Mausam – A need for inclusion in SCI-Expanded

The Government of India established the India Meteorological Department (IMD) in the year 1875, bringing all meteorological work in the country under a central authority. It is the principal government agency in all matters relating to meteorology, seismology and allied subjects. Recognizing the importance of the publication of scientific results in meteorology, Blanford¹ introduced the publication of the Memoirs of the IMD. In January 1950, IMD started publishing the Indian Journal of Meteorology and Geophysics, a quarterly research journal devoted to meteorology and allied subjects. In 1975, its name was changed to Indian Journal of Meteorology, Hydrology and Geophysics, and in the year 1979 it was renamed as Mausam.

The journal Mausam publishes results of original scientific research in the field of meteorology and atmospheric sciences. During the last five decades of its publication, there has been a gradual transition in its focus from observationbased studies and their synoptic and statistical analysis, to numerical modelling and computer simulation. The journal has strived to maintain high quality of its scientific content and has grown in its popularity in India as well as abroad². Despite being published for more than 50 years and being the only journal from this part of the world dealing with aspects of meteorology and related fields, the journal is still not being indexed by the Science Citation Index-Expanded (SCI-E). However, some other journals published from India in other disciplines of S&T are being indexed by $SCI-E^3$.

The present correspondence using empirical data for the years 2003-2006 presents a case for its inclusion in SCI-E. Based on the affiliation of the first author, 92% papers were from India and only 8% papers from abroad. Considering the large proportion of domestic contributions and composition of the editorial board, it appears to be a domestic journal. The journal needs to include eminent scientist/researchers in the field from abroad in its editorial board to encourage contributions from abroad. This will help in larger circulation of the journal as well as in raising the impact factor (IF) of the journal. The journal should also consider a change to a name in English as the present title Mausam is of Arabic origin adopted in popular Hindi language, which is not understood by the international scientific community. The average time lag between receipt and acceptance of the manuscript is about nine months, which is comparable to the Quarterly Journal of the Royal Meteorological Society, Part B, an international journal in the field of meteorology and atmospheric sciences. However, the time lag between acceptance and publication of the manuscripts needs to be reduced, as it is twice that of the Quarterly Journal of the Royal Meteorological Society, Part B.

The references cited by the journal are mostly international like other journals in the field. The IF⁴ of the journal for 2005 and 2006 is 0.19. However, among the 49 Indian journals indexed by *SCI-E* in 2005, 18 have IF less than or equal to that of *Mausam*.

While calculating the IF of the journal, it has been observed that letters to the

editor are not cited in the literature. In view of this, it is suggested that letters to the editor are published as full-length research items. This will result in increase of the IF of the journal.

In our opinion the journal duly meets most of the criteria required by Thomson Journal Selection Process and is thus a potential candidate for its inclusion in the *SCI-E*. The editors of the journal should make efforts to get it included in the *SCI-E*, which would enhance its international visibility and would attract more articles from abroad. Details are available on the website of the Thomson Scientific⁵.

- 1. The work of pioneers available at http://www.imd.ernet.in/doc/history/work-of-pioneers.htm
- 2. Editorial, Mausam, January 2001.
- 3. Sen, B. K., Ann. Lib. Inf. Stud., 2006, **53**, 232–234.
- The Institute of Scientific Information, Journal Citation Reports, Philadelphia, USA.
- The Thomson Scientific Journal Selection Process, available at http://scientific.thomson.com/free/essays/selectionofmaterial/journalselection/journ

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Prevention of hepatitis C infection among injecting drug users in Northeast India

The epidemic of human immunodeficiency virus (HIV) infection transmitted through the sharing of contaminated syringes/needles by injecting drug users (IDU) has spread across many countries in the world. In India, this has created a serious human tragedy, particularly in the northeastern states bordering with

Myanmar, viz. Manipur, Nagaland and Mizoram. A large number of youth from this region have been already affected by HIV or other blood-borne viral infections like hepatitis B (HBV) and hepatitis C (HCV). According to the National AIDS Control Organization (NACO), the estimated size of the IDU population in

Manipur ranged from 24,000 to 27,000; in Nagaland from 15,500 to 17,000 and in Mizoram from 8800 to 10,300.

In fact, Manipur and Nagaland now stand at first and second positions respectively, in India in adult HIV prevalence, which is primarily driven by injecting drug use. The numbers of HIV- positive people in these two states were estimated to be about 25,000 and 19,000 respectively, in 2006 according to the NACO report. According to the HIV sentinel surveillance report in 2006, one-fifth of IDUs was HIV-positive in Manipur.

