## TOURO UNIVERSITYCALIFORNIA Educational Impact of Helping Babies Breathe (HBB) Classes on Knowledge And Confidence in Shirati, Tanzania Rameen Atefi OMS II, Omeed Atefi OMS II, Alissa Farrell DO, Eiman Mahmoud MD MPH

Welcome!

Background

Methods

Results

#### Conclusions





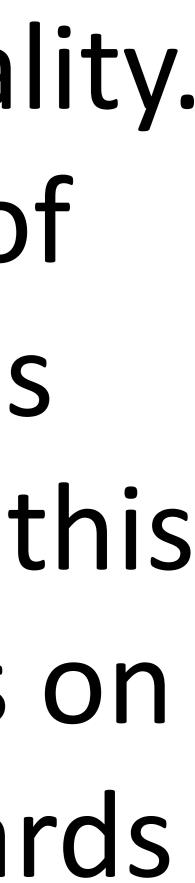


# TOURO UNIVERSITYCALIFORNIA Welcome! Background Methods Results

#### Conclusions



- Educational Impact of Helping Babies Breathe (HBB) Classes on Knowledge And Confidence in Shirati, Tanzania Rameen Atefi OMS II, Omeed Atefi OMS II, Alissa Farrell DO, Eiman Mahmoud MD MPH
  - HBB is an evidence-based neonatal resuscitation
  - program that is taught to help lower neonatal mortality.
  - Tanzania's neonatal mortality is nearly 5 times that of
  - the United States', with approximately 30% of deaths
  - occurring during the first day of life. The purpose of this
  - study is to assess the impact of educational sessions on
  - knowledge and confidence of nursing students towards neonatal resuscitations techniques in Shirati.



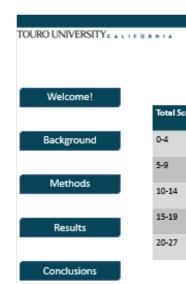
# TOURO UNIVERSITY C A L I F O R N I A Welcome! Background Methods Results

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- And Confidence in Shirati, Tanzania Rameen Atefi OMS II, Omeed Atefi OMS II, Alissa Farrell DO, Eiman Mahmoud MD MPH
  - A one-day HBB class was taught to 46 nursing students
  - in Shirati, Tanzania on June 13th, 2017. A HBB survey
  - was given to students before and after the class to
  - assess their neonatal resuscitation skills. Topics on the
  - survey included questions related to HBB and
  - confidence in bag-valve mask use. These surveys were
  - then compared to quantitatively understand changes in knowledge and confidence after training.

# Educational Impact of Helping Babies Breathe (HBB) Classes on Knowledge



re	Depression Severity
	Minimal
	Mild
	Moderate
	Moderately Severe
	Severe

Given the jast 2 works, he by any of the following pr (Use "a" to indicate your a		Not at all	Second days	More than half the days	***
1. Liffle interest or pleasure in duing things		0		2	3
2. Feeling down, depressed, or hopdess		0		2	3
3. Trouble failing or staying asterp, or steeping too much				2	,
4. Feeling tried or having title energy				2	3
8. Poor appetite or overeating		0		2	3
<ol> <li>Feeling text about yourself — or that you are a telure or have let yourself or your tempy down</li> </ol>				2	3
<ol> <li>Trouble concentrating on things, such as reading the newspaper or watching felorisism</li> </ol>				2	3
<ol> <li>Moving-or speaking so slowly that other people could have notice?<sup>1</sup> Or the opposite — being so fidpety or restless that you have been receiving ansurol a lot more than usual</li> </ol>				2	3
<ol> <li>Thoughts that you would yourself in some way</li> </ol>	te better of dead or of hurting	0		2	,
If you checked off gay pr	Fun arrite con	arabiama m		Total Score	
work, take care of Brings. Not different	at home, or get along with other ; Somewhat	people 7			

