



Variation in the Use of Internet Based Medical Resources by English Language Ability Within the Nicaraguan Medical Community



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BACKGROUND

- Project SEMILLA (Strengthening Emergency Medicine Investing in Learners in Latin America) is a collaboration between U.S. and Nicaraguan healthcare providers.
- The group has created novel, resource-appropriate, free courses in Emergency Care.
- Anecdotally, Nicaraguan medical trainees and practitioners who do not speak English appear to have more difficulty gaining access to medical information.

OBJECTIVES

- To determine how comfort level with internet-based resources varies with English language ability among Nicaraguan physicians and medical trainees

METHODS

Design

- Prospective, anonymous, voluntary survey

Participants

- Medical students, residents, and attending physicians over the age of 18, affiliated with UNAN, and who agreed to participate
- Hospitals were located in León, Chinandega, and Managua.

Measures

- Age, gender, level of training, specialty, area of the country and prior training in internet based learning or literature review

Outcomes

- Access to internet
- Current internet based learning
- Comfort level with internet based resources

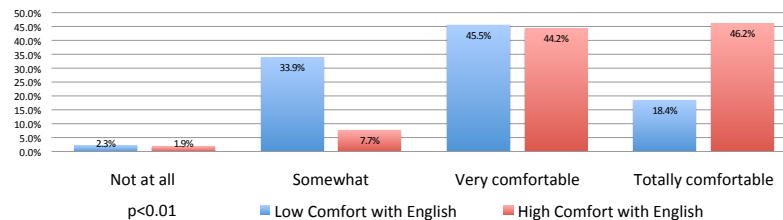
Analysis

- Descriptive statistics were used for demographics.
- Outcomes were compared by language ability using chi-squared or Fisher's Exact tests.

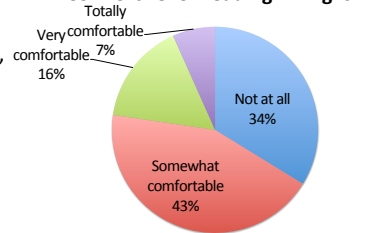
RESULTS

- In total, 226 surveys were completed.
- Mean age: 31.5 years
- 85.4% of healthcare providers rely on Spanish rather than English language medical information found on the internet at least half the time.
- Lower comfort levels with English not associated with level of training ($p=0.36$) or city ($p=0.5$).
- Providers with low English comfort use online journals less frequently than those with higher English comfort ($p<0.01$), though PubMed use was relatively similar ($p=0.34$).
- 10% of providers find information in another languages other than English or Spanish.

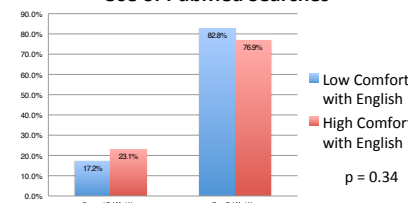
Comfort with English vs. Comfort with Internet-based Medical Resources



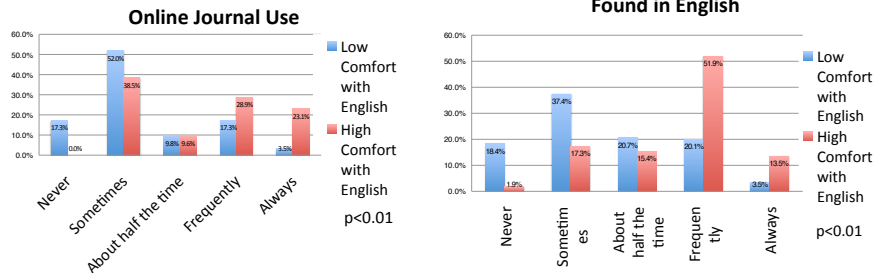
Comfort Level Reading in English



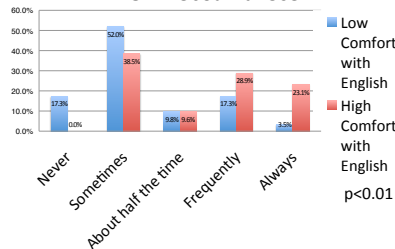
Use of PubMed Searches



Frequency of Information Found in English



Online Journal Use



CONCLUSIONS

- Only a minority of Nicaraguan healthcare providers feel significantly comfortable reading English.
- While all providers frequently use online resources, those with lower English comfort reported less frequent use of online journals.
- **Dissemination of hardcopy, Spanish language emergency curricula should be an effective way for Project SEMILLA to increase access to learning materials.**

LIMITATIONS

- Reported use of PubMed may have been suggested by the survey wording.
- All hospitals involved in the survey were public and in relatively urban areas. Providers working in rural or private clinics may vary in comfort level with internet and English.
- Data does not include the medical school branch in UNAN Bluefields.

FUNDING SOURCES

The research described was supported by:

- UCLA Center for World Health
- DGSOM Short Term Training Program
- NIH/National Center for Advancing Translational Science (NCATS) UCLA CTSI Grant Number UL1TR000124

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