Hospital Partnership MAGNET:
Malawi German Networking for Capacity Building in Treatment, Training and Research at Kamuzu Central Hospital (KCH), Lilongwe, Malawi

Malawi: KCH Medical Department - Head of Department: Lillian Gondwe, Hospital Director: Jonathan Ngoma
Germany: University Heidelberg, Institute of Public Health - Florian Neuhann, Sandra Barteit, Hilde Gold-Feuchtmüller | University Cologne, Department of Infectious Diseases - Gerd Fätkenheuer

INTRODUCTION

The partnership started in 2008 and is funded as part of the German ESTHER Initiative through GIZ. The current third phase runs until October 2015.
The partnership has accompanied KCH through various periods of extreme staff shortages and always put the improving of care at the centre of its efforts with the overall aim: Clinical care and managerial capacity of the Medical Department of Kamuzu Central Hospital is strengthened. Every year an annual departmental planning meeting looks at the status and progress of the partnership next to regular visits by German partners.
The funding through GIZ has been very supportive however for the current phase the overall conditions for the German partners have become increasingly difficult.
During the current phase the partners focus on three subcomponents, which are described in a bit more details. For all subcomponents the MD has identified a Malawian clinician to take on particular responsibilities.

Hospital Partnership MAGNET:

Kamuzu Central Hospital, Lilongwe

University Clinic Cologne

University Clinic Heidelberg

THREE COMPONENTS

1. Antibiotic Stewardship Initiative at the KCH

Infectious diseases present a major challenge for health services worldwide, particularly in resource limited settings. Prevention and efficient treatment of severe infections are essential in order to improve neonatal/under-five mortality, maternal health and the outcomes of patients infected with HIV. However, the inappropriate use of antibiotics is increasingly recognized as a major contributor to the problem of antibiotic resistance. The recognition of this problem has led to initiatives in the US and Europe labelled “Antibiotic stewardship” (ABS) that aim to “ensure that patients get the right antibiotics at the right time for the right duration” (http://www.cdc.gov/getsmart/healthcare/learn-from-others/factsheets/antibiotic-use.html).
Good hospital infection control practices can help to contain the development of antibiotic resistance but can be a particular challenge in resource limited settings. The overall objective is to survey the epidemiology of bloodstream infections and their antibiotic resistance pattern in order to improve clinical decision making in infectious disease and to promote rational use and management of anti-infective medicines.

The Antibiotic Stewardship Initiative at KCH will support:
- accurate documentation demographic & clinical details and microbiological results, including antibiotic resistance patterns at KCH
- standards for diagnosis and treatment of infectious diseases through application of guidelines, teaching and training
- internal drug supply chain management though data on consumption and need of antibiotics
- hospital infection prevention by provision of individual hand disinfectant

For this component a major co-funding has been granted to the partnership by CDC.

Microbiology Labratory at the KCH

Diabetes Clinic at the KCH

2. Assessment and Evaluation of Diabetes Care

Diabetes mellitus ranks among the top ten causes of disability worldwide and has become a serious health problem in many low and middle-income countries. Also Malawi, situated in Central Africa, has to face health and socioeconomic consequences of increasing diabetes prevalence and secondary complications due to late diagnosis and insufficient management. The government of Malawi has recently stressed the importance of improving prevention and control of diabetes, however, efforts are complicated by a lack of reliable data.
The Diabetes Clinic at KCH has seen an enormous increase in demand and utilization by patients over the last years reaching around 2000 registered patients. The Medical department staff felt likewise increasingly unhappy with the current situation, patient load and limited resources for management. Therefore within the MAGNET partnership together with KCH’s partners from the Pittsburgh University is was agreed to conduct a cross-sectional descriptive study is to assess patient’s knowledge, attitude, practice, quality of life and health status at the diabetic clinic. The purpose of this study was - among others - to gain a better understanding of the health needs of this patient population, to identify unmet needs and to improve services for example for long term glycaemic control: (HbA1c), a test that subsequently has been introduced to the KCH lab.
Early in 2014, the study was conducted which included 271 patients of the Diabetes clinic and is now being analyzed. In the meantime a team of doctors and nurses from KCH Medical Department went for a week internship and training at the Diabetes Clinic of Dar es Salaam which implements standards of the International Diabetes Federation. Based on the finding and equipped with the new insights through the training the staff will develop new standards of care and better patient education on Diabetes - all in line with the NCD policy of Malawi and in cooperation with Malawi Diabetic Patient Association.

E-Learning Center in the Medical Department at the KCH

Annual Meeting of the Medical Department 2013 supported by MAGNET

3. E-learning as a Tool for Partial Compensation for Lack of Clinical Teachers

The scarcity of senior medical doctors impairs the learning opportunities for interns, especially during their vital internship-year. Improving the quality of education during the internship is pivotal in order to sustain good quality of treatment and care. The rationale of the e-learning platform is to improve the quality of patient care and in service training in the medical department of the KCH. Furthermore, the e-learning platform aims to partially compensate for the lack of medical teaching staff, to increase access and to improve quality of medical education in the department with the support of information and communications technology and by providing access to up-to-date medical information. Education is a major driving force of a country‘s economy. As technological access and competition increases, cost for its usage decrease. It makes e-learning a tool of growing importance to sustain and extend access to medical education. Studies showed that e-learning has a positive effect in training healthcare workers in resource-limited settings, as well as influencing the quality of the training and quantity of trained medical personnel.
The needs of medical interns guided the content creation for and the design of the e-learning platform, particularly considering local relevance and country-specific pathology. One major aspect for defining the educational needs were the requirements stated in the interns‘ logbook of the Medical Department, that has been developed with senior medical staff of the department and of the project partners. The platform is organized into four sections: medical lessons and materials, mortality audits, presentations and workshops, and virtual patients. Virtual patients are a focal element of the e-learning platform. They allow interactive diagnosis and treatment of a patient and practice the role of a medical professional without pressure and negative consequences for patients. Also, the platform features the medical online libraries HINARI and UpToDate. The e-learning project cooperates with the Malawi College of Medicine, Lilongwe Campus and other external partners like University of North Carolina and University of Pittsburgh.

UNITY AND FREEDOM

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