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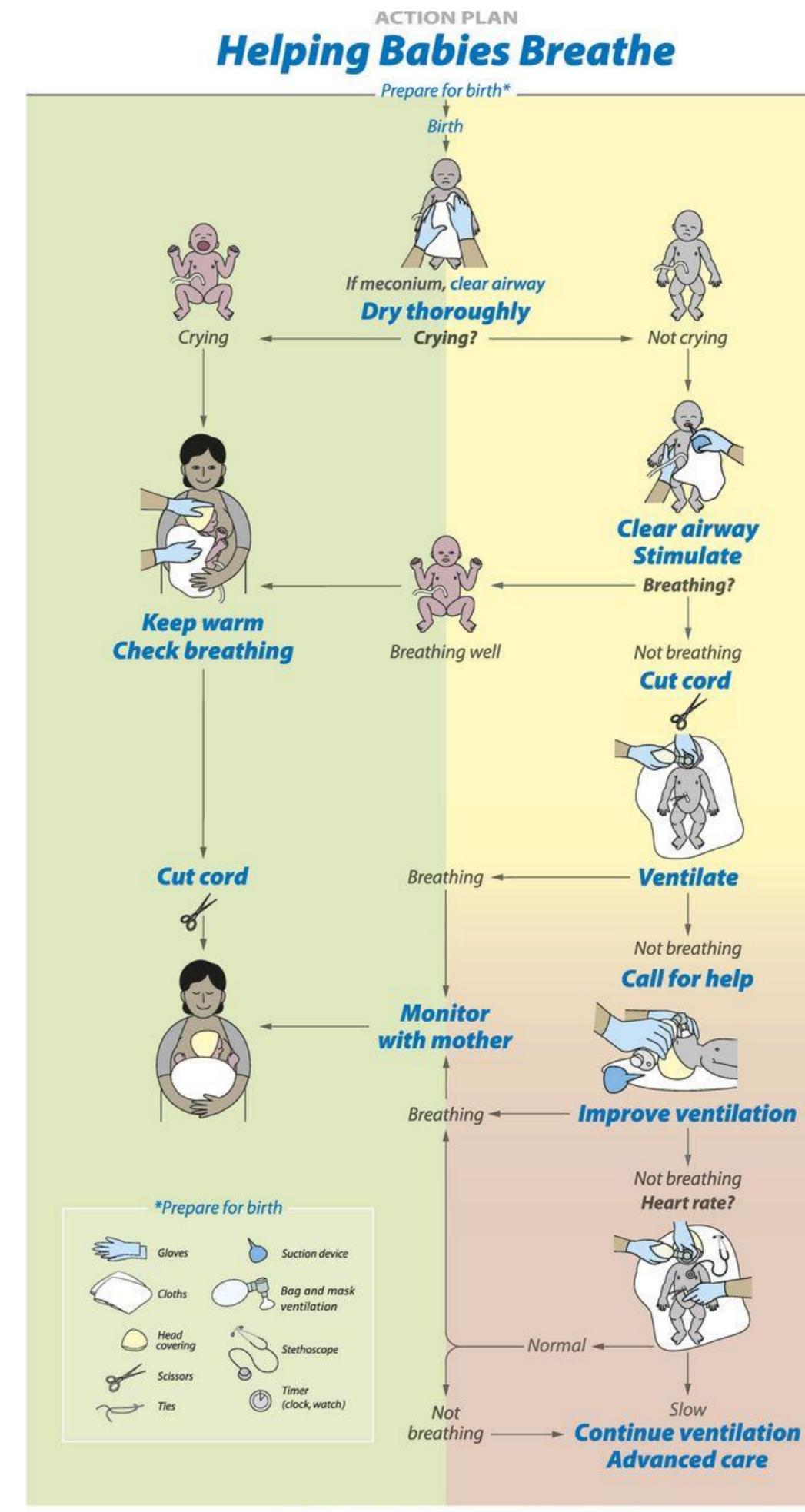


