Needs Assessment of Pediatric Radiological Equipment and Cross-Cultural Investigation into Parental Empowerment in Pediatric Radiology Program Development in the Kingdom of Bhutan

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Introduction

Bhutan is a magnificent mountainous country hugged by India to the east and west and by China to the North and South. This peaceful nestled country faces challenges in combating non-communicable diseases due to the lack of radiological equipment necessary for early diagnosis. Prior to implementation of these medical devices, it is imperative to investigate the cultural attitudes, beliefs, and infrastructure, to ensure successful integration. Bhutan is beginning to implement a pediatric radiology program for the nation with the assistance of ABAH Foundation and RAD-AID International, both of whom partnered with graduate students at George Washington University School of Medicine and Health Sciences. The initial stage of investigation focused on cultural consensus among parents and caregivers of children who have come to the hospital for CT scan at Children’s National Medical Center in Washington, DC and at the Jigme Dorji Wangchuck National Referral Hospital in Thimphu, Bhutan. The investigation collected information on fundamental and culture specific concerns of mothers over the safety and well being of their children during radiologic examination.

Methods

This project consisted of two parts; the first to gather administrative, health services, and epidemiological information of public record within Bhutan, prior to the initiation of a pediatric radiology program, and the second to learn about parental cultural beliefs in relation to pediatric radiology services. A total of 50 families were interviewed in Bhutan using a standard open format interview technique to generate items and phrases from parents for use in future anthropological investigation into “what matters” to Bhutanese caregivers during the medical imaging process. Bhutanese medical professionals and health officials collaborated in the efforts to provide further information on logistical and technical information on how to successfully integrate further medical imaging services. This was implemented with the effort of the Radiological Readiness Assessment completed by the Director General of Medical Services of the Ministry of Health and the Chief of Medical Staff of the Eastern Referral Regional Hospital in Bhutan.

Results

Early investigative studies highlighted the need for further investigation into the cultural education and exploration of misconceptions in the use of radiological services in children. In addition, limitations in trained staff to perform and interpret radiological studies is limited which places a need on both the financial and logistical barriers to successfully implement further imaging machines.

Discussion

There will be ongoing investigations into cultural consensus among parents and caregivers of children who have come to the hospital for CT scans at the Jigme Dorji Wangchuck National Referral in Thimphu, Bhutan, at the Eastern Referral Hospital in Mongar, Bhutan, and in the south in Gelephu, Bhutan. This project is being done under the signed Terms of Reference with the Ministry of Health of Bhutan between ABAH Foundation and the Royal Government attached as Enclosure. ABAH Foundation is arranging and partially supporting the travel and project.

Future Work

• Continued data collection on maternal perspectives in rural areas of Bhutan
• Identification and implementation of radiological protocols and equipment to service the needs of the population
• Funding for successful attainment of radiological devices and training of personal

Acknowledgments

American Bhutanese Associates for Health
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(http://www.abahfound.org)

RAD-AID International (http://www.rad-aid.org/countries/global-outreach/asia/bhutan/) will be using the results to refine their strategy as they proceed with the implementation of a Pediatric Radiology Program in the Kingdom.