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Depression Screening by University COVID-19 Contact Tracers: Is It Feasible?

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Depression Screening by University COVID-19 Contact Tracers: Is It Feasible?

A Scholarly Project Presented to the Faculty of the

Nicole Wertheim College of Nursing and Health Sciences

Florida International University

In partial fulfillment of the requirements

For the Degree of Doctor of Nursing Practice

By

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Supervised By

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Approval Acknowledged: _____ DNP Program Director

Date: August 20th, 2021

ABSTRACT OF DISSERTATION

DEPRESSION SCREENING BY UNIVERSITY COVID-19 CONTACT TRACERS

By

Lazara Medina

Florida International University, 2020

Miami, Florida

Professor Dr. Ellen Brown

The purpose of this DNP Project was to explore the feasibility of implementing a depression screening protocol as a component of COVID-19 contact tracing procedures. Multiple studies have established that in young adults, depression prevalence has increased during the pandemic. A cross-sectional 18-item survey was developed and administered with a convenience sample of contact tracers and administrators at a large public university. The transtheoretical model (also known as the stages of change model) developed by Drs. Prochaska and Diclemente (1992) guided the development of several survey items. Eleven people completed the web-based survey. Participants reported depression was a significant problem among persons contacted during contact tracing interviews. Several contact tracers "contemplated" the need to include depression screening as part of the contact tracing interview but did not feel comfortable screening and referring individuals with a positive screen. A number of steps were identified by the survey respondents to "prepare" for mental health screening activities including staff education, a mental health referral list, and a readily available evidence-based screening measure. Further investigation will be needed to develop staff training and support for depression screening procedures during contact tracing.

Keywords: COVID-19, coronavirus, contact tracing, depression, university, barriers

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Introduction

To date, more than 36 million people have been identified with coronavirus, and more than 633,000 have died from the virus in the United States (Ritchie, 2021). Worldwide cases increased to more than 204 million, which resulted in more than 4 million deaths (Ritchie, 2021). COVID-19 has affected every part of life. Although the overall impact of COVID-19 on mental health is unknown (Czeisler et al., 2020), it is generally agreed that social isolation due to stay-at-home orders and physical distancing regulations have impacted overall emotional health and well-being (Singhal, 2020). It is significant that a 2020 systematic review of 12 community-based studies from January 1, 2020, to May 8, 2020, reported an overall depression prevalence of 25% during the coronavirus pandemic, indicating an increase prevalence compared to pre-pandemic estimates (Bueno-Notivol et al., 2021).

Background

The purpose of the following literature review was to define depression, examine what is known about the prevalence of depression among persons with COVID-19 and specifically among university students, describe commonly used depression screening measures and the role of contact tracers.

Prevalence of Depression

Depression is a term that includes many depressive conditions, including minor depression, major depressive disorder (MDD), and persistent depressive disorder (dysthymia) (Bylsma & Panaite, 2013). Individuals suffering from depression experience a lack of interest, sadness, decreased energy, sleep disturbances, changes in weight, feelings of loss, and worthlessness. Approximately 75% of individuals suffering from untreated depression will experience future episodes. The length of major depressive episodes varies, but the average

duration is estimated to be 6 to 8 months (Bylsma & Panaite, 2013). Persons suffering from depression are at risk for obesity, insomnia, substance or drug abuse, anxiety, social isolation, suicidal ideation, and suicide.

Depression was a common health problem for university students before COVID-19 (Ibrahim et al., 2012). The prevalence of depression varies by the population, place of study, socio-demographic factors, sampling, and diagnostic tool used (Weissman et al., 1996). According to a systematic review, the prevalence of depression in university students from 1990 to 2010 fluctuated from 10% to 85% with a mean prevalence of 30.6% (Ibrahim et al., 2012). These results indicate that students at universities experience higher rates of depression compared to the rest of the population.

According to the findings of the United States National Health and Nutrition Examination Survey (2018), from 2013 to 2016, 8.1% of Americans 20 years old or older were depressed for 2 weeks or more. Women were about twice as likely as men to be depressed. The prevalence of depression decreased with high-income levels. The prevalence of depression was higher among the Hispanics (8.2%), non-Hispanic Black (9.2%), and non-Hispanic White (7.9%) adults compared to non-Hispanic Asian adults who had the lowest depression prevalence (3.1%) (Brody et al., 2018).

