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BSN student's perspective of Departmental Honors Thesis: a case study approach

Kathryn Messier
University of Tennessee at Chattanooga

BSN Student's Perspective of Departmental Honors Thesis: A Case Study Approach

Kathryn L. Messier

Departmental Honors Thesis
The University of Tennessee at Chattanooga
Nursing

Examination Date: December 16, 2017

Dr. Shirleen Chase
Professor of Nursing Pharmacology Research
Thesis Director

Dr. Katherine Kemplin
Professor of Nursing

Department Examiner

Dr. Christine Smith
Director for the School of Nursing
Department Examiner

Four and a half years ago as a local senior in high school, I was recruited by the University of Tennessee at Chattanooga's Honors Program to attend a weekend interview session to familiarize myself with the program as well as its staff members. After discovering the diversity of the curriculum as well as the assistance with maintaining high grade status, I accepted the offer from the program's administration to join this prestigious organization and began work as an Honors student at the University of Tennessee at Chattanooga in the fall semester of 2013. Initially, there was instruction that all honors students had to complete a Departmental Honors thesis by the completion of their university course work and graduation. I was instructed by a faculty official in the spring semester of 2016 to coordinate with the School of Nursing in efforts to find a director for this Departmental Honors thesis. I met with the director of research for the School of Nursing that semester, and we agreed on the topic of infant mortality as the focus of my thesis. This case study approach includes the process of constructing a Departmental Honors thesis and is my personal reflection of the experience.

Review of Literature

To begin, I was instructed to complete a review of literature regarding the phenomenon of increased infant mortality. Upon initial search of this national health crisis, I explored national statistics regarding disparities in infant mortality. According to Matthews in the *National Vital Statistics Report* (2013), there is a disparity in the rates of infant mortality between African American infants and other races. This issue confounds clinicians because data is sparse. Many clinicians (nurses, doctors, and geneticists) believe that a genetic component is the reason for this racial disparity but there is a lack of consistent data (Parker, 2003). Several studies explored the idea that a genetic

difference between African Americans and other races exists and could be the issue in infant mortality variations. For instance, related epigenetic studies point to differences in cellular telomere length in the implication of preterm birth among African American infants (Drury, Esteves, Hatch, Woodbury, Borne, Adamski, & Theall, 2015).

The research of David and Collins (2007) suggested that there are 32 genetic variants that can cause birth complications that contribute to infant mortality. Drury et al. (2015) stated that the telomere length for AA neonates is actually longer than Caucasian neonates. The implications with a longer telomere length are associated with lower birth weights in infants, another known variable in infant mortality. Parker (2003) claimed genetic variants are more predictive than environment as determinants for racial disparities in infant mortality rates. Dahlem, Villarruel, and Ronis' (2015) interviews with pregnant African American women asserted that the quality of patient-provider communication is an environment-associated determinant of positive pregnancy outcomes among AAs. In another interview conducted by Giurgescu, Banks, Dancy, and Norr (2013), majority of the sample population of pregnant AA women understood the underlying social, health, and environmental factors that can contribute to an early pregnancy. However, an exhaustive literature review revealed that there is no data of clinician perspectives regarding a genetic component contributing to AA infant mortality. Given these quantitative studies and observations, I was instructed to incorporate those findings into a qualitative research design.

Knowledge Development Perspective

The topic of infant mortality was extremely important to me as a nursing student because my intended specialty after graduation was to be in the field of pediatrics. During

this spring semester of 2015 and upon review of the literature, I was not confident about my understanding of the genetic component that research suggests may or may not contribute to African American infant mortality. Chinn and Kramer (2011) stated that this ability for me to identify societal situations in which inequality and discrimination are prevalent and to institute improvement of the situation is classified as emancipatory knowing. Eventually, I realized that societal injustice was still present within research despite movements toward equality over the past half century. I was conflicted in my limited research capabilities because I had not yet received a research course in nursing school. However, I had to continue the assignment and felt like my limited knowledge was only an annoyance rather than an overall barrier.

Practical Implications

In the beginning, the proposed research was to provide information where gaps in the literature exist. Askenazi, Halloran, Patil, Keeling, Saeidi, Koralkar, and Ambalavanan (2015) asserted that there is an underlying genetic difference between African American infants and Caucasian infants, and that this genetic variant caused higher infant mortality at higher rates in African American infants than other racial groups. Askenazi et al. (2015) investigated the polymorphism heme-oxygenase-1 and its impact on the infant organogenesis. However, there are studies in which social as well as environmental factors greatly influence the outcome of infant prematurity and death. Negating research from Fiscella's (2005) meta-analysis regarding environmental factors and their impact on infant mortality as well as similar research from Dahlem, Villarruel, and Ronis' (2015) and Giurgescu, Banks, Dancy, and Norr (2013) is the ultimate conflict that confronted researchers who claim only a genetic influence on infant mortality.

Instruction regarding this research study revolved solely on questioning clinicians about their personal experiences with infant mortality and racial disparity and analyzing similar themes into a thesis format.

Methodology

Sampling and Recruitment Measures

The inclusion criteria for this thesis revolved around clinicians in perinatal roles. After approval from the Institutional Review Board (IRB) at the University of Tennessee was given, I was instructed to contact five clinicians from a list given to me by my thesis director. These clinicians were faculty members from Emory, Columbia, and Harvard. Emails were sent to all five individuals with (IRB) application and Informed Consent attached. See Appendix A for IRB and Informed Consent. Included in the email were the three qualitative questions that I would ask the clinician in the recorded telephone interview which included “what are your experiences with infant mortality; in your experiences, have you noticed any differences in infant mortality among African Americans as opposed to other races; moreover, does your experience with African American infants suggest that there is an underlying genetic variant causing a higher rate in infant mortality?” Inclusion of these open-ended questions in my email as well as my Informed Consent was to aid my clinicians in preparing their answers before the scheduled interview.

Over the course of the summer, only four individuals responded to the emails I sent. Three agreed that their limited neonatal experience would not provide significant information to this study. One agreed to participate in this research study; however, he did not respond when interview scheduling was initiated. Overall, participation in this

research study was nonexistent, and a change in methodology was needed. I believe this lack of participation is because the topic of "African American infant mortality" is a benchmark study where research is sparse, and clinicians are uncomfortable with discussing their thoughts on an issue about which they do not have much experience or knowledge. From a practical nursing perspective, the issue of infant mortality is not solely caused by internal, genetic influences. Researchers should analyze environmental influences like Fiscella (2005) and Dahlem et al. (2015) who contributed the cause of African American infant mortality to social, economic, and environmental influences rather than just genetics.

After this obstacle regarding lack of interview participation, the decision was made to change this research thesis to that of a quantitative study where the student would construct a survey regarding infant mortality through "Qualtrics" database and distribute the survey through social networking sites. The director instructed that incorporation of the "Perinatal Grief Intensity Scale" was to be included as the framework for the questions to be included in the survey. The "Perinatal Grief Intensity Scale" is a collection of questions used to determine the level of grief experienced by parents after they have experienced the premature loss of their infant; however, it has not been researched in the general population which posed an issue for data collection and analysis. The survey was modified for clinician perspectives where words like "my baby" or "my child" were changed to "my infant patient." In addition to this intensity scale, the questions of genetics and African American infant mortality were also included in the survey. Finally, descriptive questions were added at the end of the survey which included years of clinical experience as well as clinical profession. The survey was distributed via

this student's Facebook account as well as the thesis director's Twitter network. The survey was closed on October 3, 2017, and data analysis began shortly after.

Results

Of 32 participants, 30 gave consent to participate in this survey and only 1 completed the survey (response rate = 3.12%). Of those 30 participants who gave consent, only 9 have treated patients who are less than 28 days old. Out of those 9 participants, 5 have treated infant patients who have died. From there, the surveyed population dwindled to 3 individuals and, finally, only 1 completed the survey. See Table 1.

Table 1. Clinicians' Opinions Regarding Infant Mortality
Questions Regarding Infant Mortality

Genetic component contributes to infant mortality	Number of Clinician Opinions
Agree	1
Disagree	1
Higher incidence of African American infant mortality	Number of Clinician Opinions
Agree	1
Disagree	1
African Americans have genetic component for higher infant mortality	Number of Clinician Opinions
Agree	1
Disagree	1

Discussion

This study was one of the first to investigate clinician perspectives regarding African American infant mortality. As evidenced by Appendix B, the number of respondents significantly decreased after the second question which asked the individual of his or her experience treating patients younger than 28 days old. Because of the specificity of this question and the lack of clinician participation, the number of

individuals qualified to answer this question was significantly low. The numbers further decreased when the survey became more specific with incorporation of the "Perinatal Grief Intensity Scale." I believe that the significant decrease in participation occurred because this study has not been researched in the general population; therefore, clinician participation decreased, and miniscule values were seen. Finally, as the survey unfolded the descriptive questions, only one individual participated which left the student with one respondent at completion of the survey.

Conclusion

Limitations

This research study was limited with several different aspects including number of respondents with the original qualitative study as well as the number of participants in the quantitative study and the miniscule results collected from the "Qualtrics" survey. One explanation for the limited number of respondents from the first qualitative study could possibly be due to the discomfort of the topic of African American infant mortality and genetics. The sensitivity of diversity as well as the limitations of knowledge and clinical experience with infant mortality could explain why clinicians were not inclined to continue participation in the research study.

In addition to limitations in clinician knowledge, the incorporation of the "Perinatal Grief Intensity Scale" into formation of a clinician survey related to infant mortality and perceptions of genetic influence created constraints on thesis results as well. The "Perinatal Grief Intensity Scale" has been psychometrically validated by Hutti et al., (2013) within a specific population of parents who have experienced infant mortality. The clinician-specific scale has not been psychometrically evaluated on a

general population which negatively affected results as well.

Overall, the limitations in knowledge among clinicians regarding the specificity of genetics and its contribution to infant mortality as well as the invalidity of the "Perinatal Grief Intensity Scale" to the general population, the student was unable to adequately extract sound data from the survey results. Because of this issue in data extraction and analysis, the student outsourced to another member of her Departmental Honors Committee for assistance in furthering the research analysis and thesis construction as evidenced by Appendix C. After meeting with the committee mentor, the decision was made that the results were not strong enough to construct an adequate thesis defense regarding the quantitative research.

Research Implications

According to Chao et al., (2010), African American infant mortality is an issue where a change social and environmental factors can cause a decrease in mortality and increase in infant maturity. Sending case managers to at-risk mothers, instructing health care personnel on educational practices of eliminating infant risk behaviors, distributing adequate resources like prenatal vitamins to underprivileged mothers, and increasing the availability of family planning in communities where unplanned pregnancies are high helps decrease poor birth outcomes among this ethnicity. In addition to adding social support systems to African American women, Norr et al. (2003) states that the change in health care policy has caused a decrease in home health care visits to at-risk mothers and their infants. This intervention of home health care visits has been one of the most successful interventions in providing care to this vulnerable population. Because of these social and economic changes, African American mothers are more inclined to suffer

adverse birth outcomes rather than other populations.

In accordance with the research of Chao et al. (2011) and Norr et al. (2013), I believe that future researchers need to determine the impact of the external factors that may influence African American infant mortality as opposed to engaging in a debate on whether there is an ethnogenetic component that dictates the higher risk of infant mortality in within this population. In terms of researching clinician perspectives, I believe that a survey which has been psychometrically validated within a general population of clinicians needs to be incorporated within the design of the research as well. The survey needs to include questions regarding clinician experiences and beliefs regarding infant mortality rather than limiting their responses with the incorporation of only genetic-based questions. Through the development of a clinical-based survey of clinician experiences, I believe that further gaps in the literature regarding infant mortality will be filled.

Concluding Comments

In conclusion, this Departmental Honors Thesis was a trying, informative journey filled with pitfalls. The purpose of this research study was to uncover clinician perspectives regarding their experiences with infant mortality; however, it eventually became a self-reflective adventure regarding the student's experience with nursing research and thesis construction. Lack of clinician participation, usage of an invalid scale of perinatal grief, personal limitations in the field of nursing research and data analysis, and ultimate knowledge deficit regarding infant mortality among clinicians were among the issues this student faced during the thesis process. Looking back at the beginning and the reason that I became involved in the Brock Scholars program at UTC, I realized that

this thesis is ultimately an antithesis of my desire to participate in a program that strives for diversity. I understand that the foundation of this study is ethnically biased which also could explain the discomfort of clinicians when participating in the survey. With this discovery, I encourage future researchers as well as Departmental Honors students to reflect introspectively on their topics before initiating a project that may go against beliefs and ideals.

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Appendix A

FORM A:
APPLICATION FOR REVIEW OF RESEARCH INVOLVING HUMAN SUBJECTS

INVESTIGATOR'S ASSURANCE: By submitting this protocol, I attest that I am aware of the applicable principles, policies, regulations, and laws governing the protection of human subjects in research and that I will be guided by them in the conduct of this research.

Title of Research:	Qualitative study of perinatal clinician experiences with African American Infant Mortality

		Dept	**Mail Code**	**Email**
Principal Investigator	Kathryn Messier	Nursing		XLG972@mocs.utc.edu
Other Investigator				
Other Investigator				
Faculty Advisor	Dr. Kate Kemplin	Nursing		Kate-kemplin@utc.edu

Anticipated dates of research project: 03/2017 through 09/2017

Type of Research:

☒ Dissertation/Thesis ☐ Class Project
☐ Faculty Research ☐ Other (Please explain):

If this research pertains to a grant opportunity*: Grant Start Date: N/A
*Attach grant proposal narrative & FCOI disclosure Funding Agency: N/A

Please check that all of the following items are attached (where applicable) before submitting the application:

- Any research instruments (any tests, surveys, questionnaires, protocols, or anything else used to collect data)
- All informed consent documents (see www.utc.edu/irb for sample informed consent documents)
- Permission from applicable authorities (principals of schools, teachers of classrooms, etc.) to conduct your research at their facilities
- Appropriate permission and signatures from your faculty advisor (if applicable).
- Please be sure the entire application is filled out completely.

All student applications must be either signed by the faculty advisor then scanned and submitted electronically, OR submitted directly by the faculty advisor.

