The humanitarian consequences and actions in the Eastern Mediterranean Region over the last 60 years – a health perspective

Altaf Musani[1] and Irshad A. Shaikh[2]

Humanitarian crises – historical context

Globally, countless lives and livelihoods have been affected by the impact of natural and man-made disasters in both developed and developing countries. However, more than 90% of deaths related to natural disaster occur in developing countries and the economic losses in relation to GNP are far greater in developing countries as compared to industrialized ones [*1*]. During the period from 1984 to 2003 more than 4.1 billion people were affected by natural disasters alone [*1*]. The overall trend of disasters and their impact on the world clearly illustrate: i) an exponential increase in the frequency of reported events; ii) a substantial economic burden to national economies; and iii) an increasing number of affected people who have to recover from such events. A number of major earthquakes, floods, droughts, cyclones, conflicts and civil strife has triggered humanitarian relief to ensure the resilience in survivors. Displacement and migration are a significant consequence of disasters and have posed a new challenge to the humanitarian assistance community. As a direct result of conflict and violence, the Office of the United Nations High Commissioner for Refugees (UNHCR) reports that by the end of 2007, the world's refugee population exceeded 11 million, while 26 million people were internally displaced; an additional 25 million people were displaced because of natural disasters [*2*].

Recent reported natural disasters such as the South-East Asia tsunami, the cyclone in Myanmar and the earthquake in China underscore that the poor are the most vulnerable and suffer the greatest impact. However, the hurricanes that have affected the south-east of the United States of America (USA) clearly demonstrate that no nation is immune to natural hazards and disaster preparedness, across the globe, leaves much to be desired. Additionally, conflict, wars, sanctions and civil unrest have contributed to death, displacement, migration and disability. The major lesson learnt from all these crises is that nations and communities must be better prepared!

Looking back at 60 years in the Eastern Mediterranean Region (EMR) of the World Health Organization (WHO) there have been many types of crises, from conflict to natural disasters. Tables 1 and 2 summarize the magnitude of some of the major crises reported in the Region.

[1]Regional Adviser; [2]Medical Officer, Emergency and Humanitarian Action, World Health Organization Regional Office for the Eastern Mediterranean, Cairo, Egypt (Correspondence to Altaf Musani: musania@emro.who.int).

Table 1 **Migration in the Eastern Mediterranean Region due to war and conflict**

Country	Period	Refugees (originating from)	Internally displaced persons assisted/protected by UNHCR (1993–2007)
Sudan	1963–2007	11 520 713	81 589 66
Afghanistan	1979–2007	10 3139 506	10 089 984
Iran (IR)	1974–2007	2 180 111	No data
Iraq	1968–2007	17 578 886	10 974 576
Somalia	1975–2007	10 378 319	4 439 206
Palestine	1976–2007	3 471 303	No data

Source: The Office of the United Nations High Commissioner for Refugees (UNHCR) Statistical online population database (http://www.unhcr.org/statistics/45c063a82.html).

Table 2 **Natural disasters and their impact in the Eastern Mediterranean Region (1950–2008)**

Event	Country	Deaths (No.)	Affected[a] (No.)	Homeless (No.)	Injured (No.)	Total affected (No.)	Damage (× 10^3 US$)
Earthquakes	Iran (IR)	65 074	818 091	575	19 963	838 629	1 135 000
	Egypt	20	NA	NA	28	28	–
	Afghanistan	2 663	152 440	6 580	5 518	164 538	340 00
	Pakistan	4 989	42 975	5 200	17 605	65 780	8 255
	Morocco	12 000	NA	NA	25 000	25 000	120 000
Floods	Iran (IR)	5 757	1 140 200	–	70	1 290 270	17 43 000
	Pakistan	6 308	13 909 527	38 732	–	15 166 527	1 169 800
	Yemen	657	625 000	154 750	612	907 862	1 052 900
	Afghanistan	479	785 044	–	140	792 684	312 000
	Sudan	130	1 847 000	30 000	–	2 877 000	25 000
Droughts	Djibouti	NA	255 000	NA	–	255 000	–
	Sudan	150 000	11 850 000	NA	–	11 850 000	–
	Somalia	19 650	1 483 500	NA	–	1 483 500	–
	Yemen	NA	2 000 000	20 000	–	2 020 000	10 000
	Iran (IR)	NA	625 000	–	–	625 000	–
	Afghanistan	–	48 000	–	–	48 000	200

[a]Affected = people requiring immediate assistance during a period of emergency, it can also include displaced or evacuated people.
Source: Centre for Research on the Epidemiology of Disasters – Emergency Events Database (CRED EMDAT) (http://www.emdat.be/Database/terms.html).
NA = not available.
– = not reported.

