutrition, even while lacking many basic necessities. This involves educating them about essential, healthy and affordable food items, to mitigate the recurrence of malnutrition linked to limited nutritional knowledge, living conditions, and other contributing factors.

In Yemen some 46 percent of children under five are suffering from chronic stunting that can impede their mental and physical development, and increase their vulnerability to chronic diseases in adulthood. It is also estimated that at least 362,000 children under age five are suffering from both acute and chronic malnutrition -placing them at nine times higher risk of death.

Post-traumatic stress, depression and anxiety are commonly experienced by parents who cannot provide for their children, while being constantly worried about their safety, if not their survival.



Responding to Yemen's unseen mental health crisis

Mohamed (not his real name) is a 35-year-old patient at the AI Amal hospital in Sana'a – one of only four hospitals in Yemen providing care to persons with mental disorders.

A father of four, Mohamed is isolated from his wife and children. He thinks about them constantly.

"They have nothing to eat," he says, eyes welled with tears. "All I am worried about is my children going hungry, while I must stay here for my treatment. I miss them. They have no one to support them."

Outside the hospital walls, Mohamed faces social stigma and shame, because of widespread misinformation, ignorance, and discriminatory attitudes about mental illness in Yemen. Yet mental illness is among the most common health conditions in Yemen. Some eight million Yemenis – more than one in four – are estimated to be suffering from mental and psychosocial problems that are exacerbated by armed conflict, forced displacements, unemployment, food shortages, and other dire conditions.

Mohamed is an exception to the great majority of these Yemenis who have no access to available and affordable diagnosis and treatments for a wide range of mental health disorders.

Yemen's eight-year armed conflict and collapsing economy have crippled health facilities and worsened mental illness that impacts every community and social strata of Yemen. Compounding this largely invisible, neglected crisis, Yemen has never had a fully developed national mental health programme, or extensive education campaigns to address the pervasive social stigma associated with mental disorders.

The relatively few facilities that deliver mental health and psychosocial services are gravely underfunded, in comparison to an overwhelming need for their services. Yemen has just 0.21 psychiatrists per 700 000 Yemenis and 0.17 psychologists per 100 000 Yemenis – compared to 12.4 psychiatrists and 29.03 psychologists per 100 000 US citizens, and 29.68 psychiatrists and 54.28 psychologists for every 100 000 Norwegians. There is also a scarcity of reliable detailed data about mental health services in Yemen, hindering targeted investments.

While his family struggles daily with abject poverty, Mohamed is gripped by deep depression and anxiety. Yet he still counts himself highly fortunate to be hospitalized.



"People who are unwell need to be treated well by those who are healthy," he said. "I believe I would have died if I wasn't brought into this hospital. I am blessed to be here. I might have committed suicide otherwise."

WHO is supporting the Ministry of Public Health and

Population to update the National Mental Health Strategy and programme, and to build needed capacities of partners and stakeholders for mental health and psychosocial support initiatives.

"WHO has been able to work with our partners here to improve the delivery of mental health and psychosocial support services, and their coordination mechanisms," said Ibrahim Abou Khalil, Mental Health Technical Officer at the WHO Yemen country office. "However, there are overwhelming needs not addressed on a national level."

Since 2021, more than 3500 health care staff, first responders, frontline workers, school teachers, and child protection and gender-based violence case managers have been trained in mental health and psychosocial support. Two hospitals in Sana'a – the Al-Amal Neurological and Psychiatric Hospital, and the Al-Thawra General Hospital Psychiatric Ward – have been rehabilitated and provisioned with new equipment and materials. Incentive payments have been made to 196 unsalaried health workers. Fifteen health facilities have received psychological diagnostic kits and psychotropic medications. The Ministry of Public Health and Population has also been given support to develop a mental health awareness campaign.

Working together with the Family Counseling and Development Foundation (FCDF) as implementation partner, WHO strengthened multi-level mental health and psychosocial support services and improved their availability to some 145,000 people suffering from mental health complications.

"Mental health is an integral part of health; indeed, there is no health without mental health," said Dr Adham Ismail Abdel-Moneim, WHO Representative to Yemen. "Together with our partners, WHO is committed to supporting and advancing national efforts to promote, protect and restore mental health for all Yemenis, without discrimination."