Multiple studies (Ahmed et al., 2020; Bueno-Notivol et al., 2021; Ettman et al., 2020; Jia et al., 2020) have established the prevalence of depression among positive COVID-19 individuals. Ettman et al. (2020) conducted a study to compare the prevalence of depression before and during COVID-19 pandemic. The study involved 1441 participants during the pandemic and 5065 participants from before the pandemic older than 18 years of age. In this research, Ettman and his team used the nine-item Patient Health Questionnaire (PHQ-9) tool to

assess depression. The researchers found that the prevalence rate of depression during coronavirus pandemic increased more than threefold to 48.5 %. In addition, the study revealed that individuals experiencing economic and social challenges were at the highest risk for depression.

In their study, Jia et al. (2020) evaluated community members' mental health residing in United Kingdom during the COVID-19 pandemic. This survey involved 3097 participants older than 18 years with a mean age of 44 years. The results from the study revealed that 64% of the respondents reported symptoms of depression. Groups recognized being at higher risk for depression were women, young adults, and individuals at higher risk for coronavirus disease.

The study conducted by Bueno-Notivol et al. (2021) also explored the prevalence of depression in adults. These investigators conducted a systematic review of 12 community-based studies from January 1, 2020, to May 8, 2020, that described the prevalence of depression during COVID-19. The number of participants ranged from 600 to 7236, with a mean age from 32.2 to 49.1 years. All the studies used online questionnaires with standardized scales; the most common was the PHQ-9. The results from the study revealed that the pooled prevalence of depression was 25%. The researchers concluded that compared to the global estimates of depression of 3.44% in 2017, the pooled prevalence of 25% was seven times higher than before the pandemic, suggesting an important impact of coronavirus on the mental health of the general population.

The Ahmed et al. (2020) study assessed the mental health needs of 1074 Chinese individuals aged from 14 to 68 years old during COVID-19 by conducting an online survey that included the Beck Anxiety Inventory (Beck & Steer, 1993), the Beck Depression Inventory (Beck et al., 1996), and the Alcohol Use Disorder Identification Test (Saunders et al., 1993). Results from the study revealed higher prevalence for depression (37.1%) related to lockdown

measures during coronavirus pandemic. Also, the population aged 21 to 40 years had higher prevalence rates of anxiety, depression, and alcohol abuse than expected.

Several studies examined the prevalence of depression globally during previous epidemics outbreaks, such as SARS and Ebola, the prevalence rates of depression in the overall population fluctuated from 3% to 73.10% (Chew et al., 2020). However, previous pandemics were controlled sooner, and infection rates were lower, which may explain the higher rates of depression during COVID-19 (Huremović, 2019).

According to an online survey study in May 2020 of 4132 health responders living in Kuwait aged 18 years old and older, responders younger than 30 years old were at the highest risk of depression, and people with a high-school degree were more depressed than university and postgraduate students (Burhamah et. al, 2020). A systematic review of 19 studies by Xiong et al. (2020) found that the prevalence of depression ranged from 14.6% to 48.3% in the general population during the COVID-19 pandemic in China, Spain, Italy, Iran, the U.S., Turkey, Nepal, and Denmark. Several factors were found to increase depression, including being female or being less than 40 years old, having a history of mental health or chronic illness, unemployment, student status, use of social media, and prolonged time following the news regarding COVID-19 (Xiong et al., 2020). Overall, studies have reported very wide ranges for depression prevalence during the pandemic, but there is agreement among them that the prevalence of depression was lower before the pandemic. Additionally, women and younger populations were at highest risk.

Recommendations for Depression Screening

The U.S. Preventive Services Task Force (USPSTF) and the American Academy of Family Physicians recommend screening for depression in the general adult population. Depression screening is recommended for all adults older than 18 years. There is a shortage of

evidence to recommend one screening instrument over another. The USPSTF found sufficient evidence that programs linking screening for depression with support systems in place improves clinical results in adults. The two-item and nine-item Patient Health Questionnaires (PHQs) are the most commonly used depression screening tools (Siu et al., 2016). However, the PHQ-2 depression screening tool might be more appropriate for busy settings. The PHQ-2 inquiries about the frequency of a depressed mood and anhedonia over the past 2 weeks, scoring each as 0 ("not at all") to 3 ("nearly every day"). A PHQ-2 score of 3 or greater has a sensitivity of 83% and a specificity of 92% for major depression disorder (Kroenke et al., 2003).