#### Before Class Assessment

Ţ

- Before Class: 1. Which of the following best describes you? Midwife Nurse Medical Officer Doctor Nursing student Health extension worker Other:
- 2. Have you ever been trained in or attended a "Helping Babies Breathe" class? Yes
- 3. Within the first minute of life, what is the most important factor that will lead you to intervene and help a baby breathe? Heart rate less than 150 beats per minute Baby is not crying or breathing well
- Baby is born blue Always intervene and provide breathing assistance
- 4. When should you start using the bag-valve mask? Only when a doctor is present When the baby is born blue If you have cleared the airway, stimulated, and the baby is still not breathing. When the baby has not been breathing for over 2 minutes
- 5. How long do you have to dry the baby, assess breathing, and provide respiratory intervention if the baby needs it? 1 minute 3 minutes
- 5 minutes 10 minutes
- 6. Do you feel comfortable using the bag-valve mask?
- 7. How many breaths per minute should you give to a newborn baby with a bag-valve mask who is not breathing? You should never provide breathing intervention
- 12 20 breaths per minute 30 breaths per minute 40 breaths per minute





Helping Babies Breathe

American Academy of Pediatrics



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## Welcome!

#### Background

## Methods

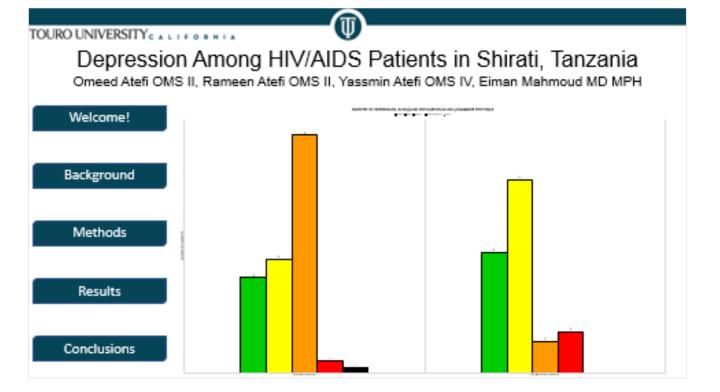
## Results

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  - Average class quiz performance increased by 18.5%
  - after attending the training. Confidence in using a bag-
  - valve mask for resuscitation increased by 24% (71.7% to
  - 95.7%). 100% of the students found the class to be
  - useful, 80.4% felt that they would use the knowledge
  - gained during the session in the future.

(70.1% to 88.6%). There was a 43.5% increase in the number of students who received a 100% on the survey



