

SPH Faculty Members Advance Field of Maternal and Child Health Epidemiology

Arden Handler, DrPH

The University of Illinois at Chicago School of Public Health is one of the few schools of public health in the nation to have specifically dedicated MPH and PhD programs in maternal and child health (MCH) epidemiology. Led by Arden Handler, DrPH, professor, Community Health Sciences Division/MCH and Deborah Rosenberg, PhD, research assistant professor, Epidemiology and Biostatistics Division, these two degree programs were developed in response to a national call to increase the number of individuals who can assist state and local public health agencies in strengthening their data and analytic capacity related to the health of women, children, and families.

The field of MCH epidemiology emerged as a distinct focus area in state and local health agencies beginning in 1986 when the Centers for Disease Control and Prevention (CDC) and the Health Resources and Services Administration (HRSA) began assigning MCH epidemiologists to public health agencies. These individuals serve as senior scientists to provide state and local MCH agencies with the analytic leadership necessary to engage in data-based decision-making to promote the health of the MCH population.

Handler, along with Rosenberg and Joan Kennelly, PhD, MPH, RN, research assistant professor, Community Health Sciences Division/MCH, have played a leading role in shaping this field for well over a decade. Their contributions began in the early 1990s with the development of the Enhanced Analytic Skills Program (EASP), later known as Data Enhancement for Accountability and Leadership in Maternal and Child Health (DEAL-MCH), a national certificate program aimed at enhancing the analytic skills of state MCH professionals. In addition to directly training a cadre of MCH epidemiologists, Handler, Rosenberg, and Kennelly used their experience to develop a workbook on *Analytic Methods in Maternal and Child Health*, published by the Maternal and Child Health Bureau/HRSA. Colleen Monahan, DC, MPH, director, Center for the Advancement of Distance Education (CADE), is also an editor of the workbook. The workbook has been through several printings and is used as a resource by MCH data practitioners and as a text by several MCH graduate programs throughout the nation.



In 1996–1997, Handler, Kennelly, and their colleague Stacie Geller, PhD, associate professor in the College of Medicine, conducted an evaluation of the national CDC/HRSA Maternal and Child Health Epidemiology Program. As part of designing the evaluation, these researchers defined the new field of MCH epidemiology in the following way:

MCH epidemiology is “the systematic and ongoing collection, analysis, and interpretation of population-based and program-specific health and related data for the purpose of identifying and assessing the distribution and determinants of the health status and needs of the maternal, infant, child, and adolescent populations, leading to the development of appropriate and targeted interventions.”

This definition has provided increased recognition for MCH epidemiology as a field distinct from other specific epidemiologic fields within MCH such as perinatal epidemiology and child injury epidemiology.

Most recently, Rosenberg, Handler, and Kennelly have been funded by the CDC to conduct a comprehensive evaluation of the current patterns of MCH epidemiologic capacity and functioning within state health agencies and to produce a report which specifies models of effective MCH epidemiology. The UIC MCH epidemiology team also continues to participate on a variety of committees, expert panels, and task forces focused on enhancing the analytic skills of the MCH public health workforce. Rosenberg is currently lead faculty member in a national training course in MCH epidemiology sponsored by HRSA/CDC, and Handler and Kennelly are members of the National Action Alliance, a partnership of major MCH organizations which is addressing strategic issues for advancing the field.

According to Dr. William Sappenfield, director of the MCH Epidemiology Program at CDC, "The team at UIC has consistently provided outstanding leadership in developing the field of MCH epidemiology. Clear evidence of this leadership is Dr. Handler's receipt of the National MCH Epidemiology Award for Effective Practice at the National Level in 2000 and her invited presentation on 'What is the History of MCH Epidemiology?' at the 9th Annual MCH Epidemiology Conference on December 11, 2003 in Tempe, Arizona."

Although the MPH and PhD programs in maternal and child health epidemiology at the UIC School of Public Health only entered their third year in fall 2003, they have already started producing MCH epidemiologists. Dr. Michael Kogan, head of the Office of Data and Information at the Maternal and Child Health Bureau, says, "It is evident that this program is on the path for success. One graduate of the program is currently working at the Chicago Department of Public Health as an epidemiologist, and a current doctoral student is also working there as an epidemiologist focused on infectious diseases. An additional doctoral graduate from the Maternal and Child Health Program received a CDC/HRSA MCH Epidemiology Training Fellowship and was assigned to the Mississippi State Department of Health. This is a remarkable track record and reflects the commitment



Deborah Rosenberg, PhD, and Arden Handler, DrPH, review text of *Analytic Methods in Maternal and Child Health*.

of the faculty to ensuring that graduates enter the MCH epidemiology workforce."

The MPH and PhD programs at UIC are unique in that they are implemented jointly by both the Community Health Sciences Division and the Epidemiology and Biostatistics Division. Faith Davis, PhD, professor of epidemiology, observes, "Students benefit from the dual emphasis on epidemiologic methods and planning cycle skills so that they can clearly see the link between data analysis for the purposes of assessment, planning, evaluation, and policy development."

These two programs are looking forward to continued growth and to playing a significant role in training future MCH epidemiologists for state and local health agencies across the nation.

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