Evaluation of Travel Health KAPs in Philadelphia International Airport

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Co-investigator:
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2019 SUMR Scholar:
Saskhia Dieudonne
Global Health in Philadelphia

- Diversity in our population
- International visitors
- Involvement in past outbreaks
Global Health in Philadelphia

- Monitoring health in Philadelphia has included:
  - West Africa Ebola outbreak in 2014
  - Zika Virus
  - Patients from Puerto Rico and other hurricane affected areas
  - Malaria

Reported Cases of Malaria by Travel History: Philadelphia, 2008-2017

*Includes one congenital and one cryptic case with unknown source of infection*
Why We Worry About Travel

- Exposure to new pathogens
- International Travel is no longer the only concern
Significance

- In 2017 the rate of domestic travel increased 1.9% and international travel 7% as reported by the U.S. Travel and Tourism Overview and the World Tourism Organization.

- With this increase in travel, it is suspected that more individuals will be exposed to diseases they previously had not encountered.
Study Aims

This study seeks to do two things:

- Understand and assess the knowledge, attitudes, and practices of current travelers and how they perceive their risk of contracting diseases, as well as where they go to seek health advice.
- Obtain feedback on the Philadelphia Department of Public Health (PDPH) educational materials that have been placed in the Philadelphia International Airport.
Hypotheses

- Those who travel often will seek the most medical advice

- Individuals traveling to places they have already visited will not seek travel advice before or after departure
Study Design

- Educational materials were drafted by PDPH and approved by the Quarantine station
- These materials were displayed throughout the Philadelphia International Airport on screens

- Literature review
- Data collection
  - Survey instrument
- Data input
- Data Assessment
Travel Health Education

- The travel health consultation should include:
  1. A technical component
  2. Individual component
  3. Travel health education

- Patients can only remember a max of 2-3 concepts after meeting with a travel health specialist
  - Other educational materials allow them to retain the most concepts and be able to refer back to them
Questionnaire

Travel Health Knowledge, Attitude, and Practices (KAP) Survey

I. Departing Travelers

1. Are you traveling:
   a. Domestically
   b. Internationally

2. Is this your first time traveling to this destination?
   a. Yes
   b. No

3. How long are you staying at your destination(s) (Specify: days, months, years)?

4. What is the main purpose of your trip?
   a. Business/Work
   b. Tourism/Personal
   c. Visiting friends or relatives
   d. Educational
   e. Religious
   f. Other

5. Did you visit rural areas/countryside?
   a. Yes
   b. No

6. When did you begin planning this trip prior to your departure date?
   a. Less than a month
   b. 1 to 3 months
   c. 3 to 6 months
   d. 6 months or more

7. Where did you get general travel information about your destination? (Check all that apply)
   a. Family or Friends
   b. Internet
   c. Travel Agent
   d. Travel books
   e. Other: Specify

II. Returning Travelers

1. Did you travel:
   a. Domestically
   b. Internationally

   1a. Where are you coming from?

2. Was this your first time traveling to this location?
   a. Yes
   b. No

3. How long did you stay at your destination(s) (Specify: days, months, years)?

4. What was the main purpose of your trip?
   a. Business/Work
   b. Tourism/Personal
   c. Visiting friends or relatives
   d. Educational
   e. Religious
   f. Other

5. Did you visit rural areas/countryside?
   a. Yes
   b. No

6. When did you begin planning this trip prior to your departure date?
   a. Less than a month
   b. 1 to 3 months
   c. 3 to 6 months
   d. 6 months or more

7. Where did you get general travel information about your destination? (Check all that apply)
   a. Family or Friends
   b. Internet
   c. Travel Agent
   d. Travel books
   e. Other: Specify

8. When did you get the pre-travel advice?
   a. Within the week of travel
   b. 1 to 2 weeks prior
   c. 2 to 4 weeks prior
   d. 4 or more weeks prior to travel

III. Educational Materials

14. The health department has developed some travel educational materials. Have you seen any of our materials? (Use the media handout to show examples)
   a. Yes
   b. No

15. For each of the following statements, circle the response that best characterizes how you feel about the materials:
   1 = Strongly Disagree, 2 = Disagree, 3 = Neither Agree nor Disagree, 4 = Agree and 5 = Strongly Agree
   a. The materials make sense.
   b. The materials make you stop and think?
   c. The materials made you feel concerned about staying healthy while traveling?

16. After seeing the materials:
   16a. What do you like?
   16b. What don’t you like?
   16c. Did you learn anything new from the posters?
   16d. Are there any other health topics you’d like more information on?

17. How can the health department improve its health education efforts in general? (Please fill in)
   18. Please list any additional comments or questions, if you would like us to follow up with you or would like further information about this survey, please inform us and we will note this separate from your survey responses.
Preliminary Findings - Study Population

- 61 interviews completed this summer
- The majority of participants thus have been:
  - White/ Caucasian
  - Had a postgraduate education
  - Been between the ages of 46-60 years old

<table>
<thead>
<tr>
<th>Sample Size</th>
<th>International</th>
<th>Domestic</th>
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</thead>
<tbody>
<tr>
<td>Departing</td>
<td>128</td>
<td>17</td>
</tr>
<tr>
<td>Returning</td>
<td>128</td>
<td>18</td>
</tr>
</tbody>
</table>
Aim 1- Preliminary Findings

- The vast majority of participants sought no medical or travel health advice
- Participants mentioned being frequent travelers
- Many participants stated that they had no medical concerns when they traveled or already knew the necessary information
Preliminary Results - Why do people travel?