- Allow at least 2 weeks for IRB processing from date of submission.
- You may not begin your research until it has been officially approved by the IRB.
- This form should not be used if your research involves protected health information. Please refer to the HIPAA section of the website (www.utc.edu/irb) for the appropriate forms.

All applications should be submitted by email to instrb@utc.edu.

Purpose/Objectives of Research: *Briefly state, in non-technical language, the purpose of the research and the problem to be investigated. When possible, state specific hypotheses to be tested or specific research questions to be answered. For pilot or exploratory studies, discuss the way in which the information obtained will be used in future studies so that the long term benefits can be assessed.*

The purpose of this Departmental Honors Thesis is to investigate the phenomenon thought to be an issue in the eastern portion of the state of Tennessee. According to Matthews in the *National Vital Statistics Report* (2013), there is a disparity in the rates of infant mortality between African American infants and other races. This issue confounds clinicians because data is sparse. Many clinicians (nurses, doctors, and geneticists) believe that a genetic component is the reason for this racial disparity but there is no data (Parker). Several studies support the idea that a genetic difference between African Americans and other races exists and could be the problem in infant mortality. Epigenetic studies point to differences in cellular telomere length in the implication of preterm birth among African American infants (Drury, Esteves, Hatch, Woodbury, Borne, Adamski, & Theall, 2015). The objective of this thesis is to collect data from clinicians and to determine clinicians' perspectives on their care of African American infants. My hypothesis for this research study is that there is a genetic component that differs among African American infants and other races and contributes to higher instances of infant mortality in this ethnic group.

Relevant Background and Rationale for the Research: *This section should present the context of the work by explaining the relation of the proposed research to previous investigations*

in the field. Include citations for relevant research. Please include at least twice as many peer reviewed articles as "lay" publications.

The research of David and Collins (2007) suggests there are 32 genetic variants that can cause birth complications that contribute to infant mortality. Drury et al. (2015) state that the telomere length for AA neonates is actually longer than Caucasian neonates. Subsequently, a longer telomere length is associated with lower birth weights in infants, another known variable in infant mortality. Parker (2003) claims genetic variants are more predictive than environment as determinants for racial disparities in infant mortality rates. Dahlem, Villarruel, and Ronis' (2015) interviews with pregnant African American women assert that the quality of patient-provider communication is an environment-associated determinant of positive pregnancy outcomes among AAs. In another interview conducted by Giurgescu, Banks, Dancy, and Norr (2013), majority of the sample population of pregnant AA women understood the underlying social, health, and environmental factors that can contribute to an early pregnancy. However, an exhaustive literature review reveals there is no data of clinician interviews regarding a genetic component contributing to AA infant mortality. Given these quantitative studies and observations, I will incorporate those findings into a qualitative question structure when interviewing clinicians.

Methods/Procedures: *Briefly discuss, in non-technical language, the research methods which directly involve use of human subjects. Discuss how the methods employed will allow the investigator to address his/her hypotheses and/or research question(s).*

The inclusion criteria for this thesis revolve around clinicians in perinatal roles. I intend to interview ten clinicians until data saturation is reached. These medical health professionals are not going to be limited to the Southeast; interviews will be conducted via telephone nationwide. This thesis is an ethnographic philosophy study where cultural influences with AAs are explored. I will follow a phenomenological framework and as such will ask open-ended questions about clinicians' experiences. An example of one of these questions is, "What are your experiences with infant mortality?" Another example of a question I will be asking is, "In your experiences, have you noticed any differences in infant mortality among African Americans as opposed to other races?" Finally, I will include a question relating to genetics and infant mortality such as, "Does your experience with African American infants suggest that there is an underlying genetic variant causing a higher rate in infant mortality?" With these three questions, I will record and analyze thematically. These are the only questions I will be asking.

Subject Population: *List the size of population to be used, and check if any of the populations listed apply to the study. Discuss criteria of selection or exclusion, population from which they will be selected, and duration of involvement. NOTE: Federal guidelines require selection of subjects be equitable within the exclusions, and subjects meeting the criteria cannot be discriminated against for gender, race, social or financial status, or any other reason.*

Describe Sample: My faculty advisor, Dr. Kate Kemplin, is going to recruit clinicians from her list of clinical colleagues. No vulnerable populations are being recruited and no health care data is going to be accessed or created. All participants speak English fluently. The sample of clinicians that I will interview will be in two separate groups: a Tennessee population and a national population. I will interview two nurses, two doctors and one geneticist from Tennessee; moreover, I will interview two nurses, two doctors, and one geneticist from other parts of the country. Participants will receive informed consent electronically via email. Their email addresses will not be retained and the emails will be deleted. The participants must sign the informed consent and send the signed informed consent back to the primary investigator (PI) via email at xlg972@mocs.utc.edu. Their signature can be typed or photocopied in the section that describes the audio recording consent. Participants' names will not be recorded and their participation is confidential. The only information to be disclosed is the generalized clinical role i.e. nurse, nurse practitioner, physician, etc. If the participant has any questions regarding information that will be used in the research project they can contact the PI at the previously stated email address.

I will submit the recorded telephone interviews through software designed by the University of Tennessee at Knoxville called NVIVO. The information that I retrieve from these interviews will serve as the qualitative data section of my research thesis. I will compare my research findings with my literature reviews and establish similarities and/or differences in these past research studies on genetics.

Approximate Number of Subjects: 10 total subjects

Subjects Include (check if applicable):

Minors (under 18) ☐
Involuntarily institutionalized ☐
Mentally handicapped ☐
*Health Care Data/Information

**Visit www.utc.edu/irb to download and complete additional HIPAA forms.*

Informed Consent: *Describe the consent process and attach all consent documents. See www.utc.edu/irb for sample informed consent forms and complete information regarding informed consent. All research must be conducted with the informed consent (signed or unsigned, as required) of all participants.*

UNIVERSITY OF TENNESSEE AT CHATTANOOGA

Qualitative study of perinatal clinician experiences on African American Infant Mortality

Please read this consent document carefully before you decide to participate in this study. The purpose of this study is to interview clinicians about infant mortality in the clinical setting. You will be asked to answer a set of questions regarding infant mortality in the clinical setting. Maximum time required is 30 minutes. The study is of minimal risk to the participant. Boredom and/ emotional response regarding death in the clinical environment are the risks to this study. The potential benefits of the study include new or increased knowledge about infant mortality from the clinician's perspective. The Institutional Review Board at the University of Tennessee at Chattanooga has approved this research study.

If you choose to participate in this study, your participation will be confidential. Participants will be emailed informed consent and must email back signed informed consent in order to participate in this study. Signatures may be typed or photocopied in the section that describes consent for audio recording. Signed consent must be emailed to Kathryn Messier, primary investigator, at xlg972@mocs.utc.edu. Emails will be deleted

after signed informed consent is received. All participants must be 18 years and older to participate in this study. No vulnerable populations will be asked to participate in this study. Because participation is confidential, the only information to be disclosed is the generalized clinical role i.e. nurse, nurse practitioner, physician, etc. The data collected will be analyzed through a qualitative software program which will analyze the interviews. All collected data will be stored on the faculty advisor's, Dr. Kate Kemplin, secure, password protected laptop and will be kept securely by the University of Tennessee of Chattanooga's information technology standards. It will be kept in a locked cabinet drawer in her office at the University of Tennessee at Chattanooga. Data will be retained for a period of 6 months for student and faculty analyses. It will be destroyed 48 hours after final statistical analyses review. If you decide to discontinue participation in this research study during the process of collecting data, then your provided information will be deleted and dismissed from the research. If you have a question about the research then you can contact the primary investigator Kathryn Messier at 423-243-8130 or Professor Amy Doolittle with the University of Tennessee IRB at amy-doolittle@utc.edu.

You must sign this waiver regarding audio recording in order to participate in this research study: I understand that I will be [audio recorded] by the researcher. These audio recordings will be kept by the researcher in a secure, password protected device and will be kept securely by the University of Tennessee of Chattanooga's information technology standards. I understand that only the researcher and her faculty advisor, Dr. Kate Kemplin, will have access to these audio recordings and that they will destroyed 48 hours after final statistical analyses review.
Audio Recording of Study Activities Interviews may be recording using audio recording to assist with the accuracy of your responses. You have the right to refuse the audio recording. Please select one of the following options: I consent to audio recording: Yes _____ No_____
Signature:

Incentives: *Indicate whether or not subjects are to be paid, how and when they will be paid, amount, and the rationale for payment. The proposed payment should be commensurate with the time required for participation, travel expenses, and/or inconvenience assumed by the subject, but should not be so great as to constitute undue influence on an individual to assume risks of study participation that would not otherwise be undertaken.*

The subjects are not going to be paid. There are no incentives nor is there compensation for participating in this research study.

Risks/Benefits to Participants and Precautions to Be Taken: *This section should discuss all possible risks and discomforts from participation in the study, indicating both severity and likelihood of occurrence for each. Risks may range from the physical to the psychological, including inconvenience, travel, or boredom, and loss of privacy and confidentiality. The methods that will be used to minimize these risks should also be discussed. If subjects are vulnerable populations, or if risks are more than minimal, please describe what additional safeguards will be taken. This section should also discuss the potential benefits of the research. List any benefit to the participants themselves, contribution to the field of knowledge, or benefit to society as a whole. Indicate if there is no direct benefit to participants.*

There is minimal risk to the participant. Boredom and/ or emotional response regarding death in the clinical environment are the only risks for participating in this research study. The potential benefits include new and/ or increased knowledge about infant mortality from the clinician's perspective. The potential benefits do not directly affect the participants. If participating in this research study causes an adverse reaction, then we have counseling services on the University of Tennessee at Chattanooga's campus and the number is (423)-425-4438. We will provide this number to the participant if he/she experiences any distress.

Privacy/Confidentiality: *Please describe whether the research would involve observation in situations where subjects have a reasonable expectation of privacy. If identifiable existing records are to be examined, has appropriate permission been sought, i.e. from institutions, subjects, and physicians? What provision has been made to protect the confidentiality of sensitive information about individuals? Are research records anonymous? If not, there should be discussion of how records will be coded, where and how they will be stored, and when they will be disposed of. It should also note where and how signed consent forms will be maintained. If video or audio tapes will be made as part of the study, disposition of these tapes should be addressed. In general, the IRB recommends that research tapes be destroyed as soon as the needed data are transcribed, and that only restricted study personnel be allowed access to the tapes. List the names of individuals who will have access to names and/or data. If other procedures are proposed [for example, retaining tapes for future use, allowing individuals other than study investigators access to the tapes] justification should be presented and separate.*

Participants' names will not be recorded and their participation is confidential. In order to maintain confidentiality for telephone interviews that include the participants' phone numbers and any other identifying information, Dr. Kate Kemplin, faculty advisor, will secure the information in a locked desk drawer in her office at the University of Tennessee at Chattanooga (UTC) to which only she and the PI, Kathryn Messier, have access.

The only information to be disclosed is the generalized clinical role i.e. nurse, nurse practitioner, physician, etc. Recorded conversations: to be secured in a qualitative software program that analyzes the interviews. All collected data will be stored on secure,

password protected devices and will be kept securely by the University of Tennessee of Chattanooga's information technology standards. The recorded interviews will be kept in a locked cabinet drawer in Dr. Kate Kemplin's office at UTC and will be kept separate from the telephone numbers and any other identifying information. Only Kathryn Messier (PI) and her faculty advisor Dr. Kate Kemplin will have access to these drawers and information. Data will be retained for a period of 6 months for student and faculty analyses. It will be destroyed 48 hours after final statistical analyses review.

Signatures:

Principal Investigator or Student	Date
*Faculty Advisor (for student applications)	Date

** If submitted by a faculty member, electronic (typed) signatures are acceptable. If submitted by a student, please print out completed form, obtain the faculty advisor's signature, scan completed form, and submit it via email. Only Word documents or PDF files are acceptable submissions.*

