

countries like India was more unfortunate. The tsunami hit the country's territory in the Andaman and Nicobar Islands, killing thousands of people at around 6.30 am and reached its eastern shores on the mainland well past 9.00 am. The British school girl in a Thailand beach could save people within less than ten minutes of reaction time available, that too with just plain thinking about the possibility of a tsunami and not based on what has happened somewhere already. Therefore, what happened in India is simply unexplainable. There were statements that India has no tsunami-warning system and hence no warning could be issued in time to save lives. But, as Raval² succinctly put it, there was a failure of mind rather than absence of machinery alone in India. To simply put it, lack of tsunami education was what led to the death of several thousands in India on that day.

Now, it is heartening to note that India is inching towards establishing a Tsunami-Warning System. In fact, an Interim Tsunami-Warning System was already put in place at INCOIS (Indian National Centre for Ocean Information Services) within seven months after the occurrence of 2004 tsunami³. This system is supported by a network of tide gauges and at present with one bottom pressure recorder. More instruments are planned to be added covering the entire region. Towards modelling tsunamis, high-resolution coastal topography and bathymetry mapping is being taken up, and the inundation models already prepared for Nagapattanam and Cuddalore regions closely matched the actual tsunami inundation in these coastal sectors³. However, providing all modern gadgets and doing research and

preparing computer models is just not enough. Ensuring peoples' participation is equally important in tsunami preparedness efforts. The government machinery at Central, State, District and city/municipality/village levels should gear up to create awareness on tsunami and other coastal hazards among the coastal communities. Public participation should be encouraged in decision-making on the evacuation procedures and escape routes, on the importance of tsunami-readiness, self-protection measures and also on the need for sustainable coastal land use and conservation measures. Massive coastal vegetation programmes must be taken up on scientific lines with location-specific species. Booklets and pamphlets should be printed in all languages, containing easy-to-understand graphics and cartoons explaining the procedures to be followed in the case of natural disasters. Pictorial depictions catch the imagination much better than written words. There should be proper coastal zone management programmes for sustainable development of the country's coastal regions.

In fact, tsunami education should begin from childhood. School curricula should be infused with information on tsunamis and the precautions that one should take in such eventualities. Universities and institutions should gear up their research teams and initiate special multidisciplinary laboratories and research centres to conduct quality research on tsunamis. (Many Japanese universities and institutions have specialized laboratories to conduct research related to active faults, subduction zones, earthquake engineering, physics of tsunamis, tsunami modelling, identification of past tsunami events,

and their possible sources and intensities from subsurface sediments.) Research laboratories may be funded for acquiring the state-of-the-art equipment to conduct research in these areas. Universities should also be encouraged to take up public awareness programmes. The government on its part should make topographic maps, aerial photographs and data on coastal zones available to researchers. Coastal zone mapping should be taken up frequently and on large scale. The tide gauge network should be improved. All the basic data on coastal zones should be updated periodically and made available through the internet.

The 26th of December may be designated as the 'Tsunami day'. Elaborate programmes should commemorate the day, including mock tsunami drills aimed at training the coastal communities at risk on how to react and follow the pre-determined escape procedures when a tsunami warning is issued. This will ensure that the tsunami danger is alive in the minds of the people.

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K. NAGESWARA RAO

*Department of Geo-Engineering,
Andhra University,
Visakhapatnam 530 003, India
e-mail: nrkakani@yahoo.com*

Is syndromic approach appropriate for managing STIs

Sexually transmitted diseases (STDs) remain a public health problem of major significance in most parts of the world¹. Syndromic approach is the mainstay of the sexually transmitted infection/reproductive tract infection (STI/RTI) control programme in India. We made an attempt to identify pathogens from individuals with STI syndrome using standard microbiological techniques. The results

show that STD could be diagnosed in the laboratory only in case of 30% males and 40% females having some STI syndrome (Table 1). A study carried out in Tamil Nadu could diagnose disease only in 10.7% of women having discharge², while in a study³ conducted in Gujarat, the positivity was 47.5%. All these studies show that a substantial number of individuals having STI syndrome do not have

laboratory-proved disease. Thus, syndromic management of STIs often results in overtreatment, which happened in our case in more than 60% individuals.