Apart from HIV, HBV and HCV infections, which share similar routes of transmission with HIV, are also a cause of concern among IDUs. HBV and HCV are important public-health diseases due to clinical consequences like acute hepatitis, chronic hepatitis, liver cirrhosis and hepato-cellular-carcinoma (HCC). HIV is a dreaded disease with 100% mortality within a short span of time. But, after the introduction of the highly active antiretroviral therapy (HAART) against HIV, the relevance of other blood-borne diseases is increasing¹. Morbidity and mortality associated with hepatits viruses are becoming important among HIV-infected persons, as their survival has dramatically improved due to HAART¹.

The major concern is particularly due to higher burden of HCV among IDUs. There is an effective vaccine available against HBV, but no such vaccine is currently available against HCV. On the other hand, more people infected with HCV develop chronicity (75-85%) compared to HBV infection^{2,3}. In a recent study, compared to 22-33% prevalence of HIV among IDUs in different districts of Manipur, 55-80% prevalence of HCV has been reported⁴. Similarly, studies conducted in Nagaland and Mizoram have also noted almost fivefold higher prevalence of HCV among IDUs compared to HIV4. As both the hepatitis viruses and HIV are transmitted through similar routes, HIV/hepatitis viruses coinfection is also commonly observed. This is known to cause rapid liver destruction. HCV also poses greater risk of HCC among Asians.

The HIV rates among IDUs have significantly declined in Manipur due to continued harm reduction effort, but HCV rate tended to remain elevated^{5,6}. A similar situation has also been reported elsewhere. There are several explanations for such discrepancy. First, prevalence of HCV among IDUs is higher than HIV, indicating a bigger pool of HCV reservoir among IDUs. Thus mathematically, if IDUs share syringes/needles with others the chances of HCV infection are considerably high^{5,6}. Secondly, the tenfold greater transmission efficiency of HCV compared to HIV through parenteral route is another explanation of greater prevalence of HCV. In the Northeast, despite continued efforts to promote safe injecting practices, multi-person sharing of needles/syringes (direct sharing) continues to be high⁴. Thirdly, sharing of injecting accessories like common container of drug preparation, filter cotton, rinse water, and front and backloading of drugs is more frequently associated with transmission of HCV than HIV^{5,6}. Among IDUs in the Northeast, prevalence of indirect sharing is high, with 50-70% IDUs reporting sharing of various injecting accessories4. Sexual transmission of HCV also occurs, but less efficiently than HIV; hence discrepancy cannot be explained by sexual transmission⁵. High rate of unprotected sexual behaviour, including report of anal intercourse among IDUs in this region, warrants programme of condom promotion among them.

It is clear that due to greater parenteral transmission efficiency of HCV than HIV, more stringent strategies are required. There is need to scale up the existing needle/syringe exchange programme to contain HCV and other blood-borne viral infections among the IDUs in northeast. It is important to encourage single use and discard syringes among IDUs.

Additionally, strategies to prevent indirect sharing practices should be incorporated, as it is believed that this is responsible for a large proportion of transmission of HCV among IDUs. The difficult hilly terrain poses a major challenge for the programme. Apart from providing prevention equipments, the programme should also offer screening service for HCV and HBV patients, and better counselling to IDUs. Intensive drug de-addiction treatment and rehabilitation measures will be a viable measure for changing the drug-use behaviour. Above all, prevention of drug use among adolescents and youth through greater community involvement will be the most effective way to fight these dreaded diseases.

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The largest genetic paradise of India lacks biotechnological implementation

Northeast India, which occupies only 8% of the total geographical area of the subcontinent, contains about 50% (±8500 spp.) of the floristic wealth and the richest phytodiversity of the country¹. This region comprising the states of Arunachal Pradesh, Assam, Manipur, Megha-

laya, Mizoram, Nagaland and Tripura, is the largest centre of genetic diversity of plants of economic importance. However, this region is still unexplored and information available about these plants is rudimentary and scanty due to lack of proper biotechnological implementation. India, endowed with an estimated 47,000 species of plants, includes around 15,000 medicinal plants, among which 7000 are used in Ayurveda, 700 in Unani, 600 in Siddha, 450 in Homoeopathy and 30 in modern medicine². Northeast India has been prospering for many centuries