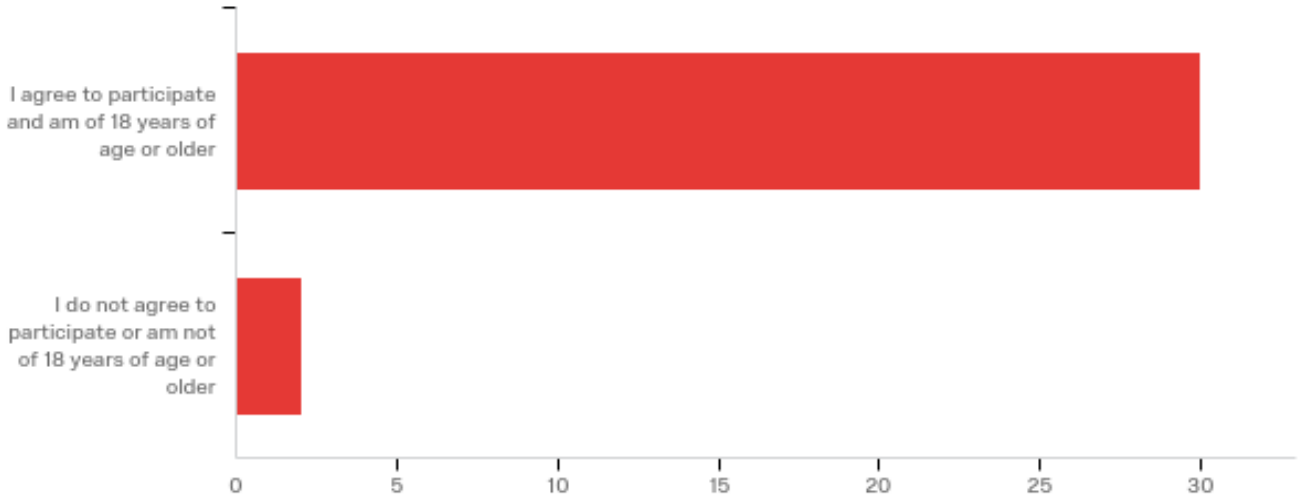
Appendix B

Default Report

Messier- DHON Survey

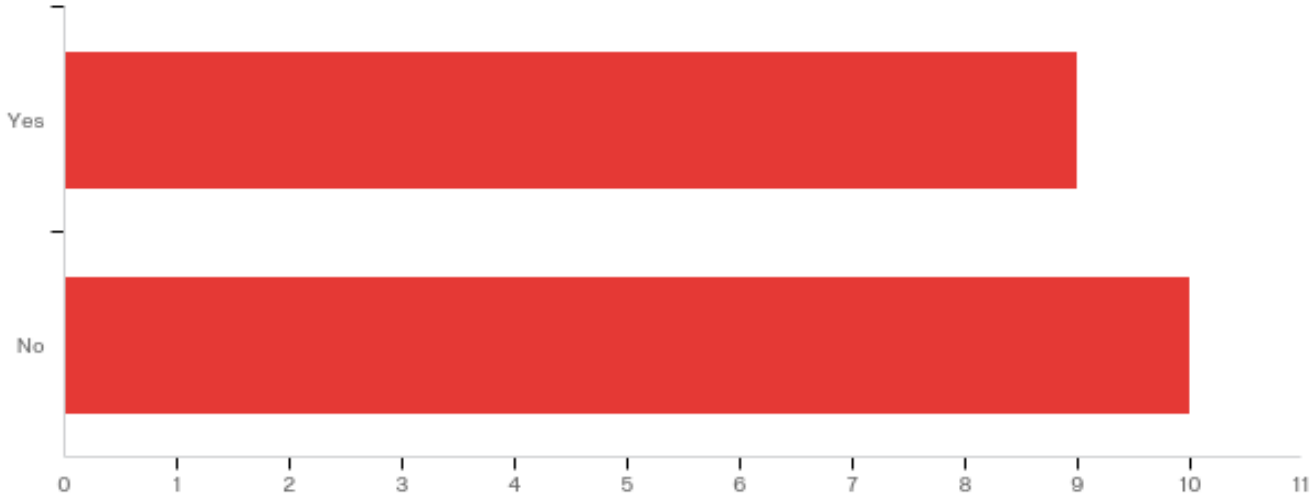
December 2nd 2017, 8:11 am MST

Q1 - Please read this consent document carefully before you decide to participate in this study. The purpose of this study is to survey clinicians about infant mortality in the clinical setting. You will be asked to answer a set of questions regarding infant mortality in the clinical setting. Maximum time required is 30 minutes. The study is of minimal risk to the participant. Boredom and/ emotional response regarding death in the clinical environment are the risks to this study. The potential benefits of the study include new or increased knowledge about infant mortality from the clinician's perspective. The Institutional Review Board at the University of Tennessee at Chattanooga has approved this research study. Individuals have the availability to withdraw from this study at any time. If an individual chooses to withdraw, the information collected will not be included in the data analyses. Participation in this study requires consent. Participants will consent electronically via the informed consent portion of the survey. Individuals must be 18 years of age or older to participate in this study. Individual identifying information will not be retained. Participants' names, IP addresses, and/or GPS coordinates will not be recorded, and their participation will remain confidential. All participants must be 18 years and older to participate in this study. No vulnerable populations will be asked to participate in this study. Because participation is confidential, the only information to be disclosed is the generalized clinical role i.e. nurse, nurse practitioner, physician, etc. The data collected will be analyzed through a quantitative software program (SPSS). If you have a question about the research then you can contact the primary investigator Kathryn Messier at 423-243-8130 or Professor Amy Doolittle with the University of Tennessee IRB at amy-doolittle@utc.edu.



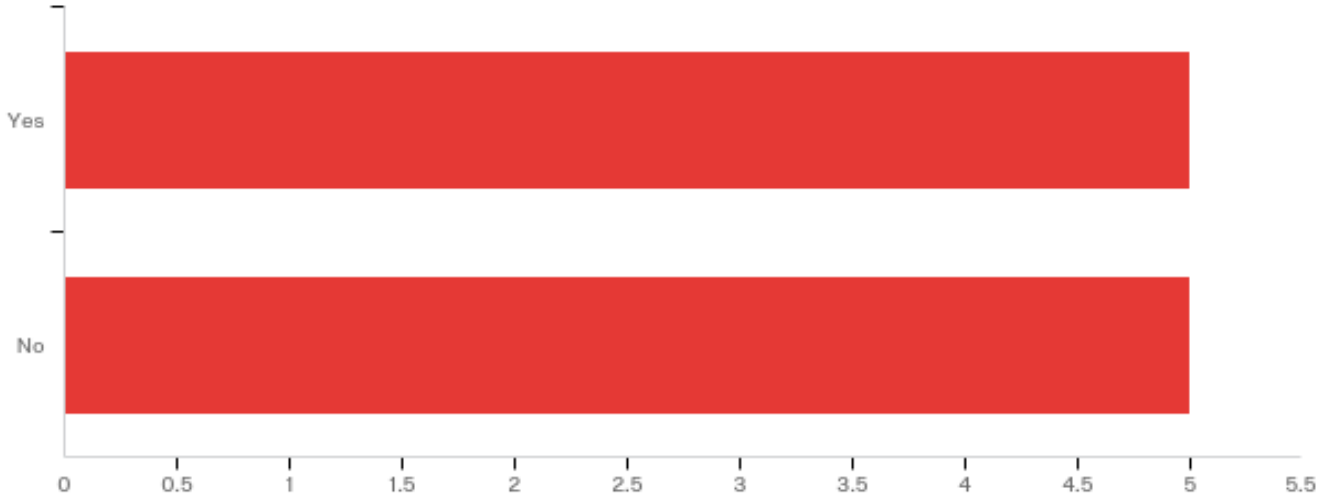
#	Answer	%	Count
1	I agree to participate and am of 18 years of age or older	93.75%	30
2	I do not agree to participate or am not of 18 years of age or older	6.25%	2
	Total	100%	32

Q2 - Have you treated patients younger than 28 days old?



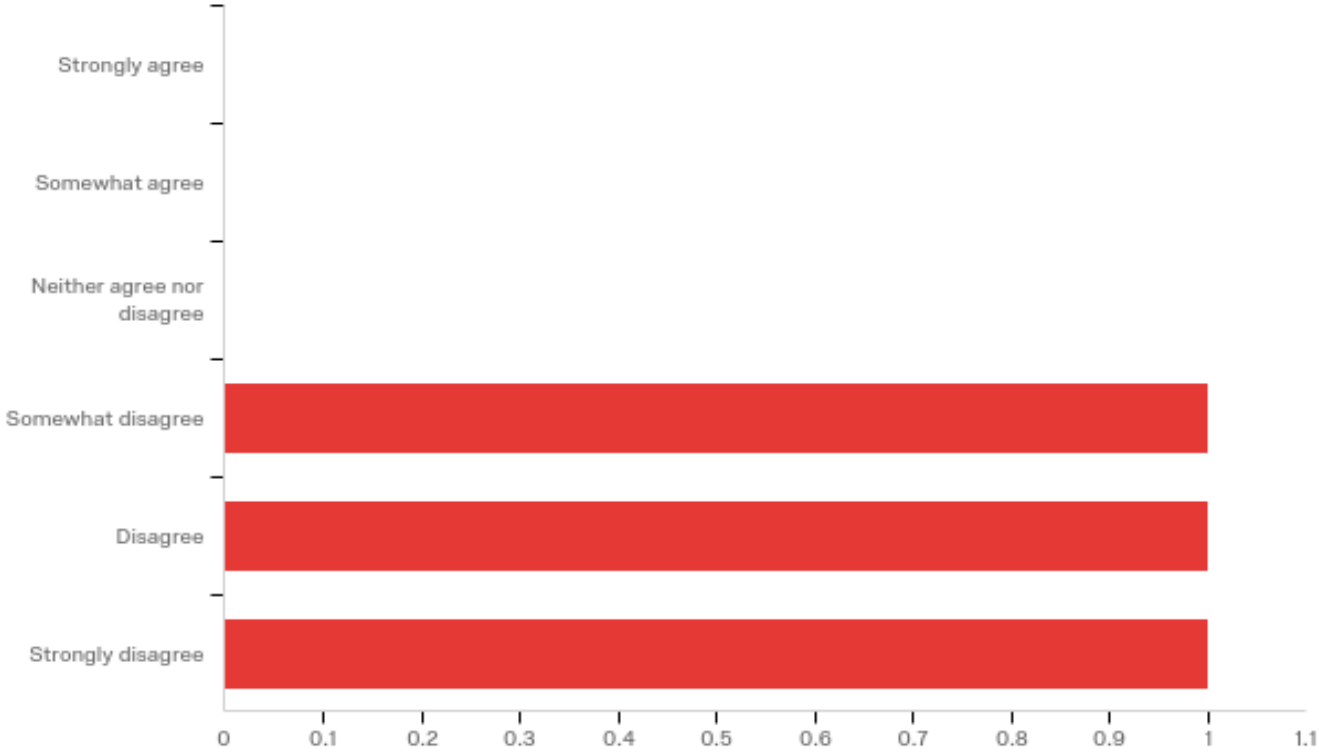
#	Answer	%	Count
1	Yes	47.37%	9
2	No	52.63%	10
	Total	100%	19

Q3 - Have you provided care for an infant patient who has died?



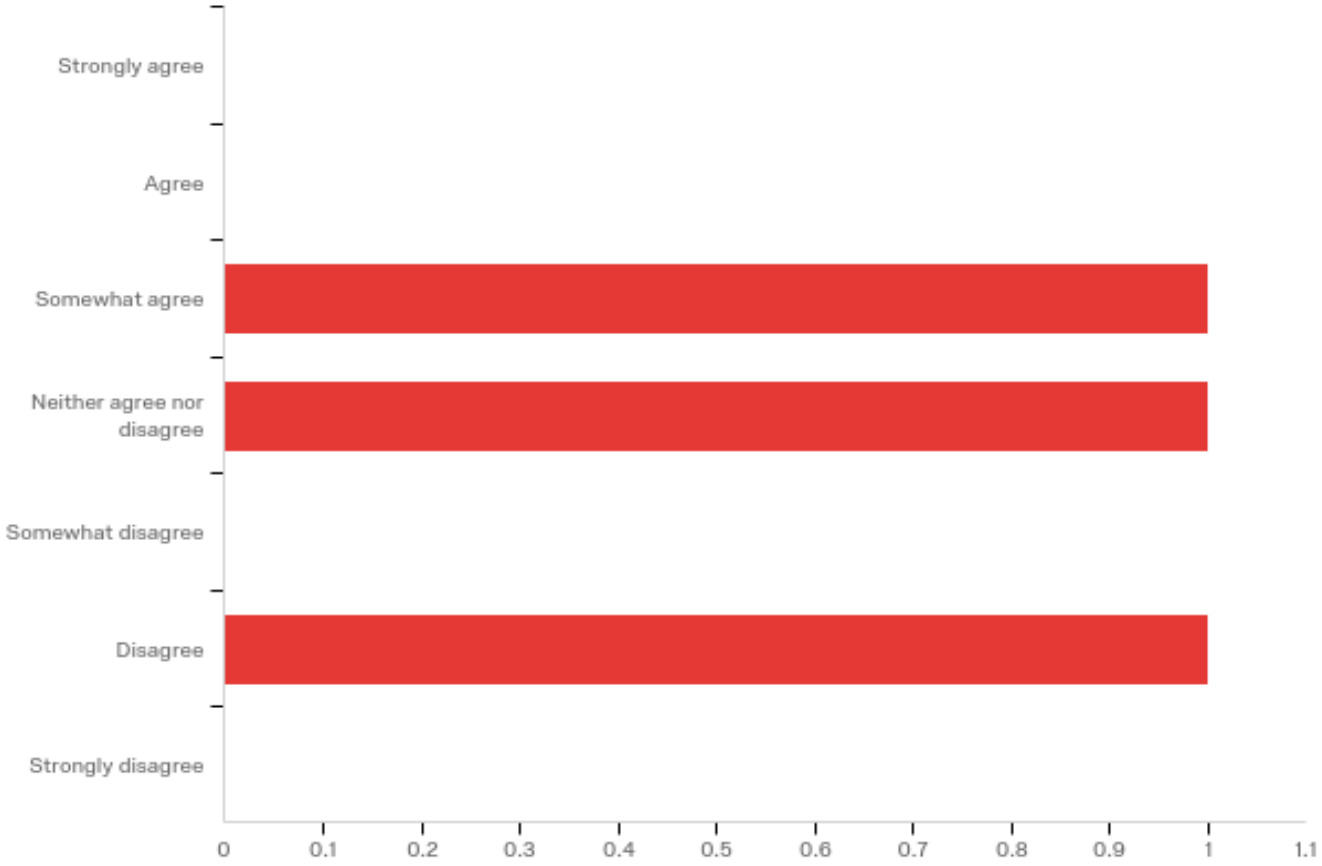
#	Answer	%	Count
1	Yes	50.00%	5
2	No	50.00%	5
	Total	100%	10

Q4 - I felt satisfied with the way the loss of my infant patient unfolded, given that I had to experience this.



