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Letter to the Editor

Dengue re-emergence in Delhi: Lessons to learn

Dear Sir,

The epidemic of dengue has been recorded across the country. The National Capital Region (NCR) around New Delhi recorded multiple dengue epidemics over the years: 1988 (dengue virus (DV)-2), 1996 (DV-2), 1997 (DV-1), 2003 (DV-3) Delhi (2003–2004, DV-3), 2003 (DV-1, 2, 3 and 4), 2005 (DV-3), 2006 (DV-1, 3 and 4), 2007–09 (DV-1, 2, 3 and 4).¹ Frequent re-emergence of dengue in NCR is indeed a concern.

There may be various implications of re-emergence of dengue in Delhi. The NCR region witnessed drastic economic growth during past two decades. Poor sanitation facilities in overpopulated, yet under-developed areas aid mosquito breeding. Public awareness regarding mosquito breeding, disease symptoms and use of mosquito prevention methods plays important role.

A recent study conducted in a tertiary care center of NCR by Chinnakali et al.² reported high dengue awareness (96.3%), and most respondents (89%) considered dengue to be a serious problem. Popular symptoms were fever (84%), headache (30%), joint pain (28%) and rash (11%). More women were aware about day-biting behavior of dengue-causing mosquitoes than men. Majority of the population (73%) was aware about breeding sites of *Aedes* mosquito. Another study from Delhi reported that a majority of respondents (90%) had heard about dengue and 68% were able to correlate it with mosquito bite.³ However, 27% respondents identified dirty drinking water as the mode of spread, and 23.4% did not know the symptoms of dengue. These studies clearly point toward certain level of basic, yet inadequate awareness toward mosquito-borne diseases. Though a large proportion of the population was aware of the disease and its vector mosquito, they were not able to correctly identify the cause and symptoms and therefore, could not protect themselves from the disease.

These studies clearly identify the existing gap between current knowledge and preventive community practices and need a multi-structured long-term strategy. Vector surveillance, educating people and training healthcare professionals about mosquito borne diseases may be helpful to a large extent. Improving hospital infrastructure will enable to tackle the problem in effective and manageable ways. Community

based implementation of effective and affordable vector-control plan is the need of the hour.

Along with these community-based aspects, there are other associated factors to be considered as well. A new serotype of dengue virus (DENV-5) was recently identified in 2013 after a dengue outbreak in Malaysia.⁴ Though there is no indication of the presence of DENV-5 in India, presence of DENV-5 in near future cannot be ruled out as India has been identified as one of the important central air traffic hub that is helping in the spread of dengue epidemics throughout the Asian continent.⁵ Also, large-scale availability of dengue virus antigen can help save lives during a dengue outbreak. The fact that after receiving many setbacks, the dengue vaccine Dengvaxia still awaits government approval to launch in India, may lead to new challenges in dengue control in coming future.⁶

To conclude, though increasing public awareness about hygiene and disease prevention is essential, strengthening public health strategies, timely vector monitoring, improving hospital infrastructure and training of health practitioners will not only enable timely prediction of threat, but also help to prevent future dengue epidemics.

Disclaimer

The opinions expressed in this article are the author's own and do not reflect the view of the organization to which he is affiliated.

REFERENCES

1. Gupta N, Srivastava S, Jain A, Chaturvedi UC. Dengue in India. *Indian J Med Res.* 2012;136:373–390.
2. Chinnakali P, Gurnani N, Upadhyay RP, Parmar K, Suri TM, Yadav K. High level of awareness but poor practices regarding dengue fever control: a cross-sectional study from north India. *N Am J Med Sci.* 2012;4(6):278.
3. Acharya A, Goswami K, Srinath S, Goswami A. Awareness about dengue syndrome and related preventive practices

