Pre Exchange Training as a Means of Developing Ethical and Cultural Competencies in Medical Students

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April 2018
Disclosure

The authors have no conflicts of interest to disclose
Background

IFMSA regroups 1.3 million medical students from 138 member organizations in 127 countries

Official voice to WHO, WMA, WFME, UNESCO

IFMSA organizes the largest medical exchange program in the world
15,000 students from 98 countries per year participate in an IFMSA exchange

Concrete need for global health education in standard medical curriculum met through exchanges (Battat et al 2010)
Purpose of Training and Study

Definition: training before exchange to maximize learning and minimize harm towards self and communities served (Anderson et al 2012)

Baseline: 49% countries organize a pre-departure training

As of yet, no standardized training throughout IFMSA

PDTs influence knowledge and competencies (Canadian Intercultural Centre, Canadian Foreign Service Institute 2005)

Very little literature on the outcomes of trainings delivered
Objectives

1. Develop a standardized PDT which fosters **cultural competency** and **cultural safety** in medical students

2. Assess the **impact** that said training has on medical students’ self-reported cultural competencies

3. Determine changes to training required before **large scale implementation** and long term evaluation
Creating and Evaluating the Training

- Literature review of PDTs
- Draft with 14 cases
- Revision by UNESCO, IFMSA and Implementation
- Assessment
- Large scale implementation

Timeline:
- December 2016: Literature review of PDTs
- February 2017: Draft with 14 cases
- March-April 2017: Revision by UNESCO, IFMSA and Implementation
- April-August 2017: Assessment
- August 2017: Large scale implementation
- Summer 2018: Implementation
Example of Case Scenario – Cultural Competency

You are a female first year clerk conducting a gynecology elective in the United Arab Emirates.

A veiled pregnant woman and her husband come in for a prenatal follow up appointment. You begin by asking her if she feels the baby moving. Her husband answers that she does, and very regularly. You ask the question to the woman, and she nods that everything her husband said was correct.

You ask her whether she has noticed any discharge or bleeding. Once again, her husband answers on her behalf, and she nods in agreement. In fact, every time you ask a question, her husband answers on her behalf.

You try to redirect your gaze towards the woman, who does not seem to be distressed at all.
Example of Case Scenario – Cultural Competency

How would you address this situation?

A. Ask the husband to step outside of the room so you can question your patient alone.

B. Ask to leave the room, and confront your supervisor. Tell him or her that you suspect an abusive relationship since the woman will not talk in the presence of her husband.

C. Continue directing your questions to the wife and hope that she begins answering questions instead of her husband.

D. Continue the interview as is - the woman does not appear to be distressed by the situation.
Implementation

General call sent through National Member Organization (NMO) server

8 countries in first trial phase:
Sweden, Brazil, Catalonia, Bulgaria, Austria, the Netherlands, Singapore

Small Working Group on Implementation held in Budva, Montenegro

Presented at IFMSA General Assembly in Arusha, Tanzania with Professor Russell D’Souza (UNESCO Chair of Bioethics) to over 100 students participants
Assessment Methodology

Pre- and post-test assessment with Likert Scale

Evaluation Form: 18 questions

- 5 for Medical Ethics
- 5 for Cultural Competencies
- 5 for Exceeding Level of Skill
- 3 for Research Ethics

Pre-tested on 10 students of varying national and linguistic backgrounds for clarity; no changes made
Statistical Analysis

Statistical analysis performed using **SPSS** (v.21, IBM Inc.)

Related samples Wilcoxon-Signed Rank Tests were used to compared Likert scores before and after the PDT for each competency.

Participants aggregated into 2 groups

- Improvement in overall scores vs. no change/worse scores
- Chi\(^2\) Tests were used to compare these groups to independent categorical variables
Results – Participants Breakdown

Number of participants : 104

- **Cohort A**: given to students before exchange from the first preliminary phase
- **Cohort B**: given to students attending the IFMSA GA in Tanzania
- 33 countries from 5 regions

73% had prior ethical training

Proportion of medical school completed

- 0-25% : 5.8%
- 25.1-50% : 32.7%
- 50.1 – 75% : 28.8%
- 75.1 – 100% : 30.8%
Results

Statistically significant improvement in self-rated competencies in all domains

- With the exception of confidentiality and consent in research

Examples of domains assessed include

- Questioning patient from different culture
- Voicing level of training
- Recognizing personal cultural bias
- Principle of justice in research

There was no difference depending on level of medical training or prior ethical training
Conclusion

• Concrete need for PDT before exchange due to nature of electives abroad

• Successful development and implementation of IFMSA/UNESCO PDT

• Benefits medical students regardless of training

• Future plans: wide scale implementation of PDT within IFMSA
Thank you!
Citations


Citations


Citations


Results Tables
<table>
<thead>
<tr>
<th>Item</th>
<th>Pre-test scores</th>
<th>Post-test scores</th>
<th>Change in score</th>
<th>P value</th>
<th>Number of positive changes</th>
<th>Number of negative changes</th>
<th>Number of unchanged scores</th>
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<tbody>
<tr>
<td></td>
<td>Median (Range)</td>
<td>Median (Range)</td>
<td>Median (Range)</td>
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<td>37</td>
<td>9</td>
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### Results (Chi Squared)

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Unchanged or worse scores (n=31)</th>
<th>Improved scores (n=73)</th>
<th>P value</th>
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<tbody>
<tr>
<td><strong>Prior ethical training</strong></td>
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<tr>
<td>- Yes</td>
<td>22 (71.0%)</td>
<td>54 (74.0%)</td>
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<tr>
<td>- No</td>
<td>9 (29.0%)</td>
<td>19 (26.0%)</td>
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<tr>
<td><strong>Proportion medical school completed</strong></td>
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<tr>
<td>- 0-25%</td>
<td>2 (6.5%)</td>
<td>4 (5.5%)</td>
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<tr>
<td>- 25.1-50%</td>
<td>8 (25.8%)</td>
<td>26 (35.6%)</td>
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<td>- 50.1-75%</td>
<td>9 (29.0%)</td>
<td>21 (28.8%)</td>
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<tr>
<td>- 75.1-100%</td>
<td>11 (35.5%)</td>
<td>21 (28.8%)</td>
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