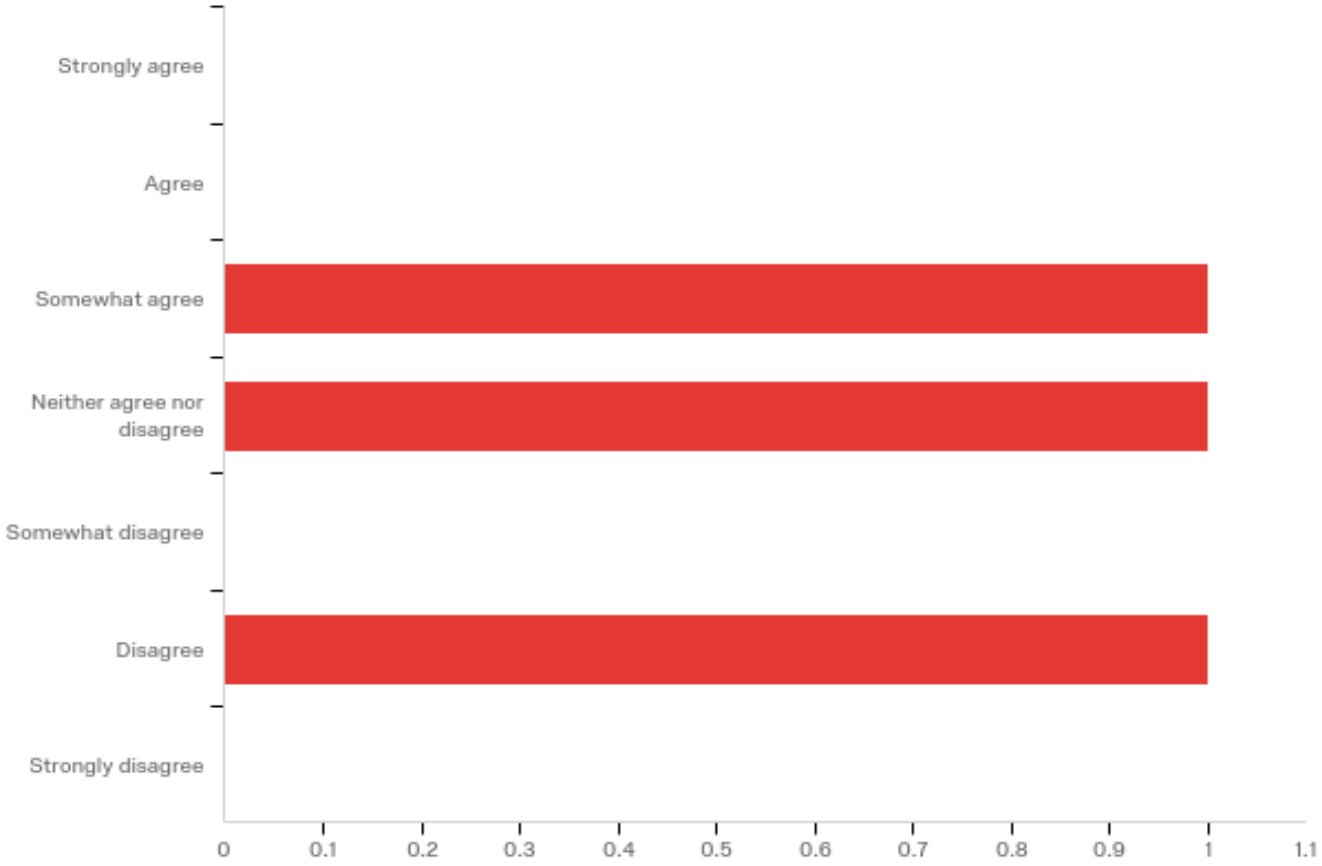
#	Answer	%	Count
1	Strongly agree	0.00%	0
2	Somewhat agree	0.00%	0
3	Neither agree nor disagree	0.00%	0
4	Somewhat disagree	33.33%	1
5	Disagree	33.33%	1
6	Strongly disagree	33.33%	1
	Total	100%	3

Q5 - I felt satisfied with the interactions with my patient's family after the loss.



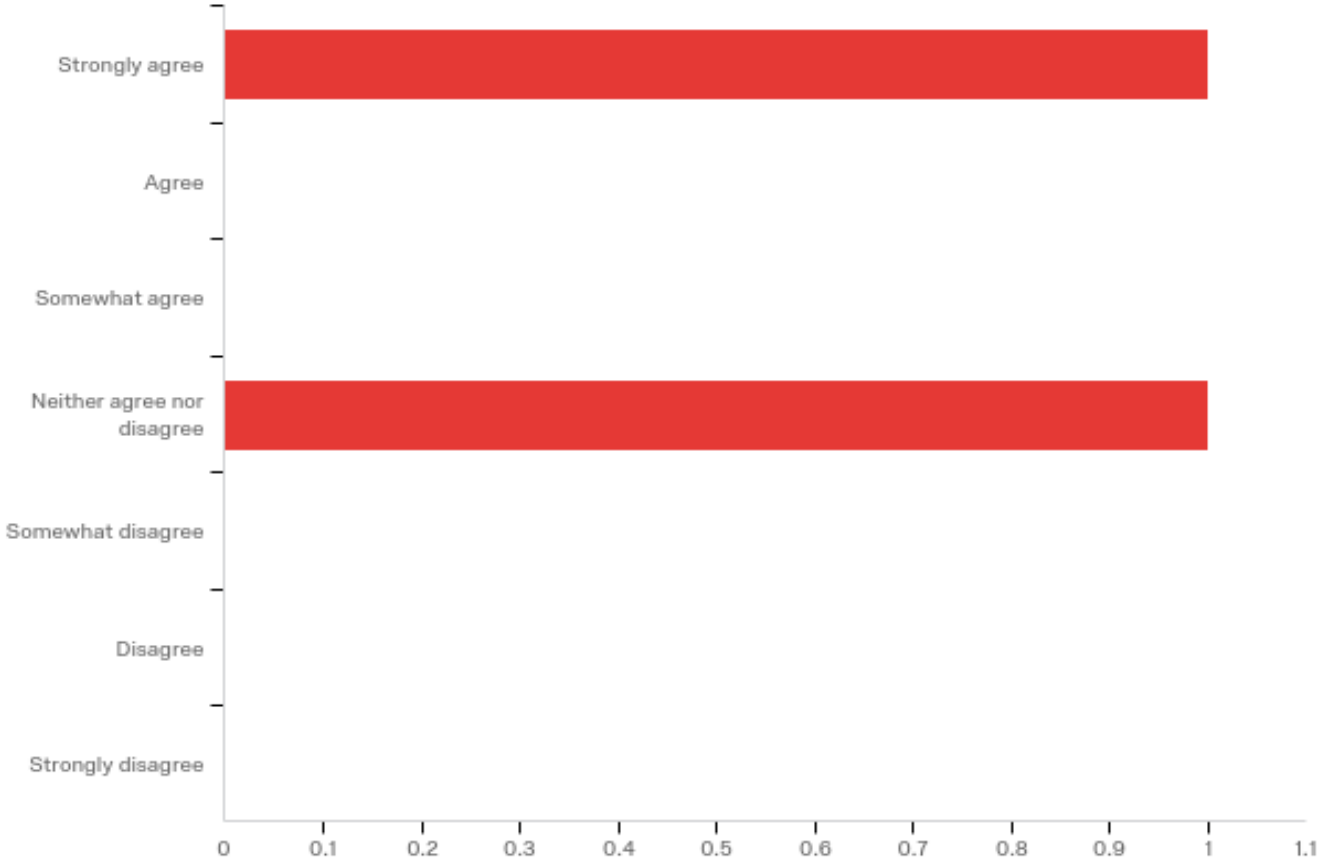
#	Answer	%	Count
1	Strongly agree	0.00%	0
2	Agree	0.00%	0
3	Somewhat agree	33.33%	1
4	Neither agree nor disagree	33.33%	1
5	Somewhat disagree	0.00%	0
6	Disagree	33.33%	1
7	Strongly disagree	0.00%	0
	Total	100%	3

Q6 - I felt satisfied with my interactions with my nurses after my infant patient's death.



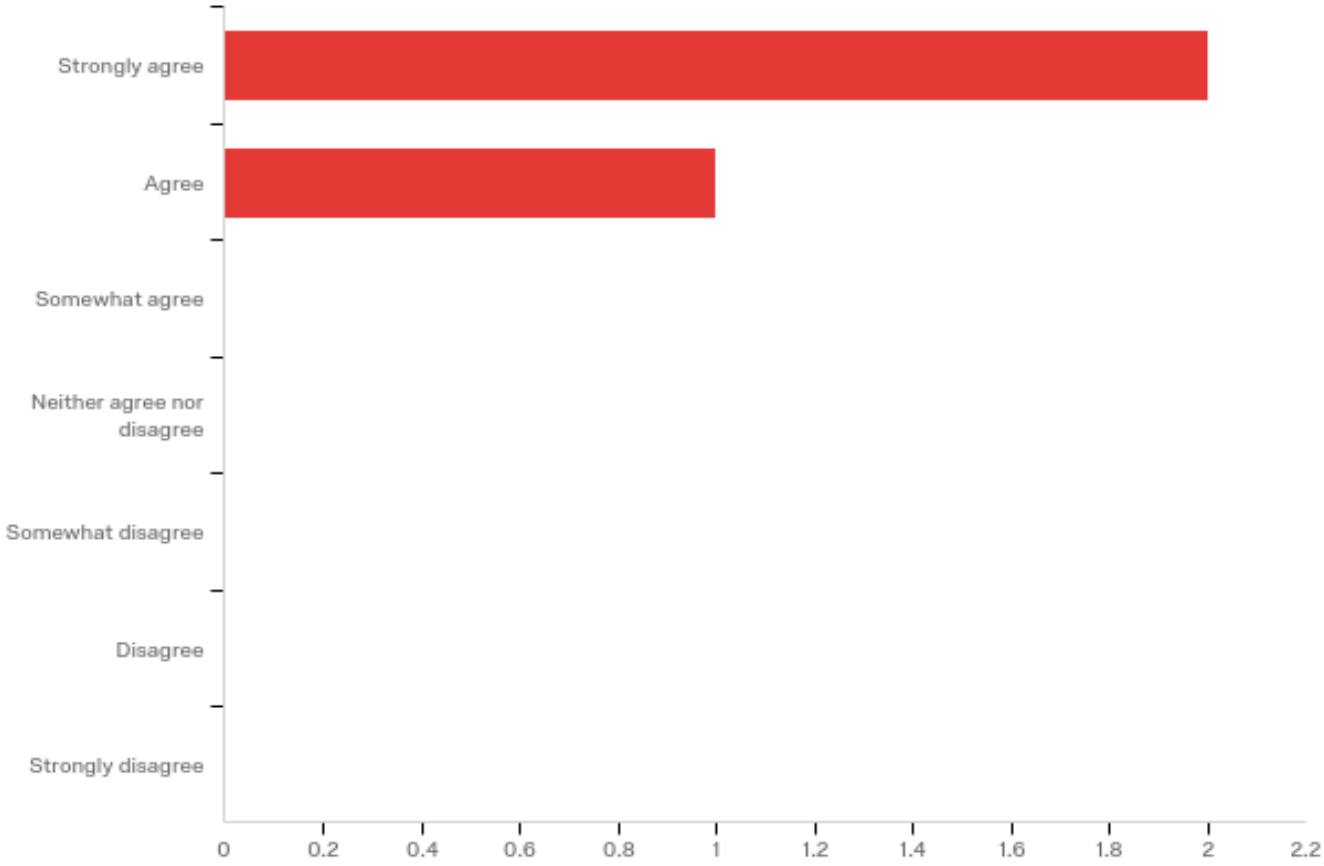
#	Answer	%	Count
1	Strongly agree	0.00%	0
2	Agree	0.00%	0
3	Somewhat agree	33.33%	1
4	Neither agree nor disagree	33.33%	1
5	Somewhat disagree	0.00%	0
6	Disagree	33.33%	1
7	Strongly disagree	0.00%	0
	Total	100%	3

Q7 - I felt satisfied with the interactions with my family and friends after my infant patient's death.



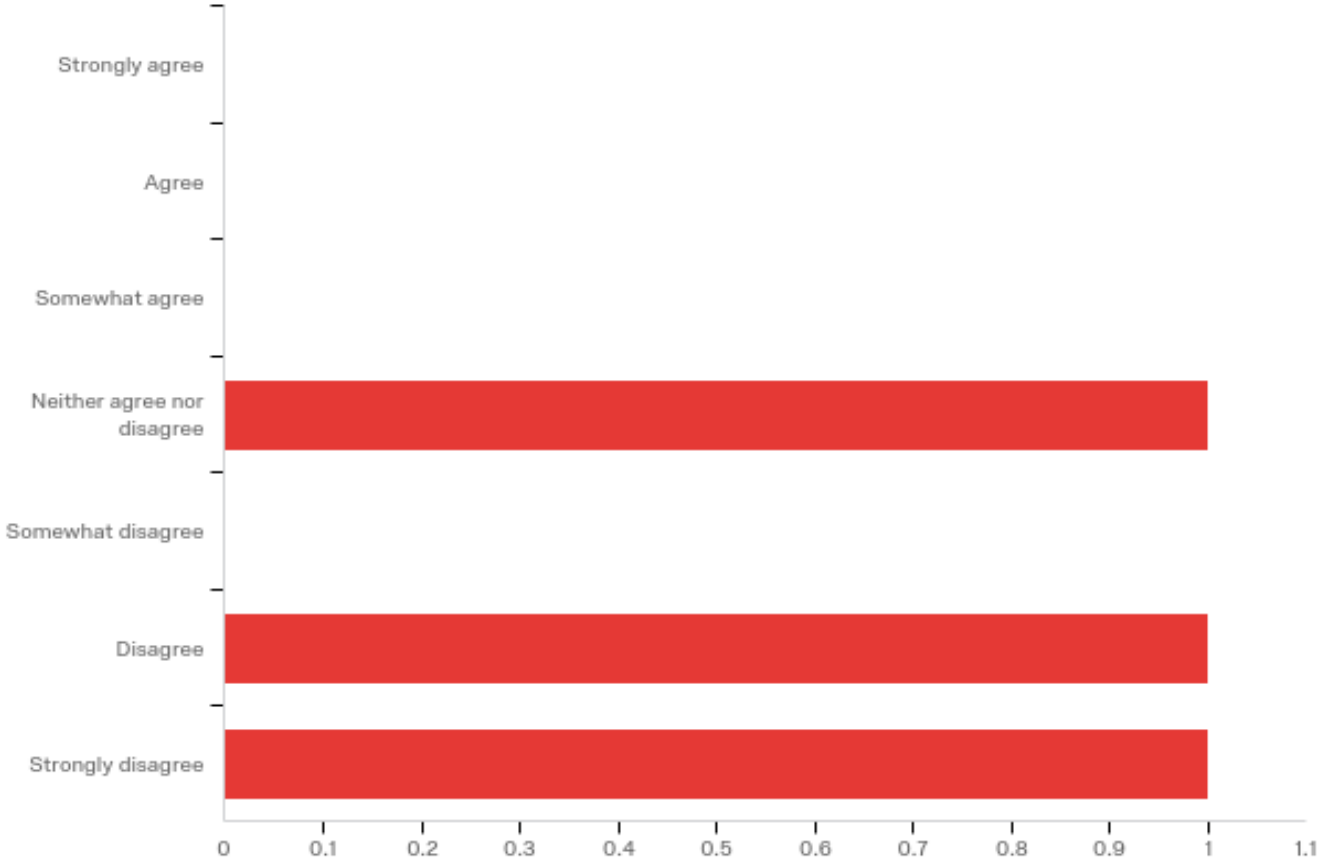
#	Answer	%	Count
1	Strongly agree	50.00%	1
7	Agree	0.00%	0
2	Somewhat agree	0.00%	0
4	Neither agree nor disagree	50.00%	1
5	Somewhat disagree	0.00%	0
3	Disagree	0.00%	0
6	Strongly disagree	0.00%	0
	Total	100%	2

Q8 - In the hours and days after my infant patient's death, I had trouble sleeping.



