

Dengue: misplaced fears

Dr. Sania Nishtar

The recent outbreak of Dengue, which is commanding widespread attention, is an important insight into several health and overarching governance issues. Before those are alluded to, a brief comment is offered on the current situation. It is indeed a sign of progressive attention to welfare that hotlines, round the clock media coverage, front paper trackers and policymakers' responses and reprimands have been galvanized in response to a public health concern. 4,363 cases of suspected Dengue Fever have been reported in Pakistan with 2,062 confirmed cases and 15 deaths until 22nd October 2010. Let's be reminded though that in the same country, hundreds of thousands of infants and mothers die needlessly every year; tens of millions suffer from hypertension and diabetes. If proportionate attention and resources are allocated and if decision-makers' wrath and intolerance is energized in response, achieving health goals might become a pragmatic reality rather than an aspirational vision, which is what it is today.

Let us also recall some facts about Dengue in terms of it being a public health threat to put things in perspective. There appears to be a fear ingrained amongst the general population in this respect, which is somewhat out of place. It should be appreciated that 2.5 billion people, two fifth of the world's population, are at risk from Dengue. Estimates show that 50 million cases of Dengue occur worldwide every year with the disease being endemic in over a hundred countries with many yearly outbreaks. The present outbreak appears to be the worst in Pakistan, but it is also important to communicate that the disease does not spread from person to person. Moreover it is usually a self-limiting febrile disease and serious complications, such as fall in platelet count (a type of blood cell) are a complication only in a minority of cases. Furthermore and fortunately, its vector (the mosquito) will not be able to survive and breed in the forthcoming winter season and hopefully the outbreak will be contained soon.

In contrast, many other equally serious infectious diseases (such as Multiple Drug Resistant Tuberculosis) often go largely unnoticed by the general public and decision-makers as they do not produce explosive epidemics. The salience of these points is being underscored to allay public anxiety, whilst stressing that the emphasis on public awareness and the public health response should be maintained.

Importantly however, the outbreak presents an opportunity to review existing constraints in Pakistan's health system. The importance of three points is being underscored in regard.

The first relates to disease surveillance. Karachi and Sindh are reporting higher numbers as they have a working surveillance system already established for Dengue. There have been no reported cases from Balochistan, which is indicative of weakness in the disease surveillance infrastructure. Underreporting was also a serious concern during successive outbreaks of Avian Influenza during the last few years and Pandemic Influenza A H1N1, last year. Underreporting is indicative of failure on part of Pakistan to fulfill International Health Regulations 2005, and is evidence of critical issues with Pakistan's health information system. Currently there are around 15 disease information collection systems in place, inclusive of surveillance systems for the following diseases: Acute

The NEWS International
Saturday, November 07, 2010

Dengue: fears & imperatives

Governance

Dr Sania Nishtar

The recent outbreak of dengue, which is commanding widespread attention, is an important insight into several health and overarching governance issues. Before those are alluded to, a brief comment is offered on the current situation. It is indeed a sign of progressive attention to welfare that hotlines, round the clock media coverage, front paper trackers and policymakers' responses and reprimands have been galvanized in response to a public health concern. 4,363 cases of suspected dengue fever have been reported in Pakistan with 2,062 confirmed cases and 15 deaths until 22nd October 2010. Let's be reminded though that in the same country, hundreds of thousands of infants and mothers die needlessly every year; tens of millions suffer from hypertension and diabetes. If proportionate attention and resources are allocated and if decision-makers' wrath and intolerance are energized in response, achieving health goals might become a pragmatic reality rather than an aspirational vision, which is what it is today.

Let us also recall some facts about dengue in terms of it being a public health threat to put things in perspective. There appears to be a fear ingrained amongst the general population in this respect, which is somewhat out of place. It should be appreciated that 2.5 billion people, two-fifth of the world's population, are at risk from dengue. Estimates show that 50 million cases of dengue occur worldwide every year with the disease being endemic in over a hundred countries with many yearly outbreaks. The present outbreak appears to be the worst in Pakistan, but it is also important to communicate that the disease does not spread from person to person. Moreover it is usually a self-limiting febrile disease and serious complications, such as fall in platelet count (a type of blood cell) are a complication only in a minority of cases. Furthermore and fortunately, its vector (the mosquito) will not be able to survive and breed in the forthcoming winter season and hopefully the outbreak will be contained soon.

In contrast, many other equally serious infectious diseases (such as Multiple Drug Resistant Tuberculosis) often go largely unnoticed by the general public and decision-makers as they do not produce explosive epidemics. The salience of these points is being underscored to allay public anxiety, whilst stressing that the emphasis on public

awareness and public health response should be maintained.

Importantly however, the outbreak presents an opportunity to review existing constraints in Pakistan's health system. The importance of three points is being underscored in regard.

The first relates to disease surveillance. Cities in Sindh are reporting higher numbers as they have a working surveillance system already established for dengue. There have been no reported cases from Balochistan, which is indicative of weakness in the disease surveillance infrastructure. Underreporting was also a serious concern during successive outbreaks of Avian Influenza during the last few years and Pandemic Influenza A H1N1, last year. Underreporting is indicative of failure on the part of Pakistan to fulfill International Health Regulations 2005, and is evidence of critical issues with Pakistan's health information system. Currently there are around 15 disease

Climate change and disease patterns in Pakistan need to be closely examined

case information collection systems in place, inclusive of surveillance systems for the following diseases: Acute Respiratory Infections, AFP/Polio, Bacterial Meningitis, Diarrhoea, Hepatitis, HIV/AIDS, Malaria, Measles and Tuberculosis. In addition, there is the Disease Early Warning System (DEWS), which is being used in flood-affected districts, the Expanded Programme for Immunisation system and the Health Management and Information System (HMIS).

