

Identifying gaps in the knowledge of trending global health topics in first-year university students

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INTRODUCTION

The term "global citizen" has become increasingly ubiquitous in discussions of global health and education. While no single definition exists, many can agree that a global citizen is someone who is informed and engaged in issues that cross national boundaries, can learn to appreciate other cultural backgrounds, and is socially responsible and understands the global impact of their actions (Lilley, Barber, & Harris, 2017; Tye, 2003; UNICEF Canada, 2011). The United Nations (n.d.) outlines a number of issues that are considered to be global phenomena above the ability of any individual country to resolve on their own, with global health being a component of this list. According to Stoner, Perry, Wadsworth, Stoner, and Tarrant (2014) global citizenship is key to securing global health; global citizenship teachings can be and should be extended to include global health.

In recent years in Ontario, educators have had the autonomy to incorporate global education into their teachings (Schweisfurth, 2006), with a number of resources having been published to facilitate this goal. Thus far, it has not been a highly focused upon or mandated practice and inconsistencies may be present. In September 2018, the Ontario government will implement a new curriculum which focuses on communication, problem-solving, critical thinking, creativity and global citizenship skills to ensure that Ontario students will succeed as they grow up in a dynamic and interconnected world (Office of the Premier, 2017).

OBJECTIVES

- Investigate the knowledge of trending global health topics in first-year university students, targeting those in health-related programs.
- Investigate students' practices and beliefs with regards to how they retrieve news and information, and their familiarity with the term "global citizen".

METHODS

Study Design

 A cross-sectional study design using a paper-based survey was conducted among first-year university students at Ryerson University from February to March 2018.

Recruitment and Inclusion Criteria

- Convenience sampling was used and professors of firstyear health-related classes were approached.
- Not possible to know the true sampling frame, estimated at 60 – 80 students based on school records.
- Inclusion Criteria: First-year students in a health-related program that graduated grade 12 in the previous academic year (2016-2017) in Ontario.

Data Collection

• Surveys were completed during regular class time.

Survey Components

- Demographic questions were asked to distinguish students that met the inclusion criteria from those that did not.
- The knowledge portion consisted of nine basic questions upon which students were marked.
- Attitudes, beliefs, and practices questions asked where students retrieve their news and information, their familiarity of the term "global citizen", and their preparedness to comprehend global concepts.

Data Analysis

 Descriptive statistics were generated using Microsoft Excel version 16.10.

RESULTS

Response Rate:

Estimated at approximately 61.3% to 81.7%

Part 1: Demographic Information

- 90 completed surveys; 49 met the inclusion criteria
- 30 (61.2%) were Public Health and Safety and 19 (38.8%) were Occupational Health and Safety students
- 43 (87.8%) of the students were 18 years old and 6 (12.2%) were 19 years old at the time of the survey

Part 2: Knowledge

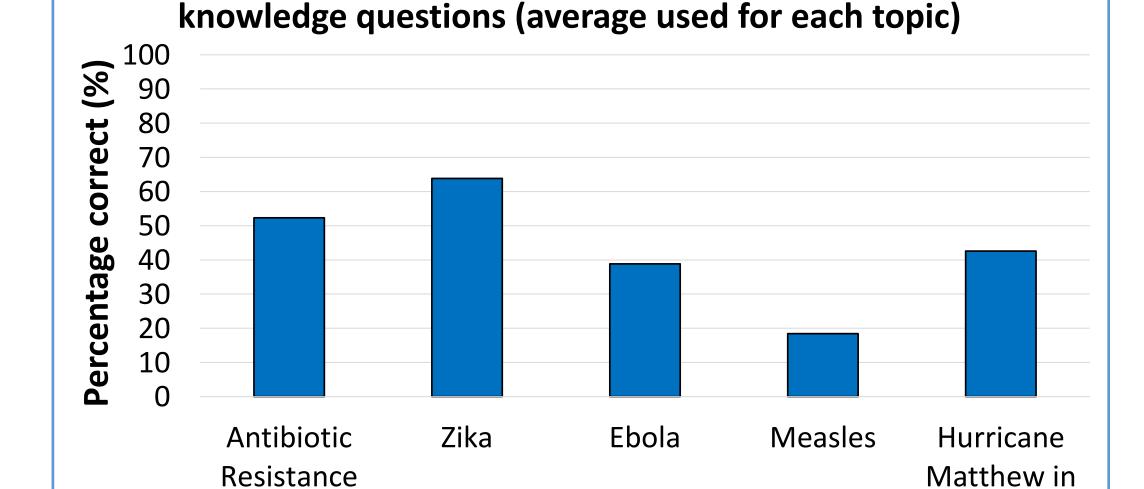
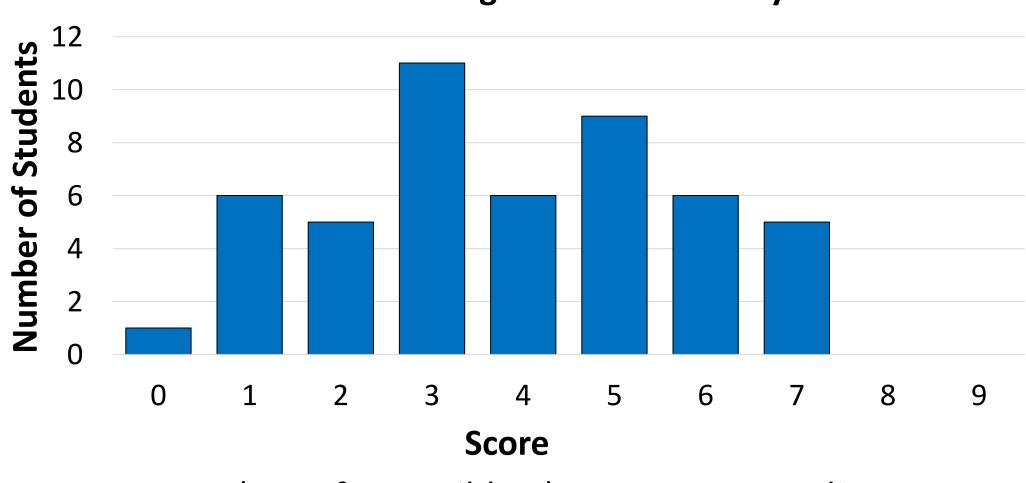


