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## National Institute of Nursing Research

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### INTRODUCTION

The National Institute of Nursing Research (NINR) was established at the National Institutes of Health in 1986. According to its broad mandate, the Institute blends behavioral and biomedical research to

- understand and ease the symptoms of acute and chronic illness;
- prevent or delay the onset of disease or disability or slow its progression;
- find effective approaches to achieving and sustaining good health; and
- improve clinical settings in which care is provided.

NINR's research extends to problems encountered by patients, families, and caregivers. It also emphasizes the special needs of underserved populations, including those at risk of poor health. These efforts are critical for translation of scientific advances into cost-effective health care that does not compromise quality.

NINR accomplishes its mission by supporting grants to universities and other research organizations, as well as by conducting intramural research at laboratories in Bethesda, Maryland. The research fosters multidisciplinary collaborative work to ensure a comprehensive approach to the study of illness and disabling conditions. This approach is especially relevant in research on

- long-term care for older adults;
- the special needs of women across the life span;
- optimum care at the end of life;
- issues related to genetic testing and counseling;
- management of prevention and treatment of infectious diseases; and
- environmental influences on risk factors related to chronic illnesses.

NINR's intramural investigations have a multidisciplinary, patient-focused approach to human health and illness. Questions addressed in the research are related to patient care and quality of life, for example, (a) the management of chronic wounds that often

accompany periods of long-term illness and immobility and (b) the pathogenesis underlying delayed healing of these wounds.

In addition, the Institute supports comprehensive research training programs to prepare persons with requisite interdisciplinary skills to conduct nursing research.

### SUMMARY OF INTERNATIONAL PROGRAMS AND ACTIVITIES

#### Extramural Programs

##### Grants

An NINR-supported grantee is conducting field research in Matlab, Bangladesh, on a public health intervention to prevent or reduce the incidence of cholera in areas where people must depend on groundwater after natural disasters such as flooding. The research involves a simple filtration method that uses widely available sari cloth to filter household water. The intervention is based on earlier studies that found sari cloth effective in reducing the number of plankton associated with *Vibrio cholerae* in surface water to below the infectious level that causes cholera. Investigators are evaluating the effective use of the technique by villagers, including whether the number of *V. cholerae* cells in water and the incidence of cholera are reduced.

Another NINR grant involves a 10-site, randomized-control study in Canada and the United States. The research is designed to reduce the unacceptably high rates of birth by cesarean section in these two countries. Earlier studies conducted on a smaller scale showed that the amount of "labor support" by caregivers during active labor can influence the rates of cesarean delivery and other adverse events related to childbirth. The elements of labor support being studied include companionship, attention to emotional needs, and comfort. The researchers are evaluating the results of two types of nursing care on women in labor—continuous support and the usual intermittent

nursing care. They are comparing the effects of these types of care on rates of cesarean delivery and forceps delivery and requirements for pain reduction, particularly for administration of epidural anesthesia. Cost-effectiveness is also being addressed. The findings will contribute knowledge about the effectiveness of labor support for a variety of events related to childbirth, such as prolonged hospital stay and postpartum depression. The results of this study are expected to inform policy decisions about the staffing of hospital delivery suites.

A research project supported by NINR addresses hospital restructuring, which is widespread in Europe and the United States. The study provides the opportunity to evaluate restructuring modifications and recommend changes to improve health care for hospitalized patients. There is little scientific evidence on the best approaches to restructuring hospitals or the effect of specific approaches on outcome for patients. This research involves hospitals in Canada, England, Scotland, and the United States, which are in different stages of restructuring. Investigators are evaluating the effects of organizational changes, including variations in nurse staffing, on patient outcomes. Also under study are the effects of nurses' personal control over nursing practice and their relationships with physicians. The investigators are also analyzing hospital mortality rates, complication rates, and rates of unsuccessful resuscitation, as well as organizational barriers to timely use of critical clinical interventions.

NINR funds U.S. training fellowships for five predoctoral students performing relevant dissertation research. These studies involve

- ascertaining the prevalence and mental and physical health outcomes of domestic violence in Chinese women in China and the United States;
- testing a hypothesis that chronic infection with the hepatitis C virus is a risk factor

for development of B-cell non-Hodgkin's lymphoma, in collaboration with the National Cancer Institute of Egypt;

- improving infant nutrition to prevent stunting of growth and nutritional defi-

ciencies, in Trujillo, Peru;

- understanding and management of cancer, including therapeutic options and cultural variables, in Peruvian Amazonia; and

- understanding the cultural context of sickle cell disease and its pain from the perspectives of the individual, the family, and the community, in Eastern Saudi Arabia.