Structure/Method/Design: An in-country needs assessment was conducted to ascertain the concerns of funders, health care providers, and hospital management at each site prior to program implementation. After the needs assessment, two expert clinicians (one master nurse educator, one midwife) were sent to design and implement a week long clinical mentoring program for expert Tanzanian midwives. Clinical case studies served as the curriculum framework to discuss how mentorship and clinical teaching could be integrated into an overburdened environment to enhance professionalism and support best practice. The nurse midwives for the training were selected by hospital management to participate.

Outcomes & Evaluation: To date, nine midwives have received the week long training. Initial program evaluation has been positive with participant comments on new knowledge acquired in mentoring, clinical case management, and newborn resuscitation. A second training is scheduled for a second rural hospital with follow-up and monitoring of the first site in January 2015. Three themes have emerged from program implementation: curriculum development in low resources settings requires a rapid assessment of the clinical and practical needs of the participants; flexibility and creativity in teaching methods are essential to engage students; and finally, access to students prior to program implementation may facilitate a more tailored approach and lead to greater participant engagement.

Going Forward: Health workers' ability to educate future generations of Tanzanian health care providers must be enhanced and sustained to maximize gains for the women they serve. The shortage of human resources threatens the effectiveness and sustainability of efforts to build capacity among staff. Offering curriculum development and implementation support—through university partnerships—may offer a key strategy to filling a need to support nurses and midwives who work under resource-strained conditions.

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Abstract #: 01ETC089

Education for male reproductive health in andean Peru

J.D. Steffens; University of Washington School of Medicine, Seattle, WA/US

Background: Abstract: Background. Education gaps regarding male reproductive health were assessed in the town of Ollantaytambo, Peru and surrounding areas. The goal of the project was to identify the three greatest needs for educational intervention, design an effective curriculum to address those needs, and test the curriculum to determine acceptability. Male reproductive health is a major issue of importance because sparse resources are allocated to address this issue, which has a major negative health impact on Ollantaytambo and surrounding areas. Machismo, or a culture of masculine pride, is present in the area as well which facilitates a greater onus of contraception and sexually transmitted disease prevention on women than men.

Methods: 13 people were interviewed in a community needs assessment to determine men's needs for education on male reproductive health. Interviewees ranged in age from 26-64, and included local health workers, health promoters, NGO workers, and residents of Ollantaytambo and surrounding communities in Peru. Information from this interviews was then used to design a curriculum, which was field tested with a group of nine males in the community of Huilloc. Findings: The community needs assessment elucidated three major gaps in male reproductive health knowledge, which included knowledge about contraceptive methods, sexually transmitted diseases, and

proper condom use. These three areas were therefore targeted in the curriculum, which included lesson plans, examples of contraception, and assessment materials. After the field test, each man knew how to properly put on a condom and learned more about contraception. Additional questions regarding sexually transmitted diseases, vasectomies, and tubal ligation were discussed. Curriculum materials were revised and improved after the field test, and will be used by Sacred Valley Health (SVH), a community-based organization, to continue education targeting men.

Interpretation: Male reproductive health is a topic that needs to be addressed in Ollantaytambo and its surrounding communities. Language barriers are present in the forms of Spanish and Quechua, and should be considered with all interventions. Education of males in the area regarding contraception, sexually transmitted diseases, and proper condom use with this curriculum should continue, with revisions and improvements by SVH as needed.

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Abstract #: 01ETC090

Understanding how rural trauma patients arrive to centers of care in Peru

M. Stewart, M. Fuller; University of Utah, Salt Lake City, UT/US

Program/Project Purpose: The WHO predicts by 2030 that death and disease attributed to road traffic trauma will outnumber most other causes of death worldwide. Resource poor countries will shoulder the majority of these injuries and deaths, with literature suggesting that up to 81% of these deaths occur in areas without established Emergency Medical Services (EMS). Few studies have investigated and implemented trauma education to improve these disparities. By investigating trauma trends at a large referral center in Peru, we hope to better understand existing methods of transportation for these patients and the feasibility of layperson trauma education. We hypothesize that the majority of trauma patients will be transported via non-EMS methods.

Structure/Method/Design: After performing a needs-based assessment in March 2014 and obtaining IRB approval, investigators were placed at a large referral hospital in Cusco, Peru, Hospital Regional. During the month of July 2014, investigators performed a survey of trauma patients arriving to the Emergency Department (ED), focusing on mode of transport, age, distance traveled, and type of injury. By specifically focusing on the mode of patient transportation, we hope to demonstrate that private transport, rather than traditional EMS, was the main method of transport utilized for the majority of trauma patients arriving at Hospital Regional.

Outcomes & Evaluation: During the study period, information was compiled from 302 trauma patients presenting to Hospital Regional in Cusco, Peru, with an average age of 32 years old. 52% of the trauma patients arrived from outside of Cusco, with some patients traveling over 3 days by foot, boat, and road. The most common mode of transportation to the hospital was taxi (49%), followed by ambulance (19%), bus (13%), private vehicle (8%), foot (3%), police (2%), and fire department (2%). Non-EMS transport was the method utilized by the majority of patients surveyed (70%), confirming our hypothesis that most of the trauma patients arrived to the referral center without EMS support.

Going Forward: Our research demonstrates that most trauma patients at a large referral center in Southern Peru arrive via non-EMS Annals of Global Health 55

transport, with many traveling a far distance to receive care. Currently, operators of non-EMS transport vehicles in Peru receive no medical training and are not prepared to provide basic trauma care or stabilization en route to definitive care. Our data identifies a potential target population for basic trauma education. The development of a basic trauma-training program targeted towards a pilot group of taxi drivers is a logical next step. Future challenges include gaining the acceptance of local taxi drivers, determining the feasibility of a layperson trauma-training program, and accurately measuring patient outcomes following the training.

