

Faith-based health providers and assistive technology services in low-resource areas

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INTRODUCTION

Although it is difficult to estimate exactly how much of local health care is provided through Faith Based Health Providers (FBHP) in low-resource areas, it is clearly a significant amount. For example, a recent article in *Lancet*, the premier British medical journal, indicated that across the African continent estimates range between 20 – 70% of services [1]. In many countries, faith-based health providers (FBHP) were the initiators of modern health care, and in spite of major changes in the health care situation, they have remained major players [1,2]. Very early in their history, many recognized that some of the acute illnesses they were seeing could be ameliorated by prevention programs through public health and began programs in the surrounding communities [1,2]. They also began local medical training initiatives. As locally trained medical and administrative staff became available, more staff were hired from local populations, and FBHP moved to local ownership [1]. Findings indicate that care is provided equally to all corners and is not biased toward those that share the world view of the FBHP [1]. As FBHP moved toward locally sustainable funding, government funding has become key to their ongoing success [1,2].

Evidence indicates that working with FBHP enhances the global response to critical health challenges. For example, FBHP are significant partners in the global response to AIDS, malaria, neonatal health and Ebola [4,5]. In countries with fragile infrastructure, challenges in delivering effective national health care abound, and the proportion of health care provided by FBHP is especially high [1]. In many countries, FBHP may be the most effective possible partners for global initiatives to improve AT provision.

However, there are barriers. FBHP are numerous and independent, making them potentially difficult to engage as a group. However, there are umbrella organizations. Christian Connections for International Health includes 5000 facilities members facilities. The World Medical Mission branch of Samaritans Purse has a strong relationship to over 40 of the larger faith-based hospitals. SIM has representatives working in more than 70 countries. Christian Medical and Dental Association has members working in FBHP and secular health providers around the globe. Once a strategy is put into place, it could be disseminated through these larger organizations. Historically, many FBHPs have often focused primarily on acute care responses to conditions which were immediate threats to survival. Resources are spent responding to water born illnesses, malaria, trauma, surgical interventions and so on. Although most FBHPs have rehabilitation staff, because of the focus on acute care, staff may not be aware of resources and guidelines that have become available to facilitate appropriate AT services.

Including FBHP in planning could have significant country-wide impact in each of the countries where FBHPs are working. Many have a long history of working effectively in country and have extensive local networks into communities. Roots in the community are especially important because those who need AT may be hidden by families [6]. The initiative by BethanyKids (BK) in Kenya is an example of what is possible when FBHPs engage in appropriate AT provision.

METHODS

An example of methods used for one FBHP

BethanyKids is a compassionate Christian organization which focuses on transforming the lives of children with congenital conditions in need of surgery and children with disabilities. They are registered as a not-for-profit in Kenya, and their programs in Kenya are directed by Kenyan executives who lead their extensive Kenyan program and staff. BK headquarters in Kenya is at Kijabe and is part of the extensive FBHP center there. That center includes schools and training initiatives such as PAACS membership and a nursing school and has been a major player in the response to HIV/AIDS in Kenya. Clients come from all over Kenya and from neighboring countries.

Steps taken

BethanyKids had initially focused on pediatric neurosurgery and orthopedic surgery. This broadened to a concern for rehabilitation, therapy and assistive technology for children with spina-bifida, cerebral palsy and other disabilities. In 2010 they contracted to provide rehabilitation services at a school for children with disabilities and hired a team of therapists for that location. At that time they realized there was a need for more than 150 wheelchairs for students at the school, but they had no access to appropriate wheelchairs. In 2011 they began to work with a research project that did long term studies on wheelchair function. This project was able to request makers of wheelchairs for use in low-resource countries to send 30 wheelchairs to BethanyKids, and the research team would follow-up to provide feedback to the manufacturers. Through this link, BK heard about the World Health trainings for wheelchair provision and sent some of their therapists to those trainings. A key step, central to the growth of the program, was the inclusion of BK top administration in the World Health Organization wheelchair provision stake holder training. BK applied to be part of the Accelerating Core Competencies for Effective Wheelchair Service and Support (ACCESS) grant through World Vision. During the duration of the grant, more staff were trained, and BK wheelchair services increased significantly. When the grant ended, they were again without a reliable supply of appropriate chairs. It was clear that complete dependency on one large grant was not sustainable.