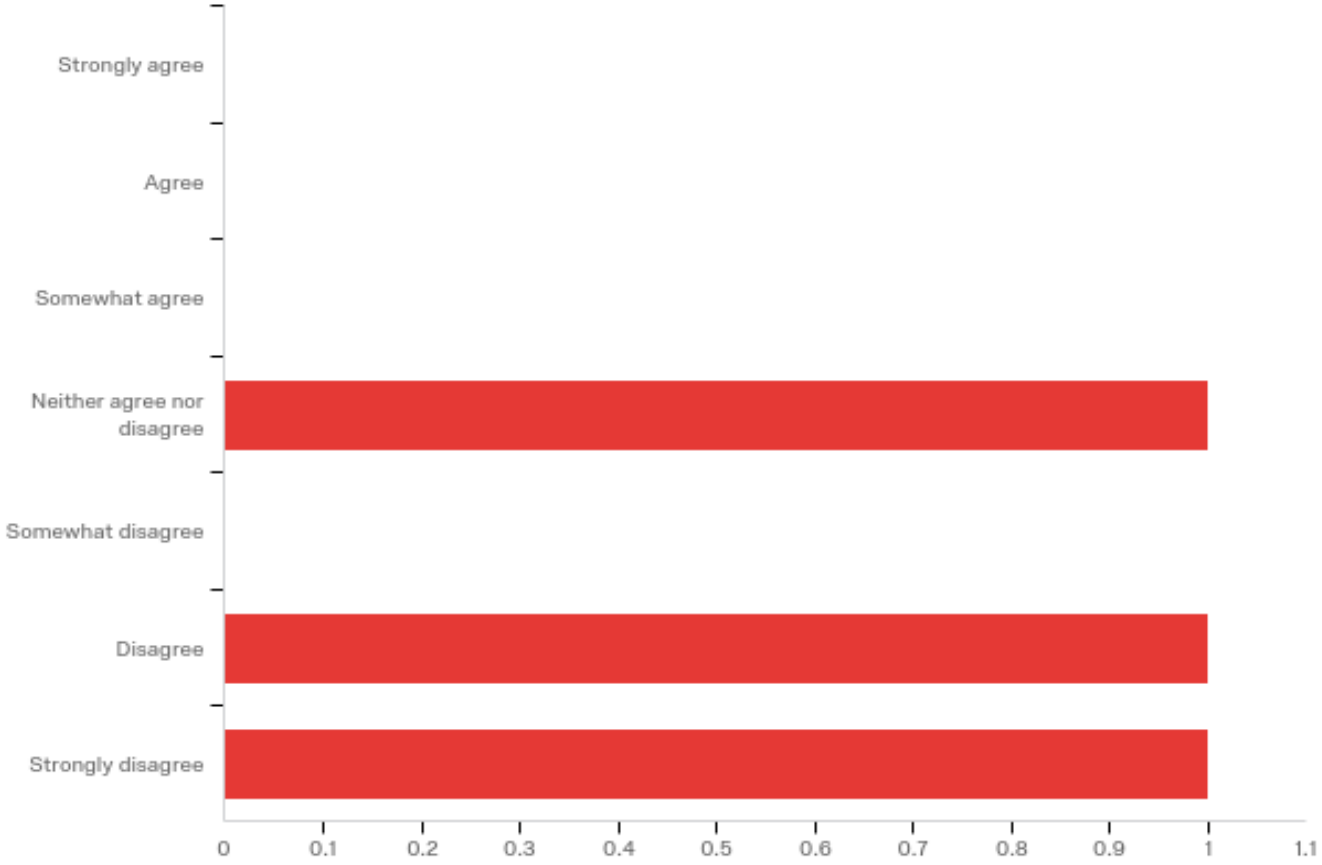
#	Answer	%	Count
1	Strongly agree	66.67%	2
2	Agree	33.33%	1
3	Somewhat agree	0.00%	0
4	Neither agree nor disagree	0.00%	0
5	Somewhat disagree	0.00%	0
6	Disagree	0.00%	0
7	Strongly disagree	0.00%	0
	Total	100%	3

Q9 - In the first hours and days after my infant patient's death, I was able to ask people who said or did things that made me feel bad to stop.



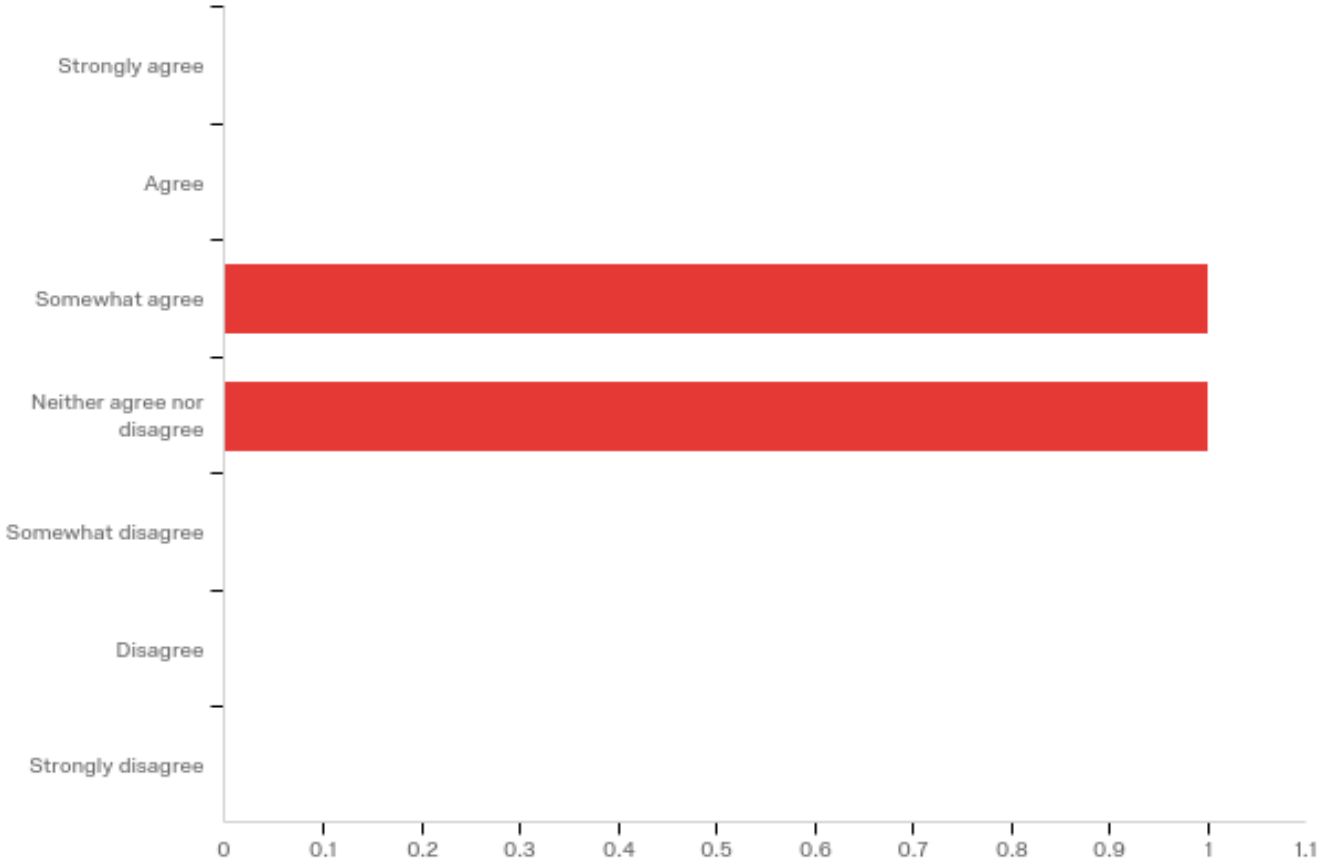
#	Answer	%	Count
1	Strongly agree	0.00%	0
2	Agree	0.00%	0
3	Somewhat agree	0.00%	0
4	Neither agree nor disagree	33.33%	1
5	Somewhat disagree	0.00%	0
6	Disagree	33.33%	1
7	Strongly disagree	33.33%	1
	Total	100%	3

Q10 - In the first hours and days after my infant patient's death, I was able to resolve problems if something happened that I did not like.



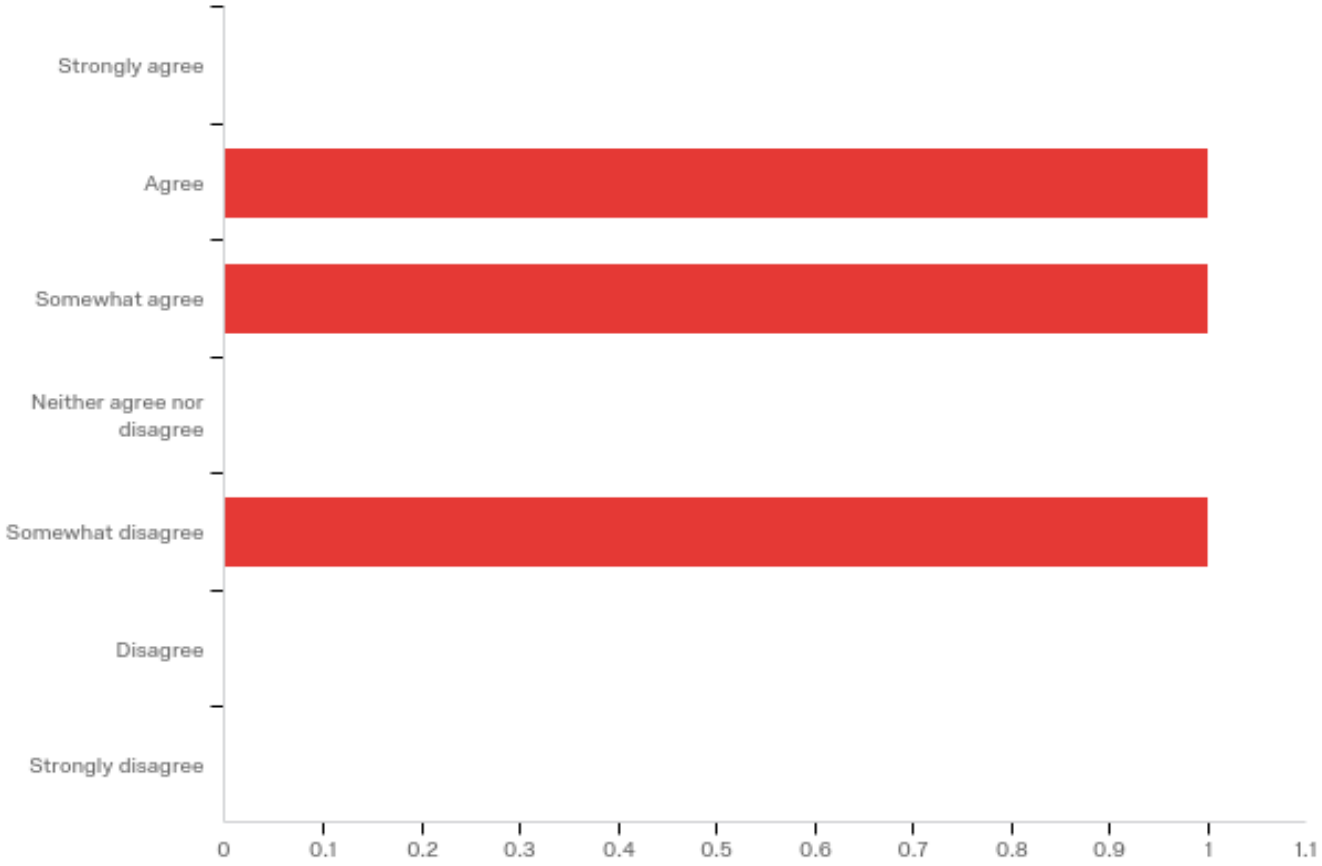
#	Answer	%	Count
1	Strongly agree	0.00%	0
2	Agree	0.00%	0
3	Somewhat agree	0.00%	0
4	Neither agree nor disagree	33.33%	1
5	Somewhat disagree	0.00%	0
6	Disagree	33.33%	1
7	Strongly disagree	33.33%	1
	Total	100%	3

Q11 - In later weeks after my infant patient's death, I was able to ask people who said or did things that made me feel bad to stop.