The main disadvantage of syndromic management is the cost of overdiagnosis and overtreatment involved. In addition, it does not address the issue of subclinical and asymptomatic infections^{2,3}. Further, in case of vaginal discharge, psycho-

Table 1. Genital syndrome vs aetiology

Genital syndrome	Male		Female	
	Disease-positive/ symptomatic (%)	95% confidence interval	Disease-positive/ symptomatic (%)	95% confidence interval
Ulcer	7/21 (33.3)	16.4–53.9	0/8 (0)	0–28.3
Discharge	29/96 (30.2)	21.7–39.8	83/201 (41.3)	34.6–48.1
Total	36/117 (30.8)	22.9–39.4	83/209 (39.7)	33.2–46.4

Diseases: Discharge – Trichomoniasis, candidiasis, gonorrhoea, chlamydia; Ulcer – Syphilis, genital herpes.

social variables also come into picture along with vaginal infections^{4,5}. A study carried out in China showed that syndromic management of urethral discharge was relatively effective and suited clinical application. The specificity and positive predictive value for syndromic management of vaginal discharge were not satisfactory⁶.

Hence there is a need to revise the strategy to control STIs in India. Laboratory diagnostic facilities for STDs should be strengthened at least from community health centre onwards. The amount of money spent on overtreatment is much more than that required for laboratory diagnosis.

Considering the available data on syndromic management of STI, we feel that there is a need to rethink on our policy to manage STI.

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V. G. RAO*

A. R. ANVIKAR

DEEPALI SAVARGAONKAR

DINESH KUMAR

Regional Medical Research Centre for Tribals

(Indian Council of Medical Research),

Nagpur Road, P.O. Garha,

Jabalpur 482 003, India

**e-mail: drvgrao@rediffmail.com*

Rocks of the Aravalli and Delhi Supergroups

The paper by Saini *et al.*¹ is mainly based on geological mapping of the terrane on large scale (1 : 12,500 scale as mentioned by them). The authors have tried to re-emphasize a point which has been published by earlier workers²⁻⁴. The following observations need clarification from the authors:

1. A close examination of the geological map (figure 2) indicated its RF as 1 : 25,000 (1 cm = 250 m as shown in the map), whereas on p. 432, it is declared to be 1 : 12,500. Besides, several structural data shown in the map are erroneous, e.g. on the NE corner of figure 2, at least three data are wrong, as one of them shows L₂ lineation along strike direction of S₂ cleavage (59° easterly dip) but with 38° plunge amount; another L₂ lineation is plunging 40°, whereas the dip of the S₁ schistosity over which the lineation is shown is dipping 39° easterly. Such wrong data collection and their presentation can also be seen at the extreme SE corner,

east-central part and NW part of the map (figure 2). Can one really depend upon interpretations based on such erroneous field data? Subtle changes in swings of the rock types so also other lithological features have immense bearing on the structural evolution of any polydeformed fold belt terrane. Therefore, in the absence of correct field data generated by authors, it is only an assumption of theirs regarding the conclusions drawn in the paper.

2. The paper deals with angular relationship between rocks of the Aravalli and the Delhi Supergroups, and the authors cite numerous previous works starting from Heron² indicating similar findings as of theirs. What is new in the work of the authors seems only to be preparing a photo-geological map (figure 4) with generalized field observations. To quote the authors, 'The original features of contact relationship seem to have been obliterated...except for expression of angular unconform-

ity... The most interesting feature is the truncation of Aravalli (Jharol Group) quartzite ridge (*sic*) against DSG quartzite... ASG is truncated by the younger DSG rocks south of Chhipala (near Modi village, figure 2)'. Here it is essential to mention that Sahu and co-workers (GSI, Jaipur) have geologically mapped (1 : 25,000 scale) the area and clearly mentioned in their report (which has also been cited in the text by the authors) that 'The contact between the Jharol Group (Aravalli Supergroup) and the Gogunda Group (Delhi Supergroup) is marked by a prominent shear thrust zone characterized by strong mylonitization of the rocks along the contact, and occurrence of small lenticular bodies of pseudotachylite as observed to the west of Chhipala and south of Phutiya'. This shear/thrust zone observed by Sahu *et al.* shows a strong but moderately dipping mylonitic foliation (N–S to NNE–SSW/50°–65° due west) with an oblique stretching lineation (25°–35° towards