RESULTS

In 2018, BK leadership then put in place a three-year plan to continue to develop teams of appropriately trained staff to enhance wheelchair provision capacity. Although the plan is still in the early stages of full implementation, last year BK provided over 900 wheelchairs. BK is initiating wheelchair services at the school for children with disabilities in Thika, at the main hospital in Kijabe, and through their mobile clinic which visits 17 locations around Kenya.

BK leadership now sees appropriate wheelchair and AT provision as essential long-term care for the pediatric population they serve. This broad long-term view of care includes other aspects of care. BK has enabled the teaching of Clean Intermittent Catheterization (CIC) a procedure which allows those with spina bifida and spinal cord injuries to be continent. They initiated CIC independently, but now have tied into the Spina-bifida and Hydrocephalus Association of Kenya, a group connected with the International Federation for Spina Bifida (IF). IF now supplies CIC kits through BK and helps to fund some of BK care of children with spina-bifida. BK also has a history of partnering in long-term studies on the function of wheelchairs designed for use in low-resource settings [7-10].

BK has struggled to find an appropriate wheelchair supply. Complex duty requirements make bringing AT through customs into Kenya difficult and expensive. Chinese made folding hospital transport chairs are also widely available for purchase in Kenya. However, these are not appropriate for long-term use [9]. Free Wheelchair Mission (FWM) provides wheelchairs free to port. Research indicates that FWM Gen 2 wheelchairs work adequately for adults and teens with good upper body function [9]. However, BK serves a pediatric population that includes children with complex seating needs. Although there is one type of locally made pediatric supportive wheelchair, studies and experience have indicated significant and dangerous quality control issues [7,8]. BK has brought in smaller donations of pediatric chairs including Hope Haven and BeeLine adaptive pediatric chairs. However, the small numbers of these chairs are not adequate for the population BK serves. Recently BK has been accepted as a partnering organization with the Consolidating Logistics for Assistive Technology Supply Project (CLASP). and plans to include the CLASP Liberty pediatric wheelchair in an upcoming study. An affordable, diverse and sustainable source of appropriate wheelchairs is very badly needed and is the largest barrier to effective wheelchair provision through BK.

DISCUSSION

For the larger FBHP, building to capacity in a stepwise manner is much more likely to be seen as possible. External funds for start-up costs such as facilities, initial hiring and staff training would open doors. However, a slow integrated development is often seen as essential for stable long-term initiatives. AT provision would become part of the fabric of services provided by an integrated hospital and

community health system. In fact, training programs for those living with disability and their families could be disseminated through existing community health programs [10-13]. Deliberately strategizing to providing FBHP with opportunities for training, education and AT supplies is likely to have a country wide impact.

Because of the high cost of appropriate wheelchairs, some sort of sustainable funding for a diverse source of appropriate high-quality wheelchairs is necessary. Part of this picture is the difficulty of importing medical supplies. Even in more developed countries, parts and components of AT are often imported. However, in many low-resource countries importing is punitively complex, unevenly enforced and expensive. Countries could be encouraged to loosen barriers for the importation of AT.

Each situation will be unique, any initiative to enhance appropriate technology services around the globe is incomplete without the inclusion of FBHP. Collaborative planning for training opportunities and financial resources for the initial start-up of AT provision programs would open many doors. Without access to suitable wheelchairs, appropriate wheelchair provision is simply impossible. Deliberate attention to the possible scope of FBHP could be part of the picture in plans for funding wheelchair provision.

CONCLUSION

It would be effective if the FBHP were included in the planning of strategies for effective assistive technology provision in low resource setting. The implementation of these strategies could enable effective use of limited funds and would harness the capacities of FBHP. Their long history of working effectively in country and their extensive local networks could result in effective implementation.

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