

A 10,000 Foot View: A Spanish Immersion and Clinical Global Health Experience for the Family Medicine Resident in Quito, Ecuador.

¹Samuel J. Randall, MD

¹Northwestern, McGaw, Department of Family Medicine, Lake Forest

Background

Global Health (GH) experiences are a valuable part of graduate medical education (GME) which increase both domestic and international medical understanding for physicians and may help to supplement healthcare efforts in underserved populations abroad. This poster is a review of a 4-week Spanish immersion elective in Quito, Ecuador through Child and Family Health International (CFHI) and Northwestern University.

GH opportunities are increasingly popular in GME, as more than half of pediatric and internal medicine residencies and nearly 75% of family medicine residencies offer GH experiences.^{1,2,3} These experiences may often begin earlier for physicians, as 25% of all US medical graduates report GH experiences during their undergraduate medical education.⁴ It has also been noted that medical trainees with GH experiences may be more likely to pursue an MPH, primary care specialties, and work with the underserved.⁵

Research Objectives

Educational objectives for this experience include:

1. Fostering partnerships with local medical providers
2. Improving healthcare access in underserved communities
3. Increasing resident physician Spanish language proficiency.

Methods



Several weeks were spent in a special-needs clinic providing direct care to pediatric and adult patients with mental and physical disability. This site did not have the financial resources to be able to provide regular in-house medical care, and typically visits were only annually and when volunteer providers were available. The resident was under the direct supervision of a local board-certified and university faculty family medicine physician. US-programmatic support as well as on-site language translation were available as needed. Additional time was spent observing in a public community family medicine clinic, rounding with residents and attendings on inpatient obstetrics, and visiting a rural Andean traditional and indigenous medicine clinic.

The resident also received 20 hours of weekly Spanish language instruction and tutoring at a local language school and lived with a local host-family.

