India: Land of (Prevention) Opportunity

In January, Janine Jagger traveled to the city of Pune in western India to speak at the 10th National Conference of the Hospital Infection Society of India (HISI). The Society has a new focus on occupational exposure prevention and is working to foster related activities country-wide. The first sharps injury data from India, using the EPINet surveillance tool, were presented at the conference. In Delhi, Dr. Jagger attended a roundtable discussion on the role of policy and regulation in healthcare worker safety. Participants came from a variety of health-related Indian organizations, including the Ministry of Health’s hospital safety division, the Indian Healthcare Quality Forum, and the Trained Nurses Association of India.

As in many other countries, awareness of, and attention to, sharps injury prevention in India is coming largely from professional organizations such as the HISI, although government agencies are starting to pay attention to the issue as well. Opportunities for improving healthcare worker safety abound. Dr. Jagger comments: “My visit to a large, 1,000-bed public hospital in Delhi, and the data presented at the HISI conference, paint a picture of a health system far behind in

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Regional Activities

FOCUS: LATIN AMERICA
For the past four years, the Center has had ongoing relations with the Pan American Health Organization (PAHO), a regional arm of the World Health Organization. The EPINet Sharps Injury and Blood Exposure Surveillance system was included in the 2005 PAHO manual “Salud y Seguridad de Los Trabajadores del Sector Salud” (“Health and Safety of Health Workers: A Handbook for Managers and Administrators”), and Janine Jagger and other Center staff have worked with Maritza Ten

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terms of sharps safety and waste handling. Clearly, there are major issues to be dealt with. But this also means that small changes in Indian healthcare settings can make a big difference in terms of worker safety.”

Interestingly, current waste disposal regulations in India, which require separation of metal and plastic, have the unintended effect of increasing sharps injury risk to healthcare workers during the disposal process. To comply with regulations, Indian healthcare workers must separate plastic syringes from metal needles after use; needle burners are commonly used to destroy needles, but the remaining needle hub must be detached from the syringe barrel, which is often done by hand. The syringe is then placed in a bleach solution in an open bucket or pan. The entire procedure results in unnecessary handling of contaminated sharps, which in turn increases injury risk. Dr. Jagger found these disposal procedures in use in both a large public hospital and a small private clinic she visited.

Medical waste disposal remains a critical issue in India—a fact underlined by the recent outbreak of a deadly strain of hepatitis B in Ahmadabad, the state capital of Gujarat, in February. The outbreak, which has killed 56 people and infected more than 100, has been linked to recycling and reuse of syringes.

Regional activity: Latin America (cont.)

In October 2008, the Ministry of Labor and Employment of Peru and the Organization of American States (OAS), in partnership with PAHO and the International Labor Organization, sponsored the Third Hemispheric Workshop on Occupational Health and Safety in Cusco, Peru. Participants, who included risk and safety officers from the labor ministries of participating countries, affirmed the goal of implementing or improving occupational health surveillance systems “for recording and notification of occupational accidents and professional diseases, [in order] to obtain relevant data for use in defining priorities and strategies.” The conference summary (available at http://www.sedi.oas.org/ddse/documentos/rial/ssp_peru/Summary_FINAL_doc) noted that surveillance data collected through such systems is useful in evaluating “the degree of success of a [prevention] intervention,” and cited “an ongoing project to prevent occupational exposure to bloodborne pathogens among health care workers” as an example of such work.

AFRICA

Plans to develop a model training program in healthcare worker safety at the Biamba Marie Mutombo Hospital (BMMH) in Kinshasa, Democratic Republic of Congo, are moving forward. The Center is currently working on finalizing sharps injury surveillance forms for implementation at BMMH.

ASIA-PACIFIC

See page one for article about Dr. Jagger’s visit to India.

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PRESENTATIONS


- Jane Perry: "Preventing Sharps Injuries in the U.S.: Successes and Challenges." Seminar on Sharps Injury Prevention and Compliance in Canada (sponsored by Daniels Sharpsmart Canada). February 27, 2009; Montreal, Quebec. (See description below.)

In the classroom—as learners and teachers

Elyane Phillips completed post-doctoral study at the Johns Hopkins Center for Injury Research and Policy during the fall of 2008 as part of her NIOSH grant. She took courses in injury prevention and occupational health, and had an opportunity to share the Center’s work with colleagues.

Phillips is back in the classroom this spring—in the role of professor. She is co-teaching a course in epidemiology with Janine Jagger to more than 40 graduate students at U.Va.’s School of Nursing.

“It’s been wonderful reconnecting with students,” Phillips says. “It’s been a pleasure getting to know a new generation of nursing students and sharing our knowledge with them,” Jagger agrees. “Many of them have extensive workplace experience and are returning for advanced degrees. Most are well aware of the risks they face from blood-borne pathogens.”

The greatest challenge for Phillips and Jagger has been putting together all-new course content—and mastering U.Va.’s on-line classroom environment, Collab.

Two of their students look familiar—Jane Perry and Ginger Parker. They are auditing the course to deepen their understanding of epidemiology.

Regional activity (cont.)