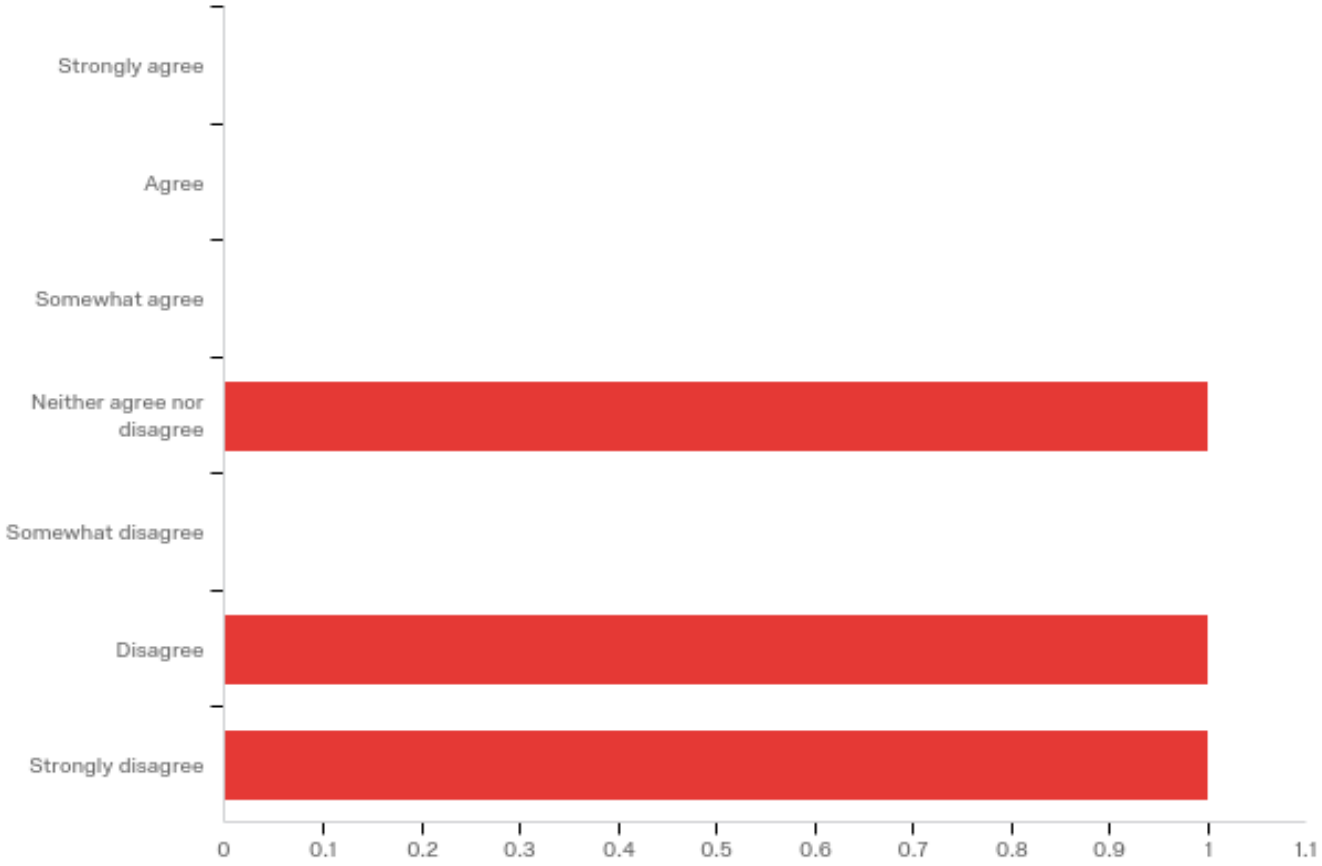
#	Answer	%	Count
1	Strongly agree	0.00%	0
2	Agree	0.00%	0
3	Somewhat agree	50.00%	1
4	Neither agree nor disagree	50.00%	1
5	Somewhat disagree	0.00%	0
6	Disagree	0.00%	0
7	Strongly disagree	0.00%	0
	Total	100%	2

Q12 - In later weeks after my infant patient's death, I was able to resolve problems if something happened that I did not like.



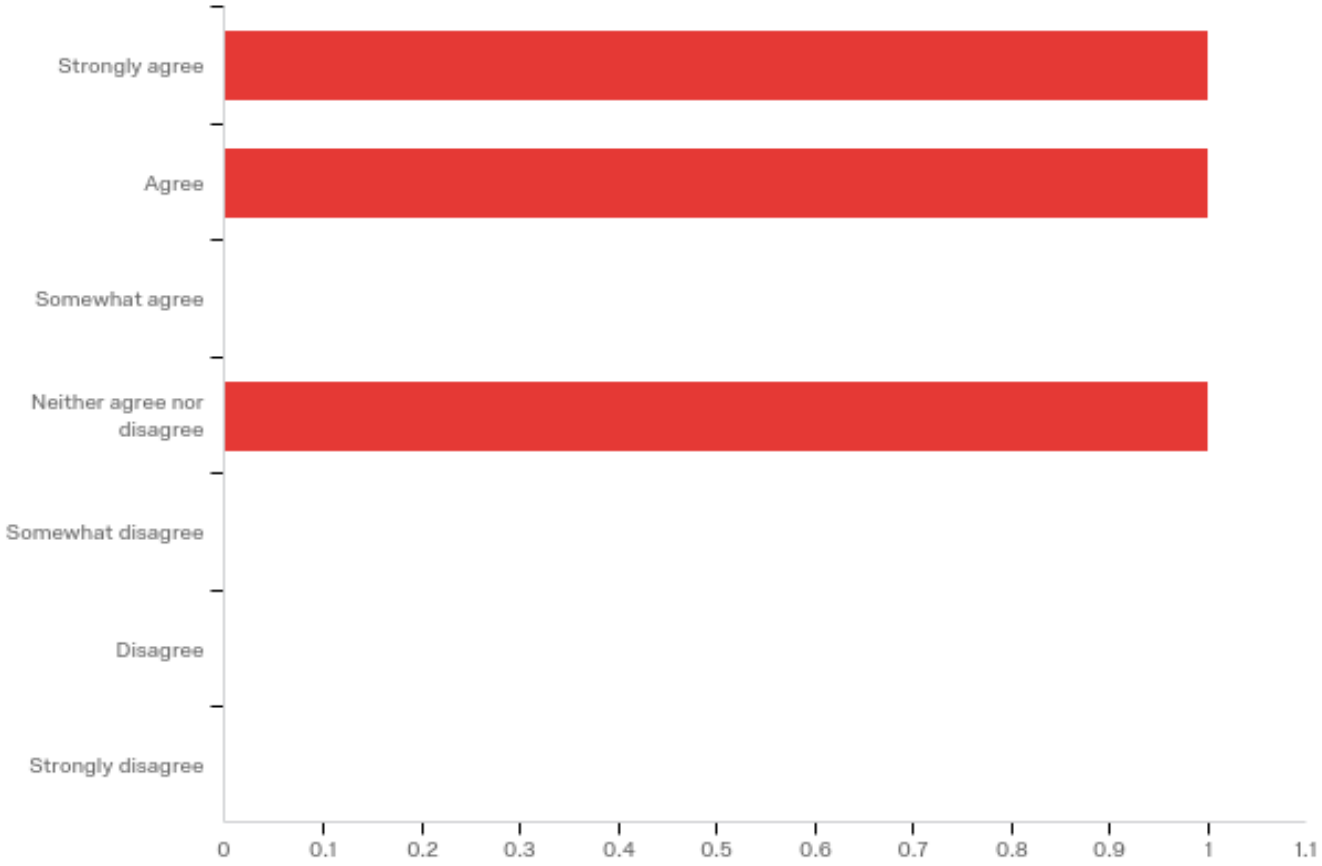
#	Answer	%	Count
1	Strongly agree	0.00%	0
2	Agree	33.33%	1
3	Somewhat agree	33.33%	1
4	Neither agree nor disagree	0.00%	0
5	Somewhat disagree	33.33%	1
6	Disagree	0.00%	0
7	Strongly disagree	0.00%	0
	Total	100%	3

Q13 - At the time of my infant patient's death, the infant mother's pregnancy did not seem real to me.



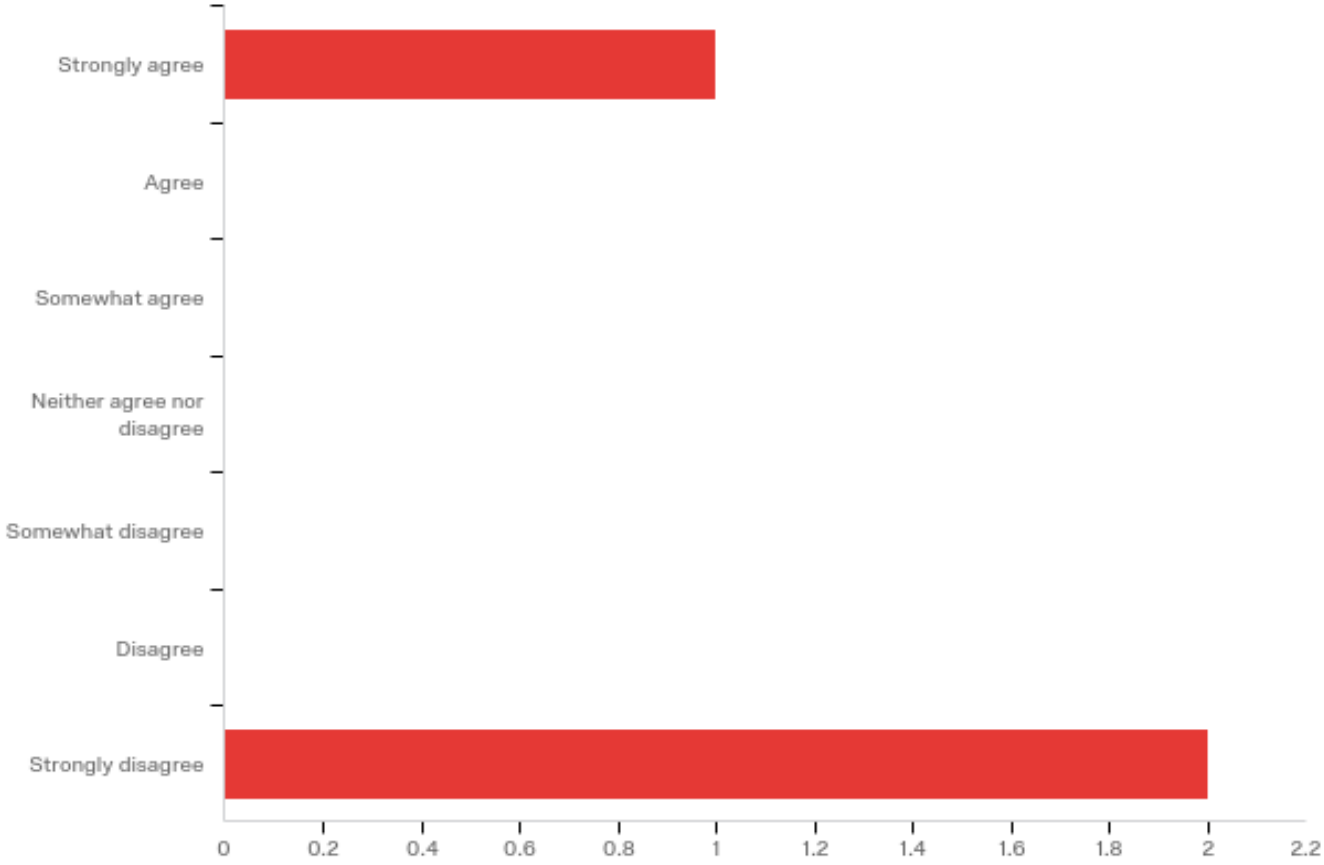
#	Answer	%	Count
1	Strongly agree	0.00%	0
2	Agree	0.00%	0
3	Somewhat agree	0.00%	0
4	Neither agree nor disagree	33.33%	1
5	Somewhat disagree	0.00%	0
6	Disagree	33.33%	1
7	Strongly disagree	33.33%	1
	Total	100%	3

Q14 - At the time of my infant patient's death, the mother's pregnancy and the infant's death seemed real to me.



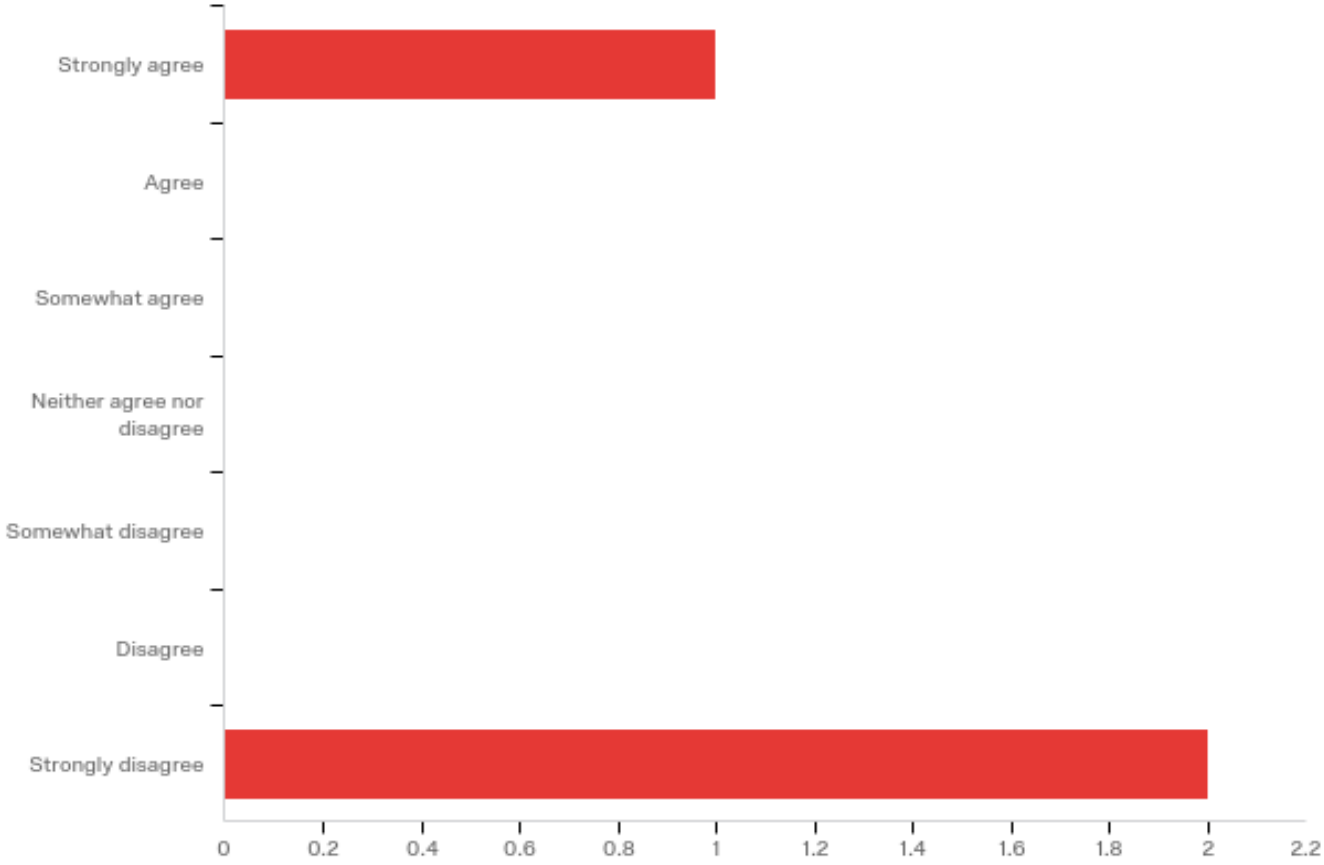
#	Answer	%	Count
1	Strongly agree	33.33%	1
2	Agree	33.33%	1
3	Somewhat agree	0.00%	0
4	Neither agree nor disagree	33.33%	1
5	Somewhat disagree	0.00%	0
6	Disagree	0.00%	0
7	Strongly disagree	0.00%	0
	Total	100%	3

Q15 - At the time of my infant patient's death, it seemed like the loss of the mother's pregnancy not the loss of the infant.