- amongst residents of an urban resettlement colony of south Delhi. *J Vector Borne Dis.* 2005;42(3):122.
4. Mustafa MS, Rasotgi V, Jain S, Gupta V. Discovery of fifth serotype of dengue virus (DENV-5): a new public health dilemma in dengue control. *Med J Armed Forces India.* 2015;71(1):67–70.
 5. Tian H, Sun Z, Faria NR, et al. Increasing airline travel may facilitate co-circulation of multiple dengue virus serotypes in Asia. *PLoS Negl Trop Dis.* 2017;11(8): e0005694.
 6. Sanofi awaits govt approval to launch dengue vaccine in India. Business Insider (Article on the Internet); 2017. Available from <http://www.businesstoday.in/sectors/pharma/sanofi-awaits-govt-approval-to-launch-dengue-vaccine-in-india/story/238251.html> [cited 17.10.17].

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Letter to the Editor

Combat psychiatry: Indian perspective

Dear Editor,

I read with extreme interest the Military Medicine Special Edition titled article 'Combat psychiatry: Indian perspective' by Bhat, published in *Med J Armed Forces India* 2017;73:404–406.¹

1. Role of military psychiatry to tackle 'Stress in the Indian Armed Forces' a subject which has been scarcely discussed and researched with very few large scale studies to date.^{2–7} The author needs to be complimented on bringing this important issue of military psychiatry to the fore by his paper on the subject.^{8–10}
2. The author has traced the evolution of military psychiatry. As can be seen from the article Psychiatrists were posted at divisional level which manned 'exhaustion centres' in the mid 20th century. Having served alongside the author in field formation, no such arrangements exist today. Authors may like to inform of any such arrangement if it exists.
3. While discussing the 'Combat psychiatry services' author clearly brings out the ground for 'felt need' for combat psychiatry but authors fail to bring out any elements of combat psychiatry existing as on date. Neither a vision for laying out a roadmap for such an initiative has been mentioned. Authors may like to educate the readers.
4. With due regards, may I submit to highlight the difference between 'military psychiatry' and 'combat psychiatry'. Combat psychiatry is a subset of military psychiatry which is relevant to operationally deployed soldiers in combat and combat stress related issues. Combat psychiatry would encompass elements of psychological screening, first aid, counseling, preventive and promotive aspects of mental health with some curative role. Combat psychiatry would have a major role for paramedics. It is submitted that both terms are not used interchangeably. Authors are requested to clarify the differences between the two.
5. Training on 'Combat psychiatry' to our specialists is presently limited to classroom teaching and as suggested

by the author that postgraduate certificate course would really be a welcome step.

6. There were 635 cases of suicide including attempted suicides and 67 cases of fratricidal killings in three services of the Armed Forces during the years 2003 to 2007 as per Standing Committee on Defense of Parliament in its Action Taken Report (ATR) of March 2010. Between 2007 and 2010, 533 soldiers committed suicide and there were 15 cases of fratricide.¹¹ These cases are just the tip of iceberg of the stress epidemic in the armed forces. Misconduct behaviors, deliberate self harm and non-fatal impact of combat stress is not even documented and data does not exist. Despite this the author in their previous paper on the subject had debated about the very existence of a stress epidemic in the Indian armed forces.⁸ If that be the case, then why are we talking about combat psychiatry and as per author all we need to do is already in place. Authors may like to comment and clarify if the point is being missed for being politically correct.
7. Another point that needs attention is the common mistake of attributing most stress related events to domestic factors without ever researching on it whether events occurring in peace or field may be linked to past or present deployment and combat stress. No such study has been done to refute the link.
8. In the armed forces there is no system to profile soldiers before enlistment, before deployment and after deployment which can be a way forward in mitigating the issue. Doing a critical event debriefing is not practised at all in our settings which can be crucial in reducing the impact on those who are witness to the event.

REFERENCES

1. Bhat PS. Combat psychiatry: Indian perspective. *Med J Armed Forces India.* 2017;73:404–406.
2. Raju MSV, Srivastava K, Chaudhury S, Saluja SK. Quantification of stressful life events in service personal. *Indian J Psychiatry.* 2001;43:213–218.