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Enhancing the quality of clinical clerkships in a resource limited settings medical school

C.N. Tarimo¹, C. Muiruri², A. Kulanga³, G.E. Kapanda⁴, E. Lisasi³, L. Mimano⁴, J. Bartlett²; ¹Kilimanjaro Christian Medical University College (KCMUCo)-MEPI, Durham, NC/US, ²Duke University, Durham, NC/US, ³Kilimanjaro Christian Medical Centre (KCMC)-MEPI, Durham, NC/US, ⁴Kilimanjaro Christian Medical Centre-MEPI, Durham, NC/US

Program/Project Purpose: To reduce healthcare workers shortage in Sub Saharan Africa, medical schools have increased enrolment. However, this expansion has not been accompanied by adequate increase in faculty size or physical infrastructures. Consequently, classes are overcrowded hence reduction in the quality of training, especially in the clinical clerkship. Aiming at exposing medical students to rural working environments and reducing overcrowding at the main teaching hospital, in 2012 Kilimanjaro Christian Medical University College (KCMUCo) introduced a 12-week rural clerkship rotation.

Structure/Method/Design: 16 hospitals operating in the northern zone of Tanzania were identified and Memorandum of Understanding (MoU) were drawn between 8 hospitals in Kilimanjaro and Arusha regions, District Medical Officers (DMOs) and KCMUCo. Minimum standards for providing clinical training in these hospitals were established. Preceptors in the peripheral hospitals were training by KCMUCo faculty and they were awarded adjunct faculty positions at KCMUCo. Acceptable minimum and maximum number of students at the hospitals was established. To assess effectiveness of program implementation, a paper-based questionnaire was anonymously administered to students after their rural clinical rotation in 2014. The questions addressed student satisfaction with their ability to apply knowledge and skills gained from previous training. Descriptive statistics were used, and tests for significance (p < 0.05) and strength of consensus measure (sCns \geq 80%) were applied.

Outcomes & Evaluation: Of 148 MD3 students, 111 (75%) responded to the survey; 62% male and 62% < 25 years. Overall student satisfaction was high with 19.4% very satisfied and 61.6% satisfied. All questions regarding student satisfaction had a high degree of consensus (81.9-83%) with the exception of accepting deployment at a peripheral hospital in the future (73%). Students felt that it was easier to practice clinical skills in a peripheral hospital (p=0.028), learned new clinical skills (p=0.028), and desire to return to practice clinical skills (p=0.004), Student-preceptor contact was rated highly by nearly 80% of students (sCns=79%). Students described limited laboratory support for clinical care, but only 39% attempted to utilize their own laboratory skills to address shortcomings. Students also expressed concern that access to learning resources was not adequate at the rural practice hospitals, and poor internet access was identified as a challenge.

Going Forward: Overall student experiences in peripheral clerkship rotations were positive with high levels of student satisfaction. Students felt comfortable in using their clinical skills, learned new skills, and desired further experiences in peripheral locations. Student-preceptor contact was rated highly. However, student utilization of their laboratory skills did not occur; this shortcoming will be addressed in an ongoing study of rapid diagnostic test "toolkits", deployed with a group of students on their peripheral rotation. Finally, to better enhance Internet connectivity and access to web-based learning materials, groups of students have been deployed with "mifi" devices.

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Creating future leaders: An interprofessional experiential training in advocacy and global health at the world health assembly

Y. Tcholakov¹, A. Gopfert², P. Peremiquel³, D. Tobón García⁴; ¹University of Montreal, Montreal, PQ/CA, ²Newcastle University, Wirral, UK, ³Autonomous University of Barcelona, Tiuana, Spain, ⁴Universidad Tecnológica de Pereira, Cali, CO

Program/Project Purpose: The World Health Assembly (WHA) is the annual decision making body of the World Health Organization (WHO). Youth organisations and Non-Governmental Organizations (NGOs) are increasing in their formal engagement with UN bodies; yet meaningful engagement requires training and understanding of the processes. In 2014 for the second consecutive year, the International Federation of Medical Students Associations (IFMSA) organised a four day youth training workshop prior to the 67th WHA in order to increase civil society involvement in international diplomacy.

Structure/Method/Design: The workshop brought together more than 50 youth from 23 countries, 6 continents, and a variety of fields: future doctors, public health practitioners, veterinary doctors, pharmacists, dentists, and economists. Participants were recruited through messages sent over various electronic media to IFMSA's and partner youth organizations' members. The workshop consisted of knowledge based sessions and advocacy skills training. The impact of this event was assessed in order to add to the evidence base creating competent advocates within the health community.

Outcomes & Evaluation: The impact of this workshop was assessed with a 14 item questionnaire where participants rated their competency using 1-5 on a Likert Scale. The questionnaire, previously piloted in three student training workshops assessed self-perceived competency in advocacy, knowledge, and confidence in interacting with peers and key stakeholders. Participants completed the questionnaire at three points in time: before and after the workshop and after the WHA. The responses showed a trend towards an improvement in knowledge and skills in all areas evaluated; it was statistically significant in 8 of the 14 areas after the conference whereas in only 2 of after only the workshop.

Going Forward: This workshop demonstrates the importance of providing experiential multidisciplinary training in fields relating to leadership and advocacy. Immediate implementation resulted in further increases in knowledge, skills and competence. The improvement of leadership skills and confidence to interact with key stakeholders demonstrates the potential of such workshops to create confident health advocates for future generations and emphasises the importance of providing experiential learning to apply new skills. IFMSA will conduct a similar workshop prior to the next WHA and we hope that other youth organizations will learn from the example