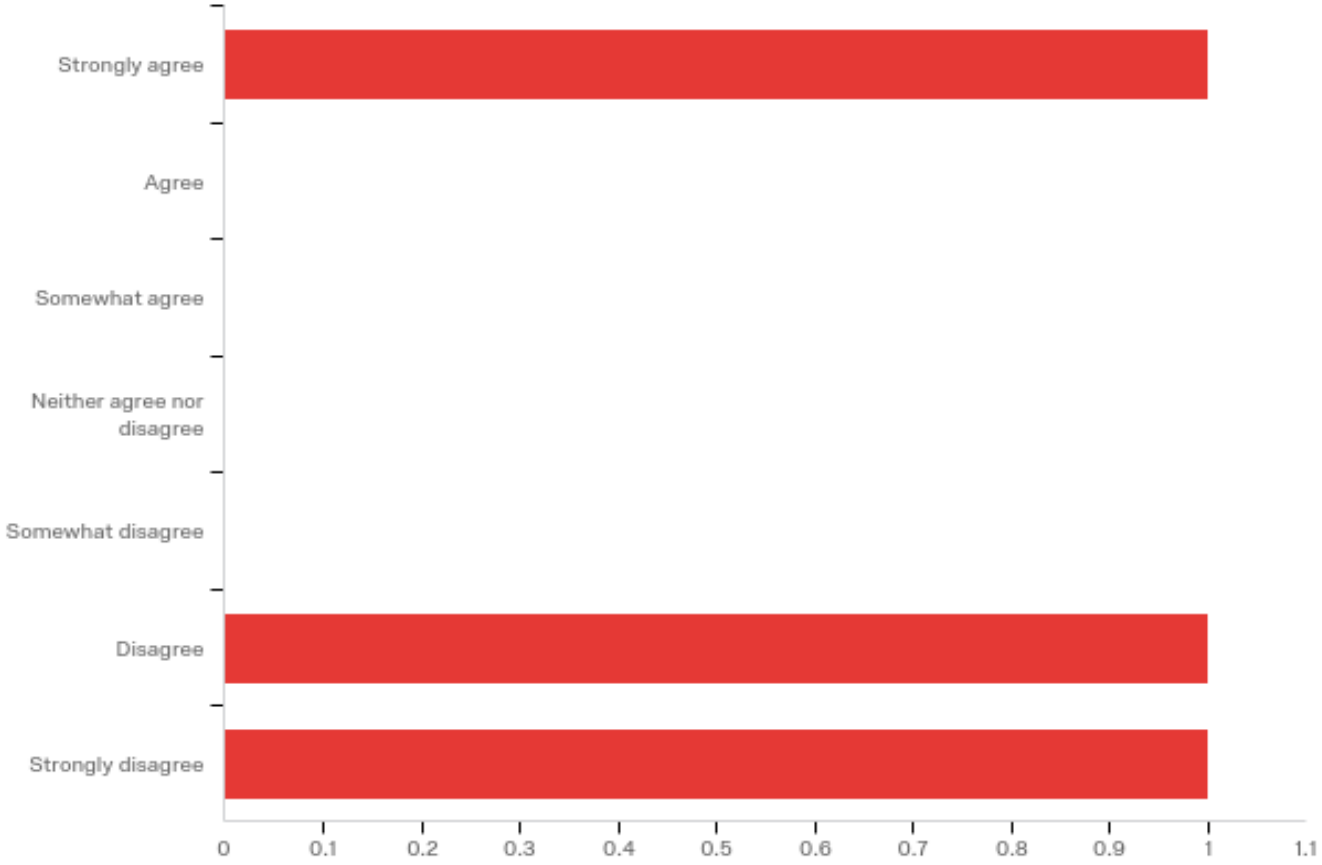
#	Answer	%	Count
1	Strongly agree	33.33%	1
2	Agree	0.00%	0
3	Somewhat agree	0.00%	0
4	Neither agree nor disagree	0.00%	0
5	Somewhat disagree	0.00%	0
6	Disagree	0.00%	0
7	Strongly disagree	66.67%	2
	Total	100%	3

Q16 - At the time of my infant patient's death, I did not think of the infant as a person.



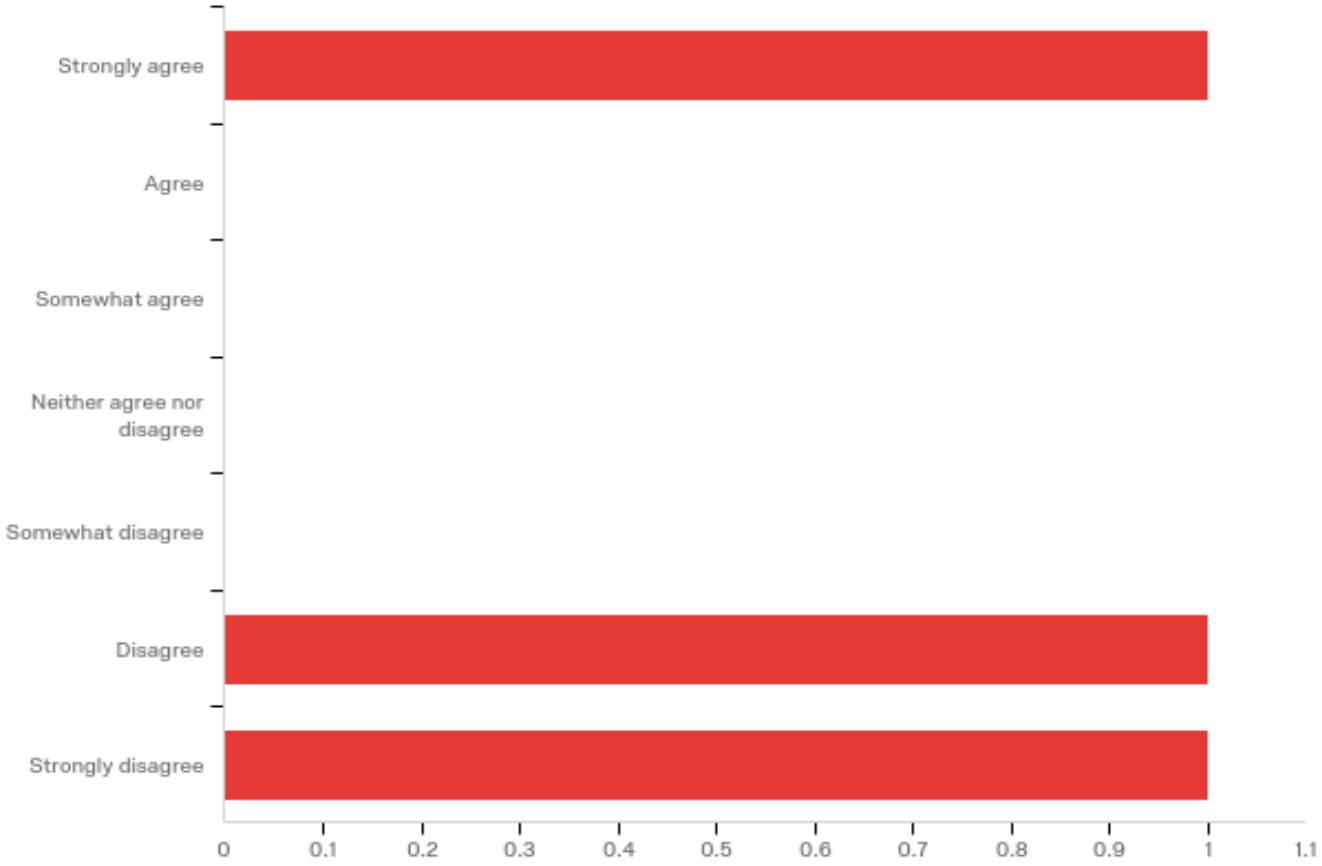
#	Answer	%	Count
1	Strongly agree	33.33%	1
2	Agree	0.00%	0
3	Somewhat agree	0.00%	0
4	Neither agree nor disagree	0.00%	0
5	Somewhat disagree	0.00%	0
6	Disagree	0.00%	0
7	Strongly disagree	66.67%	2
	Total	100%	3

Q17 - At the time of my infant patient's death, I did not think of the infant as having a personality yet.



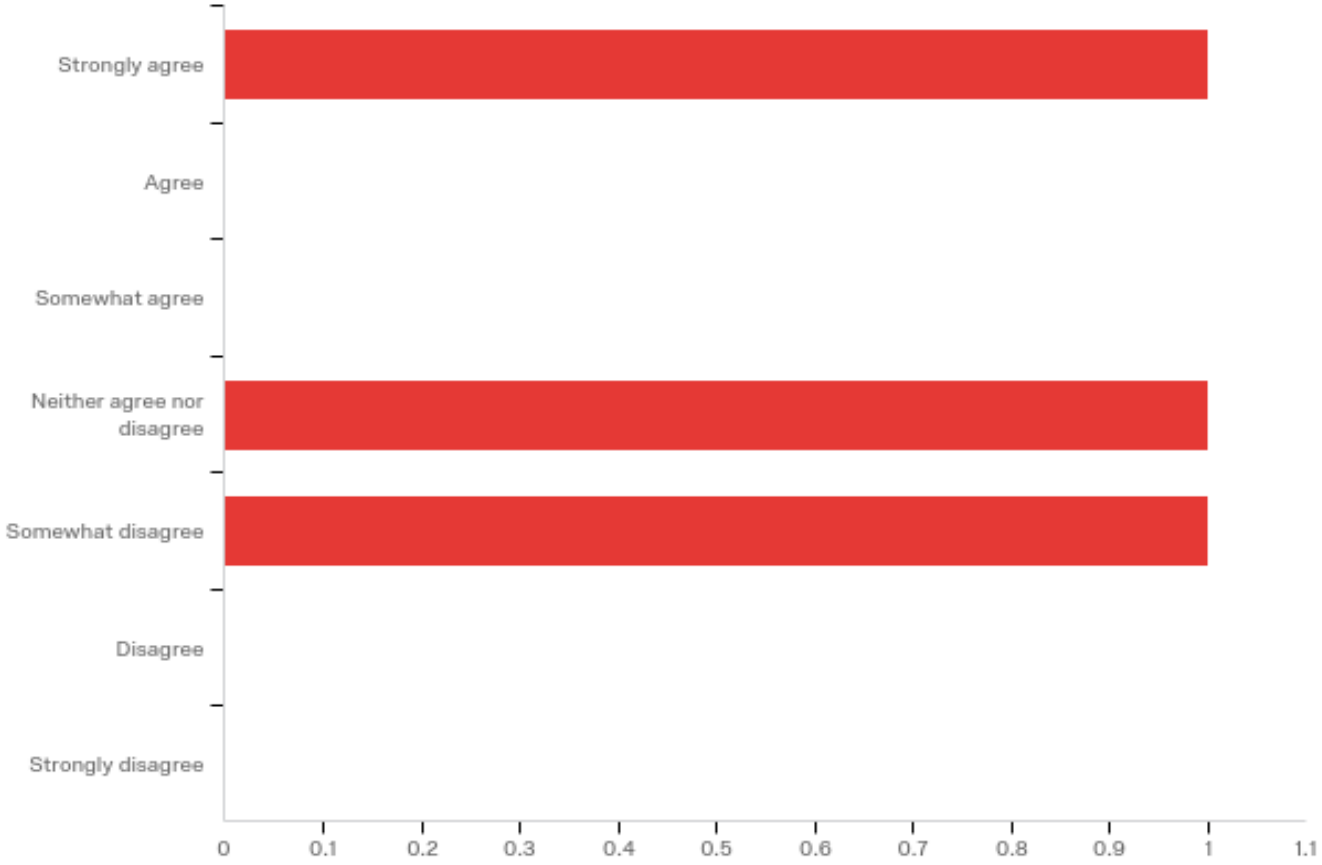
#	Answer	%	Count
1	Strongly agree	33.33%	1
2	Agree	0.00%	0
3	Somewhat agree	0.00%	0
4	Neither agree nor disagree	0.00%	0
5	Somewhat disagree	0.00%	0
6	Disagree	33.33%	1
7	Strongly disagree	33.33%	1
	Total	100%	3

Q18 - At the time of my infant patient's death, I did not think of the mother as having lost a son or daughter.