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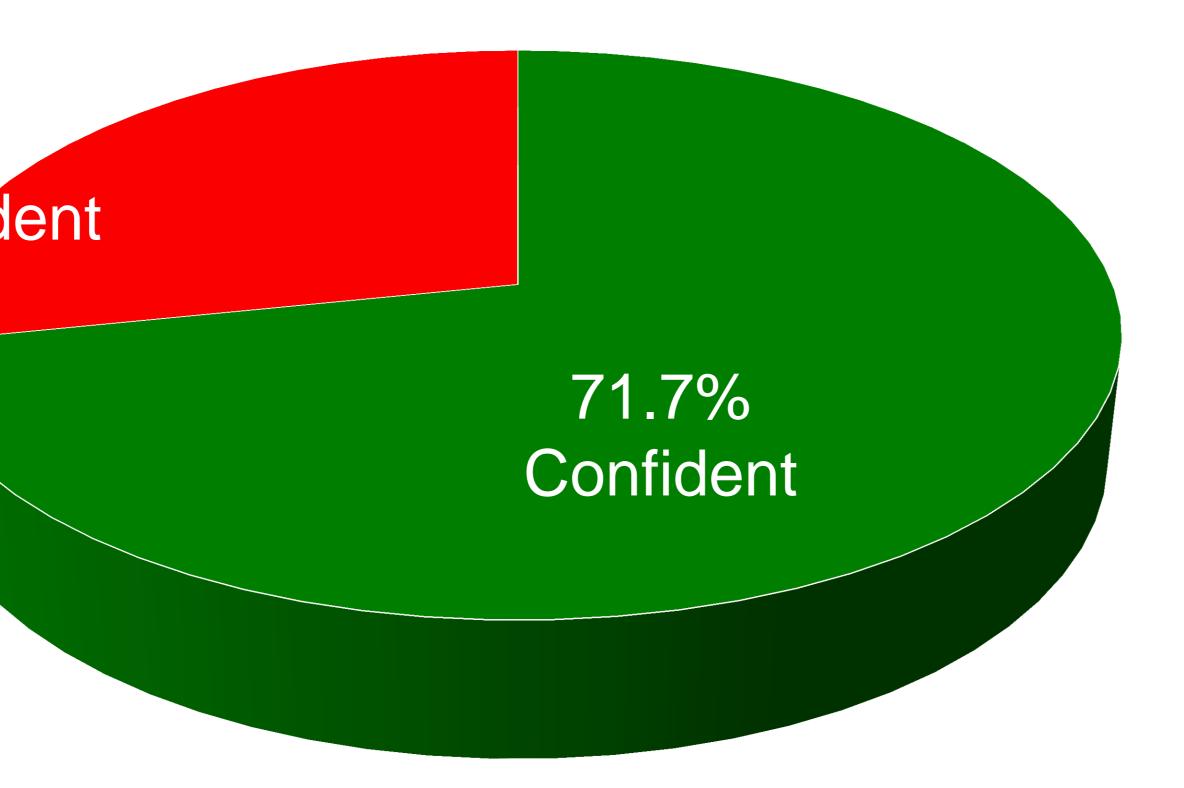
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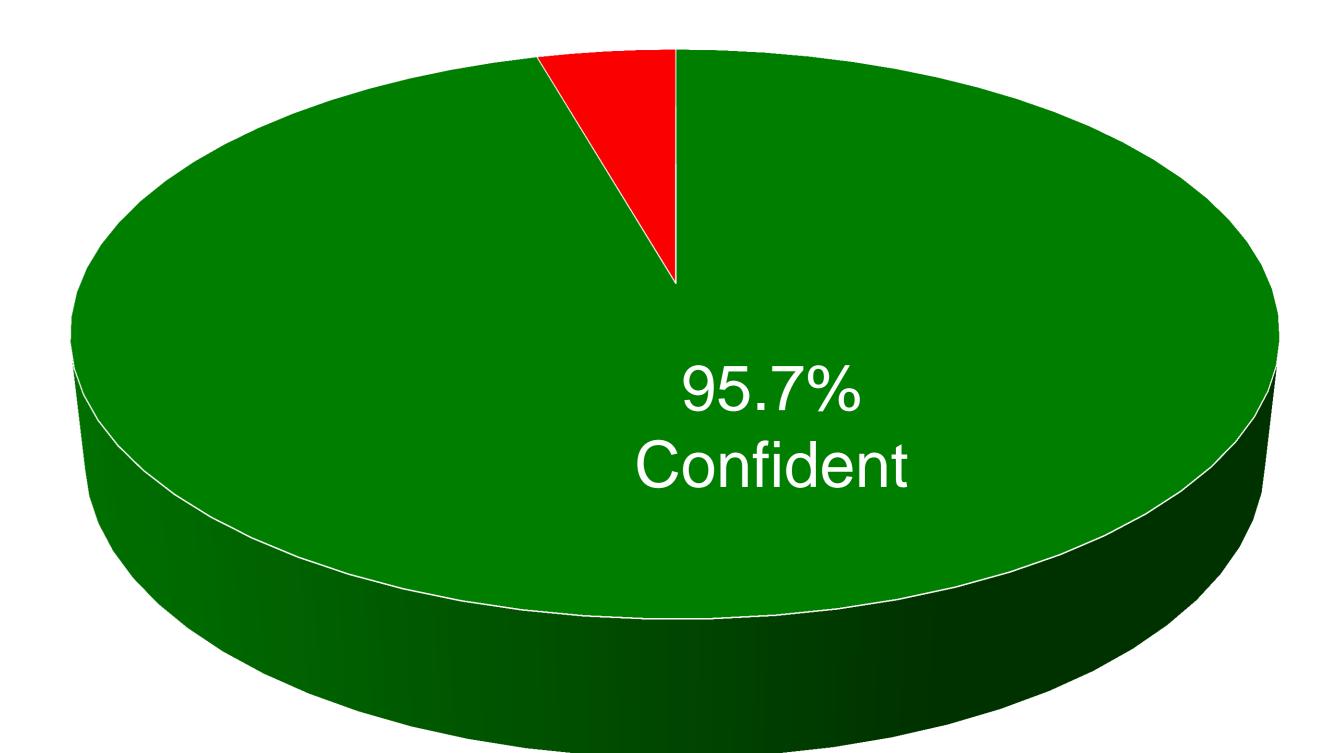
### Conclusions

