

1. Company/Organization Name, Address, Contact:

Kathmandu University School of Medical Sciences
Contact: Dr. Biraj Karmacharya
Dhulikhel 45200, Nepal



UAB Contact/Mentor:

Sadeep Shrestha, PhD MHS MS

Associate Professor

Quetelet Endowed Professorship in Public Health

Department of Epidemiology, UAB School of Public Health

University of Alabama at Birmingham

2. Title of Internship/Practicum:

Developing Chronic Care Model for Integrating Hypertension and Diabetes Management in Rural Health System of Dhulikhel Hospital

3. Number of Internship Positions Available: 1

4. Internship Slots Available: Spring, Summer, Fall semester

5. Location: Dhulikhel, Nepal

6. Paid or Unpaid Internship: Unpaid Paid

Unpaid with stipend through the UAB Sparkman Center for Global Health

7. Desired Education Level/Degree Concentration: Preferred

Upper level undergraduate or graduate

8. Brief description of the organization/agency mission, goals, and activities:

Kathmandu University School of Medical Sciences (KUSMS) is an institution established in collaboration between Kathmandu University and Dhulikhel Hospital. KUSMS is a pioneering institution in Nepal to advance the field of health sciences training, research and services in the country. Since 1994, it has created history in initiating novel, high-quality academic programs that have changed the landscape of health in the country. Currently, almost 1500 students get admission every year in various undergraduate and postgraduate programs in nursing, dental, medical, physiotherapy and other disciplines. High-quality education with special features like

community-oriented teaching, problem-based learning and use of modern pedagogical approaches make KUSMS programs unique. The infrastructure, academic environment and top-class faculty and staffs are the biggest assets of these programs. Through the network of twelve affiliated and extended colleges, comprising of more than 1500 faculties, 10000 staffs and many others, KUSMS has created one of the largest providers of tertiary level health system in the country, including in some of the most deprived and impoverished areas. KUSMS's collaboration with internationally reputed universities have been remarkable and ensure its highly productive global engagement. Kathmandu University and Dhulikhel Hospital, established in 1990, 1996 respectively as not for profit, self-sustainable, non-governmental initiatives, jointly run school of medical sciences (KUSMS). The mission of Kathmandu University – “Quality Education for leadership” and of Dhulikhel Hospital – “Quality health service for poor” are complimentary to achieve the quality health care and health science education in Nepal.

9. Scope of Work/Responsibilities of Intern:

The principal goal for this Internship/Practicum is to provide experiential learning to the interns with the realities of conducting public health practice and studies in resource-constrained settings.

Background

Although there are evidence-based approaches to prevent and manage diabetes and its risk factors, there are still major gaps in the implementation of these methods especially in LMICs. This is compounded by the fact that chronic diseases such as diabetes need a structured, well-concerted comprehensive approach comprised of on-going prevention activities, timely screening, standard clinical management, and self-management skills for life-style modification. Unfortunately, the existing health system in Nepal (similar to most other developing countries) is not prepared to address these challenges. There is no national policy or strategy to address diabetes in the current health system. Lack of standard national guidelines and protocols is another hindrance for effective prevention and management of diabetes.

One of the promising approaches to improve diabetes care is integration of the Chronic Care Model into the health system. The Chronic Care Model (CCM) is the best-known model for chronic disease management. It focuses on linking informed, actively engaged patients with proactive and prepared health-care teams. This model involves a collaborative approach in the following six core areas: health systems (organization of care), clinical information systems, delivery system design, decision support, self-management support and community resources. [*Manag Care Q* 1999; **7**(3): 56-66; *Eff Clin Pract* 1998; **1**(1): 2-4.]

Dhulikhel Hospital Kathmandu University Hospital (DH) runs a network of 21 rural health centers in 11 districts around the country. These centers provide round the clock health services to the local communities. We aim to implement hypertension and diabetes management in these facilities by utilizing the principles of chronic care model. The findings from this work will provide insights on the challenges of chronic disease management in rural setting in Nepal and will also provide preliminary experience for a wide-scale implementation of chronic disease management.

Aim

This project aims for the following:

1. Understand the epidemiology of hypertension and diabetes in the catchment population of Dhulikhel Hospital.

2. Describe the current status of hypertension and diabetes management in the outreach centers of DH.
3. Develop and pilot the implementation of hypertension and diabetes management utilizing chronic care model approach in the outreach centers of DH.
4. Identify potential barriers and facilitators to the implementation of chronic care model for the management of hypertension and diabetes in the outreach centers of DH.

The intern(s) will be responsible for the following activities in coordination with the local mentor and other local researchers

1. Develop detail proposal, study tools related to the aforementioned topic.
2. Develop data collection strategies.
3. Support data collection.
4. Analyze data.
5. Prepare manuscripts.

10. Desired Qualifications:

Student in Public Health or health-related discipline preferred.

The student should be open to new culture and work-environment, proactive and accommodative to new settings.

Students with previous research experience will be preferred.

11. MOU with UAB in place?

Yes

12. Will approval from ethical board be required? If so, how will this be done and what is the anticipated time frame to obtain ethical board approval?

Yes, the project will need to be approved by the Institutional Review Board at KUSMS. The local mentors will help to get this done.

13. Any anticipated challenges?

Student will be accompanied by Dr. Shrestha. Dr. Shrestha has a strong record of previous internships with Kathmandu University and a local NGO, Nepal Fertility Care center (NFCC).