

# Fluoride Varnish by Nurse Practitioners During Global Missions: A Sustainable Means to Promote Health

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## Background & Significance

- Oral health issues in underserved global communities is listed as long-standing World Health Organization priority (Peterson & Ogawa, 2016).
- Oral health disparities have a major impact on both short and long-term health and quality of life.
- Fluoride varnish (FV) is an inexpensive, easy to apply, useful intervention to prevent and reverse dental decay.
- Incorporating education to DNP FNP students regarding risk factors for childhood caries, subsequent adult caries and resulting implications for oral systemic health.

## Purpose

- Increase awareness of oral health disparities and value of FV application in DNP FNP students and underserved populations globally.
- Educate on importance of oral health issues and impact of FV to address this need.
- Train international relief workers on FV application to sustain the practice.



## Study Question

- Will providing education and training on FV application to international relief workers in a culturally appropriate manner help to sustain the practice at global mission sites that care for the medically underserved?

## Methods

- DNP FNP students held brief educational sessions on the importance of oral health, oral hygiene and FV application to any international relief workers at the Greece and Haiti Global missions.
  - Haiti (n=10) & Greece (n=7).
- Survey was conducted online at three months
  - Survey was translated to accommodate participants' preferred language
  - Responses were anonymous
- Survey results were averaged & percentages of means calculated (see Table 1)



Fluoride Varnish application: One Happy Family Refugee camp 2017

## Results

Table 1

| Survey Questions (n – 9)   | Responses | Mean | Percentage (%) |
|--|-----------|------|----------------|
| Age  | 20-29     | 6    | 67%            |
|  | 30-39     | 1    | 11%            |
|  | 50-59     | 1    | 11%            |
|  | 60-69     | 1    | 11%            |
| Gender   | Male      | 1    | 11%            |
|  | Female    | 8    | 89%            |
| Do you think FV application is useful?                                 | Yes       | 8    | 89%            |
|  | Unsure    | 1    | 11%            |
| Is fluoride varnish application a useful practice for those you serve? | Yes       | 7    | 78%            |
|  | Unsure    | 2    | 22%            |
| Would you be willing educate on fluoride varnish?                      | Yes       | 7    | 78%            |
|  | No        | 1    | 11%            |
| Have you educated other relief workers on fluoride varnish             | Yes       | 2    | 25%            |
|  | No        | 6    | 75%            |



## Conclusion

- DNP FNP students were provided training on oral health, correct oral hygiene and application of FV.
- DNP FNP students trained international relief workers in various settings and provided supplies for future treatments promoting sustainability.
- Two DNP FNP students were able to do their research on training of international relief workers on the application of fluoride varnish for sustainability.

## Implications

- Based on survey results The project identified that underserved areas would highly benefit from FV intervention and helped to determine if FV application would be a sustainable practice through education.

## References

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