Figure 1. Percentage of students correctly answering

Figure 2. Distribution of students' scores in the global health knowledge section of survey

Topic



Range: 0 to 7 (out of a possible 9); Mean: 3.9; Median: 4

Part 3: Attitudes, Beliefs, and Practices

Table 1: Students' perception of global health knowledge compared with their score. Shown in n(%).

"I feel I am knowledgeable about global health"

Score	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Total
0	0(0.0)	0(0.0)	0(0.0)	1(100.0)	0(0.0)	1(100.0)
1	0(0.0)	2(33.3)	2(33.3)	2(33.3)	0(0.0)	6(100.0)
2	0(0.0)	1(20.0)	3(60.0)	1(20.0)	0(0.0)	5(100.0)
3	1(9.1)	3(27.3)	2(18.2)	5(45.5)	0(0.0)	11(100.0)
4	0(0.0)	1(16.7)	2(33.3)	3(50.0)	0(0.0)	6(100.0)
5	1(11.1)	4(44.4)	1(11.1)	3(33.3)	0(0.0)	9(100.0)
6	0(0.0)	0(0.0)	5(83.3)	1(16.7)	0(0.0)	6(100.0)
7	1(20.0)	0(0.0)	2(40.0)	1(20.0)	1(20.0)	5(100.0)
Total	3(6.1)	11(22.4)	17(34.7)	17(34.7)	1(2.0)	49(100.0)

Table 2: Students reporting having been exposed to the concept of global citizenship. Shown in n(%).

Have you heard of the term "global citizen"?

The concept of "global citizenship" was discussed in my high school	Yes	No	Unsure	Total
Ye s	11(22.5)	0(0)	0(0)	11(22.5)
No	13(26.5)	12(24.5)	6(12.2)	31(63.3)
Unsure	5(10.2)	0(0)	2(4.1)	7(14.3)
Total	29(59.2)	12(24.5)	8(16.3)	49(100.0)

Table 3: Students' beliefs about accuracy of information vs. practices regarding fact-checking. Shown in n(%).

I check what I read in the news for accuracy and truthfulness.

Not all news may be accurate and may contain false information	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Did not respond	Tota
Strongly Disagree	0(0)	1(100.0)	0(0)	0(0)	0(0)	0(0)	1(100.0
Disagree	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0.0
Neither Agree nor Disagree	1(12.5)	2(25.0)	3(37.5)	1(12.5)	0(0)	1(12.5)	8(100.0
Agree	1(4.6)	5(22.7)	7(31.8)	8(36.4)	1(4.6)	0(0)	22(100.0
Strongly Agree	1(5.6)	4(22.2)	7(38.9)	6(33.3)	0(0)	0(0)	18(100.0
Total	3(6.1)	12(24.5)	17(34.7)	15(30.6)	1(2.0)	1(2.0)	49(100.0

CONCLUSIONS

- This study shows that there is a gap in global health knowledge and awareness of global citizenship concepts.
- Students' knowledge on the chosen topics varied; some topics (Measles, Ebola) were done poorly while others more successfully (Zika).
- Students' perceptions of their global health knowledge did not strongly correlate with their score in the knowledge component of the survey.
- Only 22.5% of surveyed students revealed having discussed the concept of global citizenship in their high school; discussions of the term does not yet appear to be consistent in Ontario high schools.
- The results exposed a discrepancy in students' beliefs about the accuracy of news and their practices regarding fact-checking. Of the students that strongly agreed that not all news may be accurate (18/49), only 6 agreed and 0 strongly agreed to checking what they read for accuracy.
- Nonprobability sampling and small sample size: representativeness of the population and sampling error are unknown, ability to generalize findings beyond the actual sample is limited.

RECOMMENDATIONS

- Ensure the inclusion of a global health component in the new curriculum to reduce gaps in global health knowledge.
- Focus on the development of critical thinking skills so students can analyze what they read in the news relating to global health and other relevant topics.
- Include a component in the new curriculum on how to search and find credible sources for students to further their studies on global health and other related topics.

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