Many of these surveillance systems are discrete, horizontal, fragmented and are dependent upon external donor support. Pakistan does not have an integrated disease surveillance system. Within this context, the prime minister's signal to prioritise the establishment of Integrated Disease Surveillance and Response (IDSR) on November 4 is a step in the right direction. Momentum must be sustained to overcome programmatic turf hurdles that stand in the way of creating such a structure.

In addition to this fragmentation, some surveillance systems are also antiquated and have not benefited adequately from technology. For example HMIS, a nationwide system of collecting data from public first-level facilities, has not been fully automated. Therefore, the potential that exists to leverage Pakistan's telecommunication boom and create a central computing facility for the public and private sector to report into re-

mains untapped. Thirdly, there is no agency clearly mandated for collecting, collating, consolidating and relaying information and data. Now that a new role for the Ministry of Health is being crafted in the post-18th Amendment scenario, due attention should be accorded to health information as one of its mandates. The cost of inattention could be enormous in the event of another outbreak of Avian Influenza in Asia.

Secondly, problems in the functioning of health systems merit attention. Punitive actions by provincial authorities to compel staff to be accountable are a reminder of the pervasiveness of truancy in public health facilities and the manner in which functionaries use the public job leverage to boost private practices. Signalling of intent by the government to provide free care to those who have been affected drives home the realisation that more than 74 per cent of the population of the country pays out-of-pocket to access care – the most regressive means of health financing – and that financial risk protection for vulnerable communities hasn't been secured. The plight of patients in health facilities is indicative of the direness of issues. Health system constraints in wake of the dengue outbreak are paralleled with allegations of procurement graft and accounts of pilferages from the supply-chain in medical relief operations for flood-affected areas. All these point to the need for a fundamental reform in the health system.

Thirdly, the country's constrained research capacity has also been brought to bear. We do not know, for instance, if mosquitoes have developed resistance to the insecticides currently being used for fumigation, or if the current mode of fumigation is effective. Evidence related to the extent of contribution by the recent floods needs to be examined in detail with reference to the impact of climate change on the environment, vector habitats and consequent disease patterns in Pakistan.

Furthermore, we also need to analyse if lack of attention to the local government system and the current polarisation has affected attention to water and sanitation infrastructure in ways that promote breeding grounds for mosquitoes. Many disease outbreaks and public health problems have little to do with constraints in the health care system but can be tracked back to broader socioeconomic determinants, which have a bearing on the local government system. It is only with a critical analytical lens and appropriate institutional capacity that long term consequences of these and many other issues and questions can be deciphered.

The author is the founding president of the NGO thinktank, Heartfile. Email: sania@heartfile.org

Respiratory Infections, AFP/Polio, Bacterial Meningitis, Diarrhea, Hepatitis, HIV/AIDS, Malaria, Measles and Tuberculosis. In addition, there is the Disease Early Warning System (DEWS), which is being used in the flood affected districts, the Expanded Program for Immunization's system and the Health Management and Information System (HMIS). Many of these surveillance systems are discrete, horizontal, fragmented and are dependent upon external donor support. Pakistan does not have an integrated disease surveillance system. Within this context, the Prime Minister's signaling of intent to prioritize the establishment of Integrated Disease Surveillance and Response (IDSR) on November 4 is a step in the right direction. Momentum must be sustained to overcome programmatic turf hurdles that stand in the way of creating such a structure.

In addition to this fragmentation, some surveillance systems are also antiquated and have not benefited adequately from technology. For example HMIS, a nationwide system of collecting data from public first level facilities, has not been fully automated. Therefore, the potential that exists to leverage Pakistan's telecommunication boom and create a central computing facility for the public and private sector to report into remains untapped. Thirdly, there is no agency clearly mandated for collecting, collating and consolidating and relaying information and data. Now that a new role for the Ministry of Health is being crafted in the post-18th Amendment scenario, due attention should be accorded to health information as one of its mandates. The cost of inattention could be enormous in the event of another outbreak of Avian Influenza in Asia.

Secondly, problems in health systems functioning merit attention. Punitive actions of provincial authorities to compel staff accountability are a reminder of the pervasiveness of absenteeism from public health facilities and the manner in which functionaries use the public job leverage to boost private practices. Signaling of intent by the government to provide free care to those that have been affected, while admirable standalone, drives home the realization that more than 74% of the population of the country pays out-of-pocket to access care—the most regressive means of health financing—and that financial risk protection for vulnerable communities hasn't been secured. The plight of patients in health facilities is indicative of dire quality issues. Health systems constraints in wake of the Dengue outbreak are paralleled with allegations of procurement graft and accounts of pilferages from the supply chain in medical relief operations for flood affected areas. All these point to the need for fundamental reform of the health system.

Thirdly, the country's constrained research capacity has also been brought to bear. We do not know, for instance, if mosquitoes have developed resistance to the insecticides currently being used for fumigation, or if the current mode of fumigation is effective. Evidence related to the extent of contribution of the recent floods needs to be examined in detail with reference to the impact of climate change on the environment, vector habitats and consequently disease patterns in Pakistan. Furthermore, we also need to analyze if lack of attention to the local government system and the current polarization has affected attention to water and sanitation infrastructure in ways that promote breeding grounds for mosquitoes. Many disease outbreaks and public health problems have little to do with constraints in the healthcare system but can be tracked back to broader socioeconomic determinants, which have a bearing on the local government system. It is only with a critical analytical lens and appropriate institutional capacity that the long term consequences of these and many others issues and questions can be deciphered.

The author is the founding president of the NGO thinktank, Heartfile. sania@heartfile.org