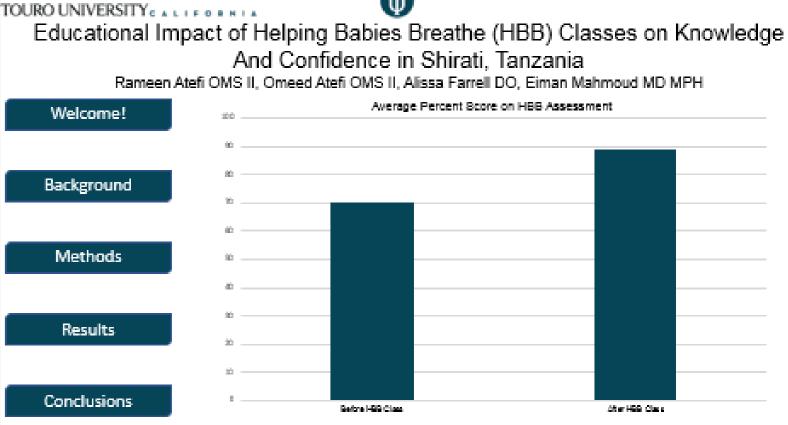


**Self-Reported Confidence in Bag** Valve Mask Use Before Class



#### **Self-Reported Confidence in Bag** Valve Mask Use After Class





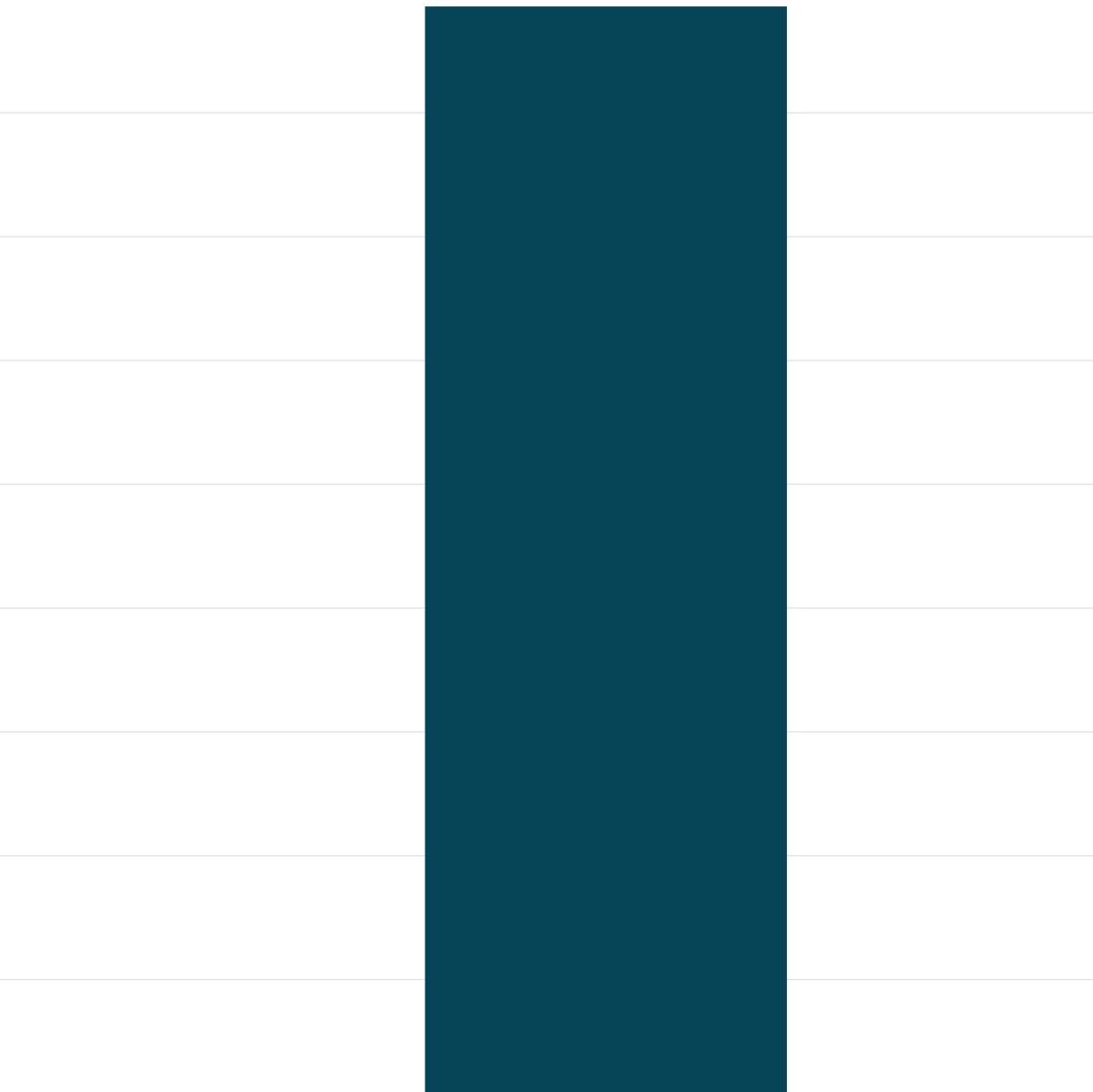


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Welcome!	100	Average Percent Score
	90	
Background	80	
	70	
	60	
Methods	50	
	40	
Results	30	
	20	
	10	
Conclusions	0	Before HBB Class



on HBB Assessment



After HBB Class



## TOURO UNIVERSITYCALIFORNIA Welcome! Background Methods Results Tanzania. Conclusions



Educational Impact of Helping Babies Breathe (HBB) Classes on Knowledge And Confidence in Shirati, Tanzania Rameen Atefi OMS II, Omeed Atefi OMS II, Alissa Farrell DO, Eiman Mahmoud MD MPH These results are promising for future trainees as it demonstrates that those who attend the class are more likely to improve their disposition and knowledge regarding neonatal resuscitation. Designating an outstanding student or nurse to regularly teach refresher classes could help reinforce proven resuscitation techniques and discourage ingrained, negative habits. Future studies should assess the same population for retention of knowledge, and reach out to more rural populations with similar classes and surveys. With continued training, application of HBB can continue the downward trend of neonatal deaths in

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#### Before Class:

- Midwife Nurse Medical Officer Doctor Nursing student Health extension worker Other:
- Yes No
- Heart rate less than 150 beats per minute Baby is not crying or breathing well Baby is born blue Always intervene and provide breathing assistance
- 4. When should you start using the bag-valve mask? Only when a doctor is present When the baby is born blue If you have cleared the airway, stimulated, and the baby is still not breathing When the baby has not been breathing for over 2 minutes
- 1 minute 3 minutes 5 minutes 10 minutes
- Yes No
- 12 20 breaths per minute 30 breaths per minute 40 breaths per minute

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1. Which of the following best describes you?

2. Have you ever been trained in or attended a "Helping Babies Breathe" class?

3. Within the first minute of life, what is the most important factor that will lead you to intervene and help a baby breathe?

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