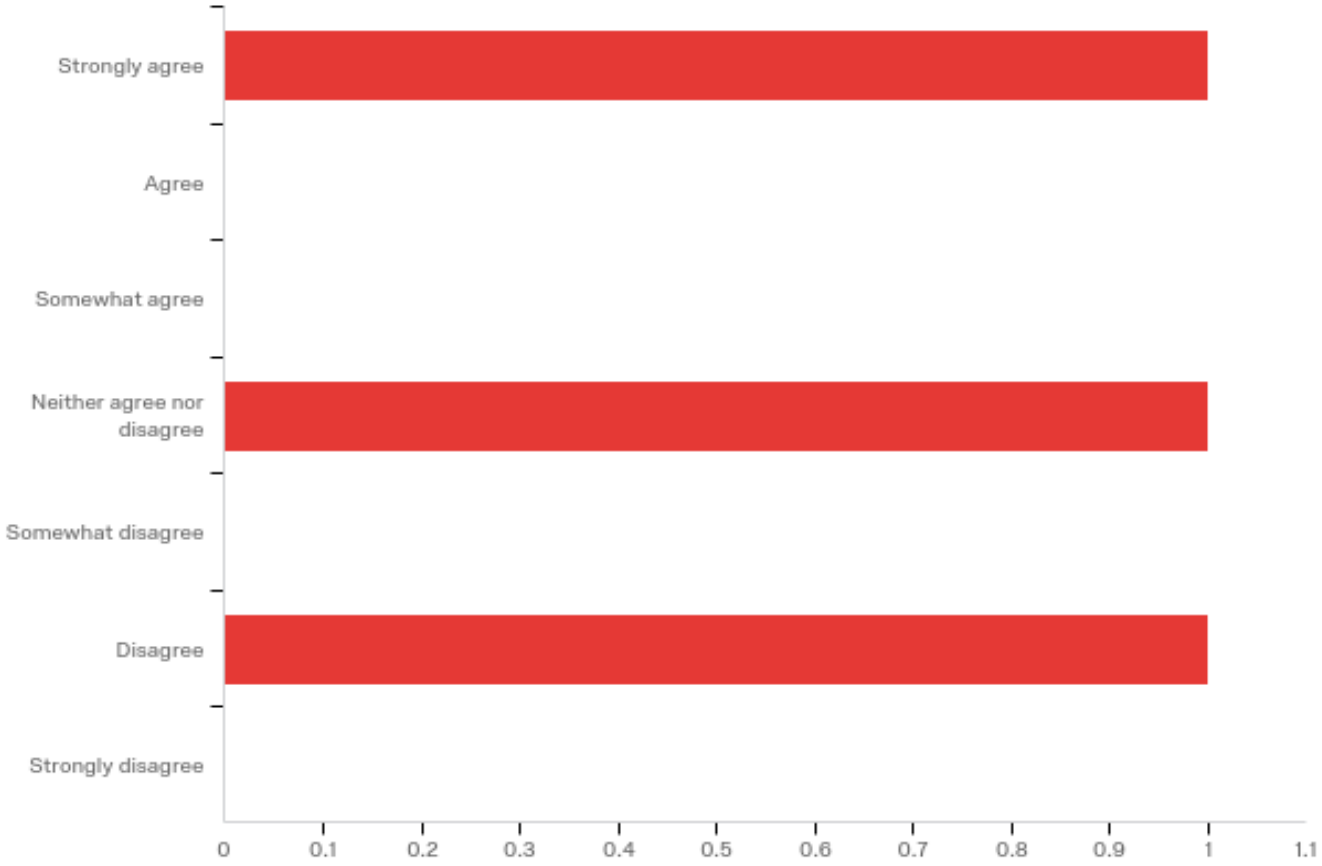
#	Answer	%	Count
1	Strongly agree	33.33%	1
2	Agree	0.00%	0
3	Somewhat agree	0.00%	0
4	Neither agree nor disagree	0.00%	0
5	Somewhat disagree	0.00%	0
6	Disagree	33.33%	1
7	Strongly disagree	33.33%	1
	Total	100%	3

Q19 - I believe there is a genetic component that increased the morbidity and mortality of my infant patients who have died.



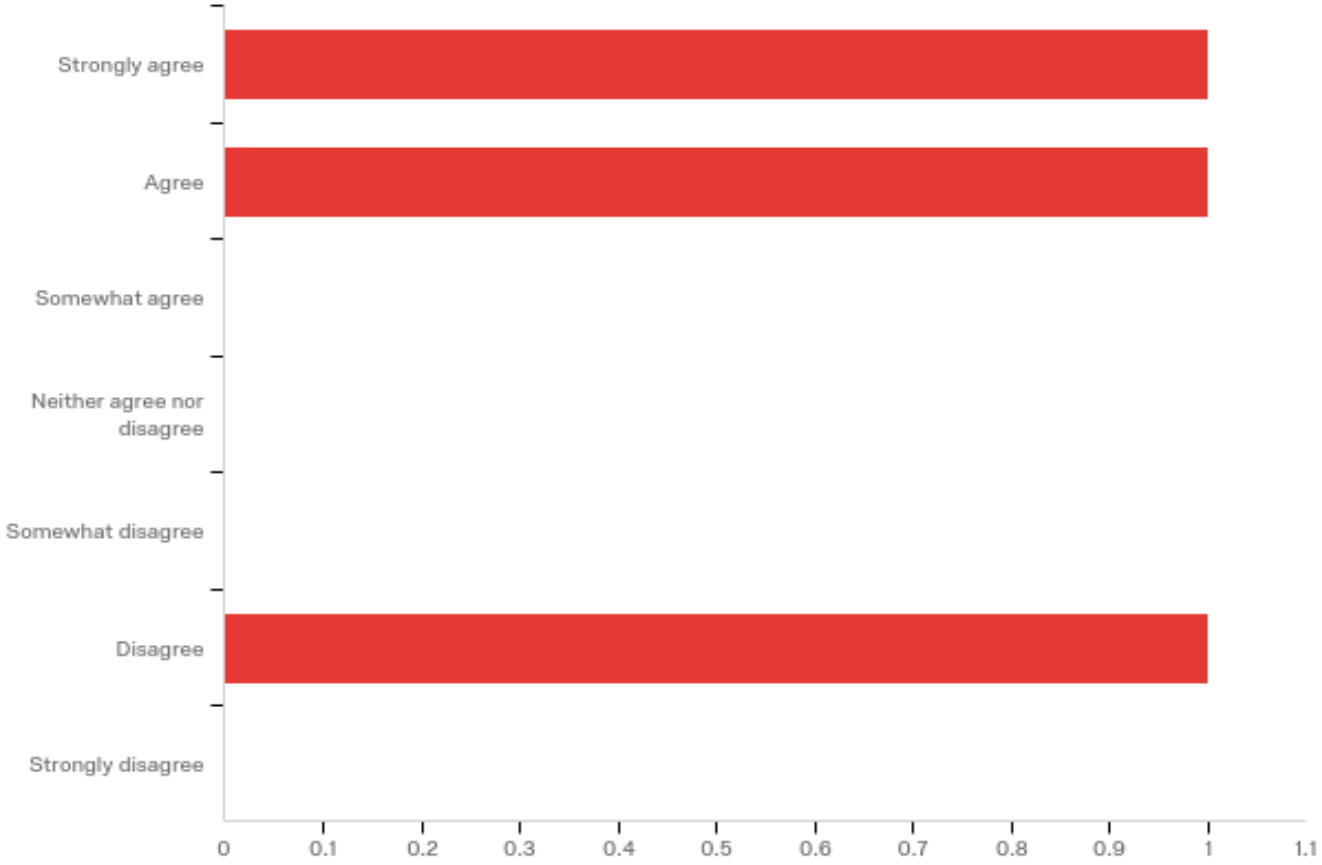
#	Answer	%	Count
1	Strongly agree	33.33%	1
2	Agree	0.00%	0
3	Somewhat agree	0.00%	0
4	Neither agree nor disagree	33.33%	1
5	Somewhat disagree	33.33%	1
6	Disagree	0.00%	0
7	Strongly disagree	0.00%	0
	Total	100%	3

Q20 - I believe there is a higher incidence of mortality among African American infants as opposed to other ethnic groups.



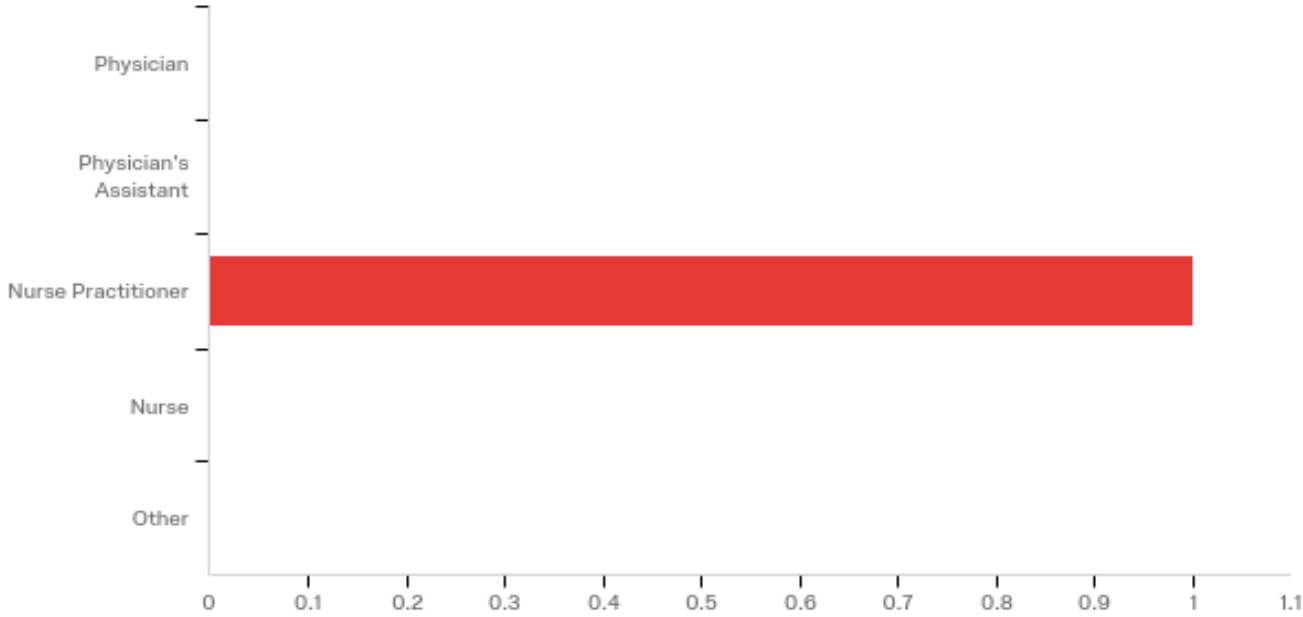
#	Answer	%	Count
1	Strongly agree	33.33%	1
2	Agree	0.00%	0
3	Somewhat agree	0.00%	0
4	Neither agree nor disagree	33.33%	1
5	Somewhat disagree	0.00%	0
6	Disagree	33.33%	1
7	Strongly disagree	0.00%	0
	Total	100%	3

Q21 - I believe that African American infants have a genetic component that increases their incidence of infant mortality.



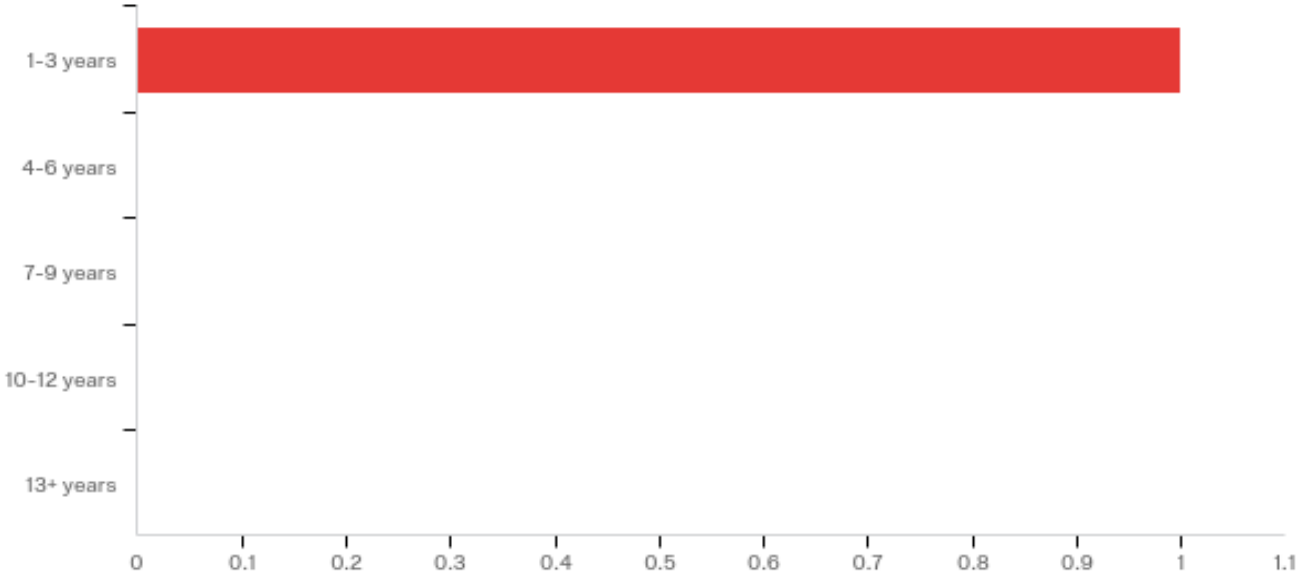
#	Answer	%	Count
1	Strongly agree	33.33%	1
2	Agree	33.33%	1
3	Somewhat agree	0.00%	0
4	Neither agree nor disagree	0.00%	0
5	Somewhat disagree	0.00%	0
6	Disagree	33.33%	1
7	Strongly disagree	0.00%	0
	Total	100%	3

Q22 - What is your general clinical role?



#	Answer	%	Count
1	Physician	0.00%	0
2	Physician's Assistant	0.00%	0
3	Nurse Practitioner	100.00%	1
4	Nurse	0.00%	0
5	Other	0.00%	0
	Total	100%	1

Q23 - How many years of experience do you have in your current clinical role?



#	Answer	%	Count
1	1-3 years	100.00%	1
2	4-6 years	0.00%	0
3	7-9 years	0.00%	0
4	10-12 years	0.00%	0
5	13+ years	0.00%	0
	Total	100%	1

Appendix C

Mail-Shirleen-Chase@mocs.utc.edu

DHON Thesis Help

Wed 10/11/2017 9:54 am

To: Chase, Shirleen <Shirleen-chase@utc.edu

Dr. Chase,
I have finished collecting my data from the survey that I sent out regarding infant mortality and epigenetic components for my Departmental Honors. Since we last met in the spring, Dr. Kemplin and I changed my study from qualitative to quantitative and sent out a survey asking clinicians about their experiences and opinions with African American infant mortality. Dr. Kemplin said I can write my thesis on the descriptive aspects of the survey; however, I am confused on how to get started, what needs to be included, and how to format my thesis. Would you be willing to meet tomorrow to discuss this with me? I can bring my data results and if you need anything else to get more of a background about this subject, please let me know.

Thank you,
Kathryn Messier