EUROPE

The Center is currently working with BD to organize a Fellows Training Program at U.Va. in June for a group from the Russian Open Health Institute in Moscow. The OHI is a non-profit foundation that promotes policies and activities to improve public health in Russia.

MIDDLE EAST

The seminar sponsored by the Gulf Cooperation Council Center for Infection Control (CIC) on occupational exposure prevention, originally scheduled for February 2009, has been rescheduled for August of this year. Ziad Memish, M.D., director of the CIC, organized the program to provide EPINet training and advance prevention initiatives throughout the Gulf States. The seminar will be held in Riyadh, Saudi Arabia.

NORTH AMERICA

In February, Jane Perry traveled to Montreal to speak at a conference on “Sharps Injury Prevention and Compliance in Canada,” sponsored by Daniels Sharpsmart. She discussed the impact of U.S. sharps safety legislation and the challenges that remain. Cathy Lockhart, an occupational health manager at IWK Health Centre in Nova Scotia, detailed Canada’s provincial needle safety laws that have been passed so far, and the steps her institution took to comply with the Nova Scotia regulations.

Mai Nguyen, nurse epidemiologist with the Public Health Agency of Canada, reported on the 12-hospital Canadian Needle Stick Surveillance Network, which now has nine years of data with 12,074 exposures. Ms. Nguyen said that CNSSN data have been used to make the case for provincial-level needle safety laws, particularly in Ontario. She also extended an invitation for hospitals in Quebec—Canada’s second largest province by population—to join the network.

Four provinces and three territories still have no sharps safety legislation, including Quebec. (Others are New Brunswick, Prince Edward Island, and Newfoundland/Labrador, and Yukon, Nunavut and Northwest territories.) Many of those attending the conference—occupational health and infection control nurses and other safety specialists, all from Quebec—were working to implement safety-engineered devices, but expressed frustration with the lack of clear provincial guidelines. There was general agreement that a face-to-face, roundtable discussion with provincial government officials would be very helpful in charting a course for sharps safety in Quebec.

OUR MISSION:

Setting a global standard for healthcare worker protection

Healthcare workers are a crucial resource in all countries. But in many places, they are at high risk of acquiring preventable, life-threatening occupational infections.

We believe healthcare workers everywhere should be provided with the basic protections that have been shown to prevent exposures and infections. We believe that these measures should be mandatory, and should be provided free of charge to workers:

- Hepatitis B vaccination for all healthcare workers.
- Elimination of unnecessary sharps.
- Availability of safety-engineered needles and sharp medical devices.
- Availability of basic barrier garments for blood intensive procedures.
- Post-exposure prophylaxis for all healthcare workers who sustain an occupational exposure to HIV.
ON THE CALENDAR:


- May 19, 2009: “OSHA Healthcare Advisor’s Q&A” (audio conference sponsored by HCPro, Inc.). Jane Perry, speaker.

- June 2009: Center hosts fellows from Moscow’s Open Health Institute for one-week Training Program in Occupational Exposure Prevention.

- August 2009: Conference sponsored by the Gulf Cooperation Council Center for Infection Control seminar in Riyadh, Saudi Arabia.

PUBLICATIONS

Recent
Note: Copies of all articles are available upon request.

Mathews R, Leiss JK, Lyden JT, Sousa S, Ratchiffe JM, Jagger J. Provision and use of personal protective equipment and safety devices in the National Study to Prevent Blood Exposure in Paramedics. American Journal of Infection Control 2008 Dec;36(10):743-9. Paramedics are at risk of infection from HIV, hepatitis B, and hepatitis C virus from occupational blood exposure. This study examined how often paramedics are provided with personal protective equipment, sharps containers, and selected safety devices by their employers; the frequency with which paramedics use sharps containers and safety devices; and paramedics’ attitudes regarding this equipment. The study found that lack of access to safety devices is the major barrier to their use among paramedics. Increased provision, training, and improvement of safety equipment are needed to better protect paramedics from blood exposure.

Shiao JSC, McLaws ML, Lin MS, Jagger J, Chen CJ. Chinese EPINet and recall rates for percutaneous injuries: an epidemic proportion of underreporting in the Taiwan healthcare system. Journal of Occupational Health 2009 Feb 18. [Epub ahead of print] A pilot surveillance system for percutaneous injuries (PIs) using the Chinese version of EPINet was introduced in Taiwan in 2003. Data from EPINet were compared with worker recall of PIs using a cross-sectional survey for rates to establish the reliability of the new system. The EPINet PI rate (36.1/1,000 healthcare workers), was almost five times lower than the recall rate (170/1,000 HCWs). Addressing the real barriers to reporting must begin with hospital administrators impressing on HCWs that reporting is essential for designing appropriate safety interventions.

Now in print (previously in press):


In press


Submitted


Global Initiative website

The EPINet Sharps Injury and Blood Exposure Surveillance system is available in 12 different languages (as well as several different English versions). They can be accessed at the Center’s EPINet Global Resources page: http://www.healthsystem.virginia.edu/internet/safetycenter/internetsafetycenterwebpages/EPINetResources/EPINetpage.cfm.