

Title: **Establishing a suicide attempt surveillance system in Ningxia Province, China**

PI: Matthew J. Miller, MD, ScD

Co PIs: Michael R. Phillips, MD, MA, MPH
Director, Suicide Research and Prevention Center
Shanghai Mental Health Center

Bo Zhang
Director, Division of Disease Control
Ningxia Provincial Bureau of Health

Abstract

Background: Suicide is an important public health problem in China that is not being effectively addressed, particularly in the impoverished rural parts of the country. The lack of an effective registry system for medically treated attempted suicides—the most important risk factor for death by suicide—is one major limitation that makes it difficult to develop targeted prevention strategies.

Aim: Develop a real-time electronic surveillance system that identifies all suicide attempts treated in the emergency departments of general hospitals in Ningxia (a sparsely populated province in northwest China with a large ethnic [Hui group] minority population) that can subsequently be used as a platform to initiate additional studies on the causes and prevention of suicide.

Methods: In collaboration with the Centers for Disease Control of Ningxia Province and with the Suicide Research Center of the Shanghai Mental Health Center, the attempted suicide surveillance instruments recommended by the US CDC and the WHO will be combined with a form developed for use in China by the Chinese Co-PI (MRP) and adapted for use in the emergency departments (EDs) of general hospitals in Ningxia. The brief form will be completed by trained ED nurses for all individuals 10 years of age or older treated in EDs for suicide attempts or accidental poisoning (that are frequently misclassified attempted suicides). The form will initially be pilot tested in the three large general hospitals in the province for 3 months and then revised and employed in 25 randomly selected medium-sized and small general hospitals for 3 months. The final form will then be converted into a real-time electronic registry system (on a secure, dedicated website) and pilot tested at all 28 hospitals for six months. Site visits to 10 of the hospitals will assess the accuracy and completeness of the registration system. Once the system has been perfected additional funding will be sought to expand it to include all 106 general hospitals in the province and to initiate detailed projects about the causes and risk factors for suicidal behavior .

Feasibility: Harvard faculty members are currently involved in an on-going mental health services project in Ningxia that could be easily expanded to include the monitoring and prevention of suicides. The Ningxia CDC, which will coordinate the project locally, has the responsibility and authority to monitor all type of fatal and non-fatal injuries in the province and already has an electronic reporting system for certain infectious conditions. The Chinese Co-PI (MRP) has more than 20 years of experience studying suicide attempts in the EDs of general hospitals in China and the US PI (MM) has more than 15 years experience studying and promoting public health approaches to suicide prevention in United States and abroad.

Expected outcomes: This would be the first electronic registry system for suicide attempts in China; it could be used as a model for similar systems in China. Data from this registry would be useful to a wide range of researchers and policymakers. The project would, moreover, give an opportunity for Harvard students to participate in epidemiological research in China and establish an ongoing relationship between Harvard Faculty and key suicide researchers in China.