

## Implementation of enhanced gonococcal antimicrobial surveillance program in Thailand

Sir,

Globally, sexually transmitted infections (STIs) have an immense impact on the sexual and reproductive health, and the quality of life of the affected persons, and have been acknowledged as one of the five most common disease categories for which adults avail health care services.<sup>[1,2]</sup> In fact, in excess of 1 million people acquire STIs everyday, and more than 350 million people every year acquire an infection among one of the four STIs, including gonorrhoea.<sup>[2]</sup>

Although antibiotic resistance against most of the STIs has been reported, the situation is quite worse for gonorrhoea, which might soon become intractable.<sup>[3]</sup> In fact, the resistance of gonorrhoea to antibiotics has increased extensively in the recent years with cases of multidrug resistant gonorrhoea, namely, penicillin, broad spectrum antibiotics, cephalosporins, and so on, being reported across 36 nations.<sup>[2,3]</sup> In India, gonococcal resistance has been first reported from Madras, and since then its periodic monitoring has been done through the regional reference laboratory located in New Delhi.<sup>[4]</sup> The earmarked laboratory is conducting a nationwide Gonococcal Antimicrobial Surveillance Programme (GASP) since the year 2000 to evaluate the quality of resistance data and the capacity to detect newer resistance cases.<sup>[4]</sup> Furthermore, 10 nations have already reported that existing treatment guidelines are ineffective to contain gonorrhoea.<sup>[2,3]</sup>

The emergence of multidrug resistance against gonorrhoea is quite a serious proposition, as a disease, which until very recently could be cured by taking a single dose of antibiotic, might now result in dramatic complications (such as infertility in women, pregnancy complications, and blindness in babies acquiring infection during childbirth), worry, and stigma among the affected persons and their family members.<sup>[5]</sup> This is quite a difficult aspect for the policy makers to contend with as they are already falling short in effectively responding to the existing challenges of deficiencies in infrastructure or resources, manpower constraints, low awareness, stigmatization, poor quality of services, limited follow-up of partners, absence of a comprehensive package of services under a single roof, deficiencies in screening, and offering quality-assured services to the high-risk groups.<sup>[1-3,5]</sup>

To prevent the spread of gonorrhoea, including the drug-resistant forms, it is crucial to offer prompt detection and

appropriate care services to the people.<sup>[5]</sup> This is extremely important as most sections of people are quite reluctant to approach health care establishments, and thus it is our important responsibility to offer effective treatment when they do actually attend.<sup>[5,6]</sup> Acknowledging the magnitude of the problem, its public health impact, and in an attempt to respond effectively, the World Health Organization (WHO) has advocated for the GASP to track the emergence and spread of gonorrhoea resistance.<sup>[5]</sup> Over the years, this programme has been launched across various European nations, United States of America, and Morocco to streamline the extent of the problem and alter the treatment guidelines at the right time.<sup>[5-7]</sup>

Realizing the benefits of the GASP, an enhanced version of the program has been launched in Thailand in the month of November, 2015 in collaboration with the various international stakeholders to precisely estimate the number of people with illness, their demographic attributes, and nature of treatment desired, so that nondiscriminatory health services can be offered.<sup>[5]</sup> This program aims to strengthen the existing surveillance mechanism in the nation by standardizing the procedure for testing samples of gonorrhoea in laboratories, obtain additional clinical/demographic/behavioral information, and to modify the current treatment guidelines based on the prevalence of antibiotic resistance to gonorrhoea.<sup>[5]</sup> The generated data will simultaneously assist the WHO in monitoring the global trends and comparing the situation in different regions of the world.<sup>[5-7]</sup> The generated reports can be utilized by the policy makers from India as well, and necessary modifications in the existing policies can be made for containing the problem of antimicrobial resistance.<sup>[5-7]</sup>

In addition, the ability of a nation to assess and advocate for the most effective evidence-based, locally available antibiotic regimen, can be of immense utility for ensuring gonorrhoea control.<sup>[6,7]</sup> At the same time, there is an extensive need to strengthen the existing STI control services, work collectively to enable behavior modifications, ensure adherence to standardized treatment guidelines by the trained health professionals, and involve community in different stages of the program.<sup>[2,5]</sup>

To conclude, the initiative to address the problem of gonococcal resistance through an enhanced surveillance mechanism can provide important evidence to formulate and implement cost-effective approaches to treat the disease without risking the lives of future generations.

### Financial support and sponsorship

Nil.

### Conflicts of interest

There are no conflicts of interest.

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Quick Response Code:	Website: <a href="http://www.idoj.in">www.idoj.in</a>
	DOI: 10.4103/2229-5178.193920

**Cite this article as:** Shrivastava SR, Shrivastava PS, Ramasamy J. Implementation of enhanced gonococcal antimicrobial surveillance program in Thailand. *Indian Dermatol Online J* 2016;7:545-6.