Annals of Global Health, VOL. 83, NO. 1, 2017
January–February 2017: 117–155

Upon completion of 1 year of training and fieldwork, all 6 intervention CHWs were retained. Each of the 6 intervention CHWs scored >80% on the knowledge test, implying a high rate of knowledge retention. Important themes identified during the FGD included satisfaction with a 2 step recruitment process, emphasis on communication skills, a preference for audio-visual aids in training and recognition of the importance of a supervisory framework. Respect from society and a positive impact on people was consistently cited as the most satisfying aspects of the job, followed by financial compensation.

Interpretation: A 2 step recruitment process allows better fit between CHWs and the CVD program. Training should emphasize audio visual aids, communication skills and allow adequate practise. Well-trained and supervised CHWs have high work satisfaction and minimal attrition. Recruitment and training processes for CHWs in CVD programs should be more standardized to enable replication, scalability and adequate assessment of their potential to mitigate CVD mortality in low and middle income countries such as India.

Source of Funding: Marwari Yuva Manch, Dalkhola.

Abstract #: *2.007_HHR*

Creation and Implementation of Standards for Ethical Global Health Volunteering

J. Lasker[1], *M. Aldrink*[2], *R.B. Balasubramaniam*[3], *P.H. Caldron*[4], *B. Compton*[5], *S. Siegel*[6]; [1]*Lehigh University, Allentown, PA, USA,* [2]*Partnership for Quality Medical Donations, Grand rapids, MI, USA,* [3]*University of Iowa, Swami Vivekananda Youth Movement, Mysore, India,* [4]*Midwestern University, Arizona College of Osteopathic Medicine, Glendale, AZ, USA,* [5]*Catholic Health Association, St. Louis, USA,* [6]*Independent, Tel Aviv, Israel*

Background: Growing concern about the quality and ethics of short-term volunteer trips in global health has led to the development of guidelines by a number of organizations and individuals (Caldron, 2016). Some of the best known are the Working Group on Ethics Guidelines for Global Health Training (WEIGHT) (Crump & Sugarman, 2010), the Catholic Health Association (2015), and the University of Minnesota's Global Ambassadors for Patient Safety (GASP). Different guidelines include recommendations targeted at organizations planning trips, criteria for potential volunteers to consider in choosing an experience, and procedures for running medical, surgical, or dental clinics. Such guidelines cover a broad set of issues, from safety concerns for volunteers to procedures for organizing clinics to the nature of partnerships with host communities.

Methods: This paper first reviews the key recommendations in existing guidelines and standards. It then asks about the extent to which they are reflected in current practices in global health volunteering. It is based on surveys and interviews with over 300 sponsoring organizations in the U.S. as well as numerous reports about volunteer experiences.

Findings: The research reveals a lack of attention to standards in many areas such as volunteer preparation, community-based needs assessment, partnership, and evaluation. Additionally, many reports from volunteers indicate a lack of enforcement of ethical principles regarding untrained volunteers practicing medicine. The paper concludes with a discussion of reasons for the lack of enforcement of any set of guidelines and the consequences for effective health programs.

Interpretation: Volunteers are confronted with innumerable choices of programs and little guidance for choosing the best ones. And spponsoring organizations are subject to few controls on their practices. Guidelines are for now mostly aspirational; serious consideration needs to be given to how to enforce them to improve effectiveness and ethics of volunteer programs for benefit of both host communities and volunteers.

Source of Funding: Lehigh University, Catholic Health Association.

Abstract #: *2.008_HHR*

Cost Analysis of Intramedullary (IM) Nailing and Skeletal Traction for Treatment of Femoral Shaft Fractures in Malawi

M. Mustafa[1], *D. Shearer*[1], *J. Kahn*[2], *B. Lau*[1], *H.-H. Wu*[1], *L. Chokotho*[3]; [1]*University of California, San Francisco, San Francisco, USA,* [2]*University of California, San Francisco, San Francisco, CA, USA,* [3]*Beit Cure International Hospital, Blantyre, Malawi*

Background: Femoral shaft fractures are among the most common musculoskeletal injuries worldwide. In high-income countries, intramedullary (IM) nailing is the standard treatment. In many low- and middle- income countries (LMICs) skeletal traction is still common because surgical treatment is deemed cost-prohibitive. However, the notion that surgery is not cost-effective lacks supporting evidence. The purpose of this study was to estimate the cost of both IM nailing and traction for treatment of femoral fractures.

Methods: In this prospective observational economic analysis we used micro-costing methods to calculate the fixed and variable costs associated with IM nailing and skeletal traction. Adult patients treated with IM nailing or traction at QECH in Malawi were enrolled. Variable costs assessed include surgical and traction personnel costs, ward personnel costs, medications, surgical implants and disposable supplies. Fixed costs included IM nailing-specific equipment cost and indirect costs such as overhead costs. We conducted sensitivity analysis examining the effects of reducing the length of stay and using diffrenent implants on the IM nailing cost.

Findings: Eighteen patients admitted between April and June 2016 were eligible for the study. Eleven were treated with IM nailing and 7 with skeletal traction. For nailing patients, the average length of stay (LOS) was 31.13 days (SD 18 days). For traction, it was 37 (SD 21.5). The total cost per nailing-patient was $539.04 (SD 145.77), and per traction-patient was $411.99 (SD 171.8). The mean variable cost per nailing patient was $295.93, and per traction patient was $294.68. The largest variable cost was the ward personnel cost ($225.9, SD $132.8), and ($266.01, SD 155.9) for nailing and traction respectively. Implants ($135.45), were the second largest cost for nailing. The overhead cost per patient per day was $3.19. At 19 days the cost of nailing was equal to traction and it was cost-saving at a rate of $11 for each day subtracted.