Q11 4. What is the main purpose of your trip?

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses</th>
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<tbody>
<tr>
<td>Business/Work</td>
<td>32.00%</td>
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<tr>
<td>Tourism/Personal</td>
<td>48.00%</td>
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<tr>
<td>Visiting friends or relatives</td>
<td>8.00%</td>
</tr>
<tr>
<td>Educational</td>
<td>4.00%</td>
</tr>
<tr>
<td>Religious</td>
<td>0.00%</td>
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<tr>
<td>Other (please specify)</td>
<td>8.00%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>25</td>
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</table>

Q28 4. What was the main purpose of your trip?

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<th>Answer Choices</th>
<th>Responses</th>
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<tbody>
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<td>Business/Work</td>
<td>27.27%</td>
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<tr>
<td>Tourism/Personal</td>
<td>36.36%</td>
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<tr>
<td>Visiting friends or relatives</td>
<td>30.30%</td>
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<tr>
<td>Educational</td>
<td>3.03%</td>
</tr>
<tr>
<td>Religious</td>
<td>0.00%</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>0.00%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>33</td>
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</table>
Preliminary Results - Where do people obtain travel information?

**Departing**

<table>
<thead>
<tr>
<th>ANSWER CHOICES</th>
<th>RESPONSES</th>
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</thead>
<tbody>
<tr>
<td>Family or Friend</td>
<td>20.00%</td>
</tr>
<tr>
<td>Internet</td>
<td>60.00%</td>
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<tr>
<td>Travel agent</td>
<td>0.00%</td>
</tr>
<tr>
<td>Travel books</td>
<td>0.00%</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>20.00%</td>
</tr>
<tr>
<td>Total Respondents</td>
<td>25</td>
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**Returning**

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<th>ANSWER CHOICES</th>
<th>RESPONSES</th>
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<tbody>
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<td>Family or Friend</td>
<td>29.03%</td>
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<tr>
<td>Internet</td>
<td>38.71%</td>
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<tr>
<td>Travel agent</td>
<td>19.35%</td>
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<tr>
<td>Travel books</td>
<td>3.22%</td>
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<tr>
<td>Other (please specify)</td>
<td>29.03%</td>
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<td>Total Respondents</td>
<td>31</td>
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Preliminary Results- Do people obtain travel health advice?

Travel Health Knowledge, Attitude, and Practices (KAP) Survey

Q15 8. Did you seek travel health or medical advice prior to your trip?

Answered: 25  Skipped: 36

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<th>ANSWER CHOICES</th>
<th>RESPONSES</th>
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<tr>
<td>Yes</td>
<td>16.00%</td>
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<td>No (if no, skip to question 9)</td>
<td>84.00%</td>
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</table>

Q32 8. Did you seek travel health or medical advice prior to departure?

Answered: 33  Skipped: 28

<table>
<thead>
<tr>
<th>ANSWER CHOICES</th>
<th>RESPONSES</th>
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<td>Yes</td>
<td>18.18%</td>
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<td>No (if no, skip to question 9)</td>
<td>81.82%</td>
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<td>TOTAL</td>
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</table>
Preliminary Results - What vaccines do travelers receive?

Q19 10. To your knowledge, have you been vaccinated for any of these diseases? (Check all that apply).

Answered 25  Skipped 36

Departing

Travel Health Knowledge, Attitude, and Practices (KAP) Survey

Q36 10. To your knowledge, have you been vaccinated for any of these diseases? (Check all that apply).

Answered 32  Skipped 29

Returning
Educational Materials

Stay healthy wherever you go.

Safe and healthy travels!

January 2019
STOP the COUGH

Need to COUGH or SNEEZE? USE A

TISSUE  MASK  SLEEVE

and then WASH YOUR HANDS WITH SOAP AND WATER

LET’S STAY GERM FREE
Aim 2- Preliminary Findings

- Very colorful and vibrant, grabs attention
- Simple and easy to read
- Great reminder
- Pre travel and stop the cough are favorites
- Too much information on the post travel poster
- Need to be presented prior to airport arrival
Preliminary Results - Feedback on the Educational Materials
Next Steps

- We will be continuing surveys primarily in the international terminal

- Assessment of the data
  - Pull out the main points that are consistent
Lessons Learned

- Articulating questions in a way that everybody can understand

- Remain unbiased and neutral while conducting a survey

- Stay on topic
  - Always reevaluate why you’re doing what you’re doing
Future Considerations

- What do travel health practices look like for individuals traveling to their countries of origin?

- How would the survey answers differ if performed outside of the Philadelphia airport (ex: travel health clinics)?
Thank you!

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University of Pennsylvania