Over the past 2 decades in particular, the Region has experienced a number of complex emergencies as well as large scale natural disasters; 15 of the 22 Member States (roughly 85% of the Region's population) have suffered in protracted conflict situations [*3*]. In particular, the situations in Afghanistan, Iraq, Lebanon, Palestine, Somalia and Sudan go unabated and have collectively affected over 10 million people, 6.5 million of whom have been displaced from their homes and over 200 000 have died [*4*]. In Iraq, with the on-going violence and insecurity coupled with previous humanitarian needs, almost a third of the country is cut off from essential health services [*5*]. The conflict in the occupied Palestinian territories has been ongoing for over 6 decades and still 80% of the population living in Gaza depends on humanitarian assistance. Because of the burden of these crises, the world's highest proportion of internally displaced persons still lives in EMR.

To make matters worse, as the remainder of the world continues to realize health gains and achievements, due to the ongoing crises in Somalia and Afghanistan, these 2 EMR countries still have the worst national records of infant and maternal mortality indicators in the world. In addition to a high frequency of natural disasters and conflict, the Region is also vulnerable because of many other factors, such as population growth (Pakistan [*6*] Islamic Republic of Iran [*7*], Yemen [*8*]), crop failure/food insecurity (Somalia [*9*], Sudan [*10*], Afghanistan [*11*], Pakistan [*12*]), environmental degradation (Pakistan [*13,14*]) and water scarcity (Yemen [*15*], Sudan [*16*], Somalia [*9*], Jordan [*17*]). These vulnerabilities to a varying degree have also contributed to rural-to-urban migration and subsequent "premature urbanization" in major cities whereby the urban sector cannot generate compensatory economic growth to absorb the massive influx. This has resulted in thousands living in slums and/or low income housing that are unsafe when it comes to natural hazards, either because of poor structural quality or risk prone locations.

Newly emerging threats in the Eastern Mediterranean Region

In addition to the aforementioned obvious and localized threats and vulnerabilities that conventionally affect the poorest members of a population, there are newly emerging threats, which include a possible human pandemic influenza, sky rocketing food and oil prices, and climate change. These are global threats and combined with the existing vulnerabilities, if left unaddressed, will result in potentially catastrophic consequences for marginalized populations.

Health impact of an influenza pandemic

Should the Region experience a phase 5 or 6 situation with regard to the influenza virus (evidence of significant or efficient and sustained human-to-human transmission), the impact on countries could be crippling. Models and scenarios that have been developed on the pandemic anticipate that the health institutions will be overwhelmed with patients seeking care (at an expected attack rate of 35%, it is estimated that in the EMR, more than 180 million people will fall ill, 96–168 million will require medical care and 6–28 million will need hospitalization). Moreover, with already weakened and rundown health infrastructures in places like Afghanistan, Somalia and Sudan and existing vulnerable groups, such as refugees and internally displaced populations, the pandemic influenza virus will flourish. Countries, thus, will need to

be prepared to contain the epidemic within their borders.

The Region has already witnessed the largest cluster of human cases of the highly pathogenic avian influenza virus A/H5N1 outside Asia. Out of 22 countries in the Region, H5N1 has been reported from 10, including 2 countries with H5N1 in wild and migratory birds (Kuwait and Islamic Republic of Iran), 5 with H5N1 in poultry (Afghanistan, Jordan, occupied Palestine territory, Pakistan and Sudan) and 4 countries with confirmed human cases (Egypt, Iraq, Pakistan and Djibouti).

Food crisis and its impact on vulnerable populations

The world is witnessing some of the sharpest rises in food prices ever; since January 2008, rice prices have soared 141%. This food inflation could push at least 100 million people into poverty (to add to the 800 million people already suffering from hunger), which will wipe out all the gains the poorest billion of the world's population has made during almost a decade of economic growth [*18*]. The United Nations Economic Commission for Africa estimates that the number of food insecure people could rise by 16 million for every percentage point increase in real prices of staple foods, meaning 1.2 billion people could be chronically hungry by 2050 [*19*]. In EMR, countries at highest risk from the food crisis include Somalia, Sudan, Pakistan, Palestine and Yemen. The impact is already obvious and profound. In Somalia, this has meant an additional 600 000 urban poor, a 40% increase since January 2008, who now face conditions of acute food and livelihood crisis and humanitarian emergency and are in need of assistance [*8*]. In the case of Palestine, the United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA) reports that whereas in 2004 it spent about US$ 8 per refugee every 2 months in Gaza, today costs have risen to US$ 19 to provide the same 60% of their basic needs, these increases have forced the agency to significantly reduce the number of recipients of aid [*19*]. Additionally, the global food crisis threatens to spark even more violence and social unrest in war zones where millions of already marginalized people have had no or very limited success in their efforts to secure access to sustainable food commodities. It is therefore crucial that the health sector is able to respond quickly to excess violence and injury.