Table 1. Clinical Pathology

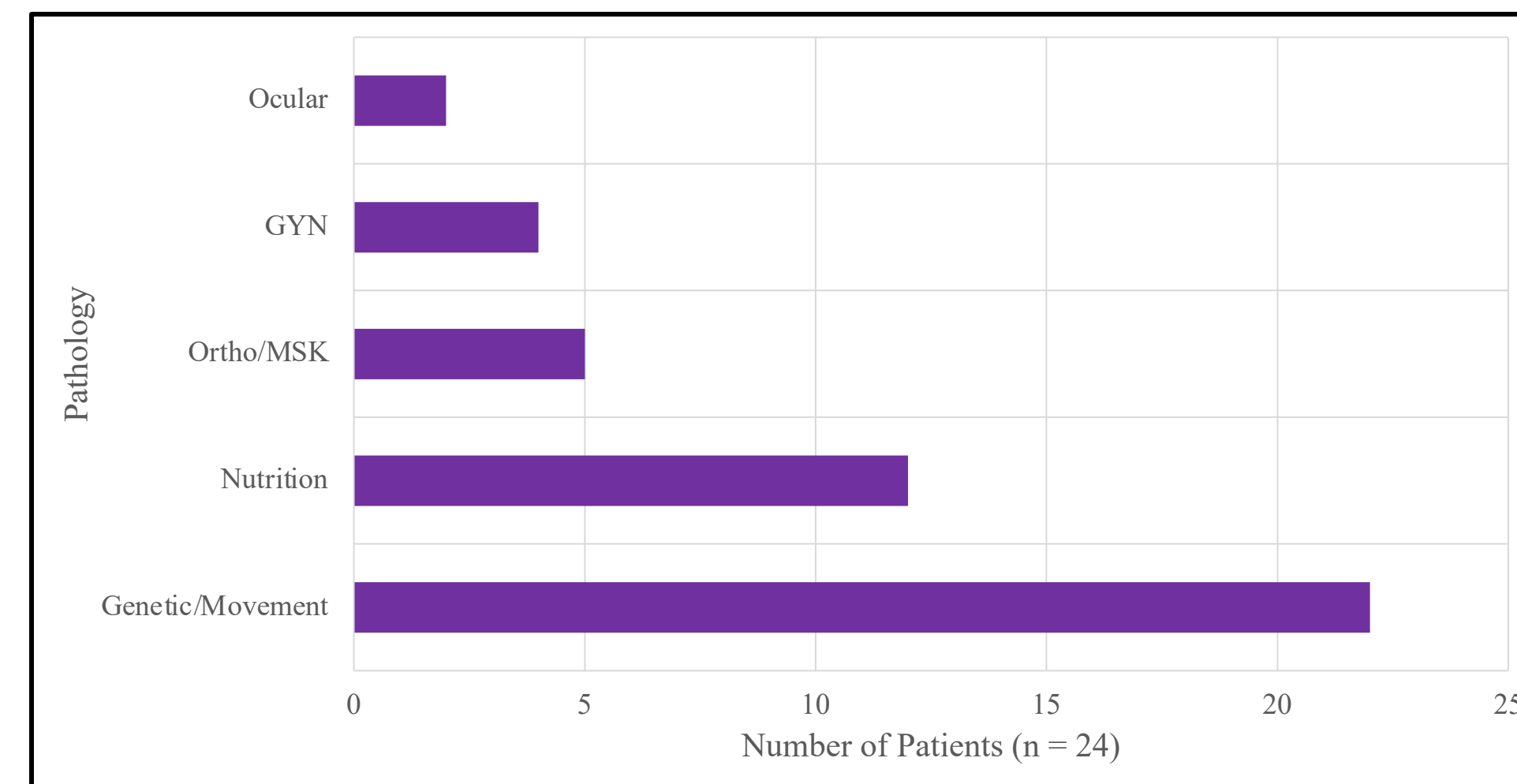


Table 1. Outlines the most common chief complaints and primary pathology from patients seeking care and examined during the resident's clinic.

Figure 1.



Fig. 1: clinical presentation of patient with severe pain.

Figure 2.



Fig. 2: Plain film pelvic x-ray showing superolateral subluxation of the R femoral head.

Results

The resident experienced the Ecuadorian healthcare system from 4 different points of access, working with established practices and local providers in all settings. Notably, of the 24 patients examined in the special-needs clinic, half were pediatric, and mean age was 18yo. Pathology encountered included genetic and movement disorders (n=22), orthopaedic and musculoskeletal pain (n=5), acute infectious disease (n=2), and severe malnutrition (n=12). (Table 1)

The following case study was a patient seen in that clinic. A 14yo patient with intellectual disability, mutism, and 4 months of "crying" was brought into the clinic for "extreme pain with movement" and clinic staff were unsure why. She was not ambulatory and when transferred and would "cry a lot". Physical exam was very concerning and follow up x-ray imaging confirmed the diagnosis of R hip subluxation. (figures 1 and 2) She was then referred for urgent surgical intervention with orthopedics, and received femoral head amputation shortly thereafter. Follow up with clinic staff a few weeks later confirmed the patient was doing well post-op and had resolution of severe pain.

Figure 3.

GME Global Health Pre-Departure Checklist:	
Local Partnership	Working with local health care professionals
	Community is open to or welcomes visiting provider
Medical Supervision	Senior healthcare provider overseeing clinical care
	Direct on-site supervision and support of the learner.
Bioethics	Scope of practice consistent with learner's scope and education level in home country
	Protection of patient privacy
Continuity of Care	Historic and future plans for patient engagement
	Sustainability of medical care model
Cultural Humility:	Pre-departure education on local language, customs, and healthcare system.

The resident was exposed to full-spectrum family medicine at multiple clinical sites and phases of care. The resident's medical Spanish competency increased from baseline as determined by the Spanish Language school. All learning objectives were met and as a summary of this case study, a checklist was developed to guide medical residents planning similar immersion rotations. (Figure 3)

Conclusions

Drawing on field experience and clinical encounters, key considerations were identified to maximize the immersion experience, including an emphasis on local-partnership, medical supervision, bioethics, and continuity of care. This experience highlights the value of global medical education to the family physician as well as local communities abroad and helps to increase clinical competency and better equip providers to serve patients in increasingly diverse settings.

References

- ¹Butteris SM, Schubert CJ, Batra M, et al. Global health education in US pediatric residency programs. *Pediatrics*. 2015; 136: 458–65. DOI: <https://doi.org/10.1542/peds.2015-0792>
- ²Kolars JC, Halvorsen AJ and McDonald FS. Internal medicine residency directors perspectives on global health experiences. *Am J Med*. 2011; 124: 881–5. DOI: <https://doi.org/10.1016/j.amjmed.2011.04.003>
- ³<https://pubmed.ncbi.nlm.nih.gov/27472790/>
- ⁴<https://www.aamc.org/system/files/reports/1/2018ggallschoolsummaryreport.pdf>
- ⁵Ramsey AH, Haq C, Gjerde CL, Rothenberg D. Career influence of an international health experience during medical school. *Fam Med*. 2004;36(6):412–416.