Climate change and its humanitarian impact

Climate change is expected to trigger, compound and increase disasters and exacerbate existing humanitarian situations. Most of the effects of climate change will be on low income, resource-starved countries with limited ability to adapt and respond. Extreme events such as changes in rain patterns, more severe tropical cyclones, drought, floods, extreme temperature fluctuations, possible rise in sea levels, coastal erosion and reduced biodiversity are expected to have a broad-ranging influence on agricultural production, food security, access to water, habitat and livelihoods. Likewise, there would be a considerable impact on human health. Scientists consider that most of the health impacts of climate change would be adverse. WHO, in its World Health Report 2002 [*20*], estimated that climate change was responsible in 2000 for approximately 2.4% of worldwide cases of diarrhoea and 6% of malaria in some middle-income countries. According to a World Bank study [*21*], just a 1 metre rise in sea levels would turn at least 65 million people in the developing world into environmental refugees; in terms of number of

populations affected, the top 10 countries in such a scenario include 3 countries from EMR: United Arab Emirates, Egypt and Tunisia. From a water scarcity perspective as a result of climate change, again, the Mediterranean and the Middle East Regions are the ones expected to be the worst off. The high number of refugees and internally displaced people indicate the existing vulnerabilities in EMR; because of these, greater humanitarian efforts will be required to deal with the consequences of climate change in order to prevent further erosion of their capacity to cope.

Responding to Regional crises

The inherent hazards and vulnerabilities that have been faced over the past 60 years in EMR, coupled with emerging threats, clearly indicate the changing nature and dynamics of humanitarian crises. It is apparent therefore that humanitarian strategies and methods used to deal with crises will need to be significantly different from the vertical relief approach of the present. Emerging causes of humanitarian crises – human pandemic influenza, climate change, food insecurity or bioterrorism – require multidisciplinary and multisectoral prevention and preparedness measures to build, sustain and promote national and local capacities. Moreover, the position of health, although clearly linked to better quality of life and livelihood, has often taken a back seat compared with the models and operations for food aid and water distribution. Hence the challenge for WHO, ministries of health and health partners in the humanitarian arena is to promote a public health preventive approach before disasters occur as well as to ensure that public health best practices apply in times of crises in order to ensure human survival.

Over the last 30 years WHO's humanitarian response actions and policies in the Region have focused on relief aid and ensuring the availability of and access to health services for those most in need. The approach was challenged by a number of major emergencies in the past that required WHO to become more involved in operations while still maintaining its technical leadership in health. As the frequency of natural and man-made disasters has increased, WHO has gradually evolved to be an active humanitarian partner among the international aid agencies. However, the technical leadership and health guidance to work with national and international partners and promote standards in health assistance still remain a core strength of the Organization. The role of WHO as the leader in health and humanitarian assistance has been echoed and re-enforced by Member States and partners through several World Health Assembly resolutions. More recently the humanitarian reforms have thrust WHO to the fore as the "convener" of the global and country health clusters in times of emergencies [*22*].

Over the last 2 decades WHO has been challenged by several emergency situations requiring the provision of health and humanitarian assistance to affected populations. Establishing operational capacity to respond to the earthquakes in the Islamic Republic of Iran and Pakistan as well as the conflict/violence in Lebanon, Iraq, Somalia, Afghanistan and Sudan has been a driving force behind WHO's regional response activities; however, more recently a strong shift from purely response to include and integrate preparedness and risk-reduction measures has been addressed within the Organization's strategy. Additionally, WHO is tackling the aspect of health in a post-crisis phase in order to ensure the bridge between relief and development.

What does the future for hold for the Region with regard to crises? The newly emerging threats coupled with the long-standing and inherent vulnerabilities do not present an optimistic prospect for health in the Region. Despite tremendous efforts to increase emergency response measures to safeguard lives and livelihoods, humanitarian partners, and in particular Member States, will have to intensify efforts to deal with the growing demand for humanitarian assistance. WHO has attempted to respond to the call of Member States for investment in national and local capacities for disaster preparedness and response. Ensuring the integrity and resilience of the health system in times of crisis has been the focus of a recent World Bank, United Nations International Strategy for Disaster Reduction and WHO global campaign of hospitals safe from disasters [*23*].

Additional challenges facing humanitarian assistance were outlined in a recent report of an interagency standing committee and addressed a number of key factors that we must take into consideration [*24*]. These include the ever-evolving and negotiating space for provision of humanitarian assistance; the global nature of various crises, such as a possible pandemic; greater engagement of local and national partners, including the private sector; use and engagement of national and foreign military assets in humanitarian crises; the erosion of protection of humanitarian workers; and the increased need for accountability by the humanitarian community.

EMR, despite its richness, heritage and diversity, has been beset by crisis situations for decades. Although there may have been several milestones in health throughout the Region, countries like Somalia, Afghanistan and Sudan stand on a precipice and risk falling deeper into poverty and ill health. Beyond the long-standing conflicts in the Region, all countries are vulnerable to impacts of climate change which threaten development and prosperity. Our challenge, if we are to reach the targets of the United Nations Millennium Development Goals, is to ensure the resilience of nations and communities to the effects of disasters.

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