The PHQ-2 is recognized as an early screening tool in individuals older than 18 years. If depression is detected, the PHQ-9 screening tool can then be completed to establish whether the individual meets the criteria for depressive disorder (Siu et al., 2016). The PHQ-2 and PHQ-9 are openly accessible; no special permission is required to use, reproduce, or distribute the tools. Also, these tools are free of charge and can be included in electronic medical records. The PHQ-2 and PHQ-9 screening tools can be completed using smartphone applications and phone calls (Pinto-Meza et al.,2005). Results from several studies have demonstrated that these methods generate similar results to being administered in person. PHQ-2 and PHQ-9 are available in multiple languages at www.phqscreeners.com (New York State Department of Health, 2016).

The 4-item Patient Health Questionnaire (PHQ-4) is a screening measure that consists of a total of four items; two depression items (PHQ-2) and the two items generalized anxiety disorder tool (GAD-2) (Löwe et al., 2010). The PHQ-4 tool serves as a general marker of mental distress. The PHQ-4 screening may be useful as a brief screening tool for a very busy unit concerned with screening cases of anxiety and depression. Individuals with a positive PHQ-4 screening result should be referred for further evaluation (Kroenke et al., 2009).

Contact Tracers

In April 2020, the United States had approximately 11,142 contact tracers, which were not enough to contain the outbreak of the pandemic (Simmons-Duffin, 2021). The country needed to hire more than 100,000 contact tracers during the height of the pandemic. By the end of December 2020, the contact tracing workforce increased from 11,000 to more than 70,000 (Simmons-Duffin, 2021). During the COVID-19 pandemic, contact tracing protocols have been used to distinguish people who have been or probably were infected with COVID-19 and quarantine them from others. Contacts are tracked by contact tracers and are asked to recall and identify their contacts within 2 days before the onset of symptoms until they were quarantined (CDC, 2020).

The CDC has trained contact tracers for more than 40 years. According to the CDC, contact tracers need to complete disease-specific training. Additionally, contact tracer training includes interview techniques, specific protocols (including the referral of individuals to clinicians or support services), and privacy management (CDC, 2020). The CDC website provides "COVID-19 Contact Tracing Guidance and Resources."

Contact tracers are often but are not required to be healthcare professionals but need to have cultural sensitivity, excellent interpersonal, and interviewing skills (CDC, 2020). They are required to have skills such as how to counsel during a crisis and the capacity to refer individuals if further care is needed (CDC, 2020). In the United States, contact tracers were required for tuberculosis (TB), human immunodeficiency virus (HIV), and sexually transmitted infections (STDs) (Armbruster & Brandeau, 2007). In addition, contact tracers have been used for smallpox, severe acute respiratory syndrome (SARS), mouth and foot diseases, and avian influenza (Armbruster & Brandeau, 2007).

A usual day for a contact tracer includes making phone calls, collecting data, and conducting interviews that would include collecting demographic and clinical information including the individuals' name, date of birth, home address, symptomatology, and the names of people that the person has been in close contact with. Contact tracers work in a fast-paced environment where time management skills are essential to precisely collect and document the large amount of data.

In summary, due to the high prevalence rates of depression among university-aged adults with COVID-19, exploration of the feasibility of integrating mental health screening during contact tracing interviews is warranted.

Purpose

The purpose of this DNP Project was to explore the perspective of staff from a large public university contact tracing unit on the feasibility of including depression screening during routine COVID-19 contact tracing calls.

Research Questions

1. Is it feasible to include depression screening and make mental health referrals during contact tracing interviews?
2. What are current barriers to implement depression screening during contact tracing?
3. What are some strategies to implement depression screening during contact tracing?

Methodology

Study Design

The methodology used for this DNP project was a cross-sectional survey conducted with a convenience sample. The protocol for this project was approved by the university Institutional Review Board (IRB).

Setting

The setting for this DNP project was a large public university in the southeast. The student population was nearly 54,000 (Florida International University, n.d.). The school serves a diverse community of students, the majority of whom are Hispanic (61%), followed by White non-Hispanic (15%), Black (13%), Asian or Pacific Islander (4%), and other minority groups (7%) (Florida International University, n.d.).

Sample

All participants working on the COVID-19 response team or within the contact tracing unit were eligible to participate.

Procedures

Emails with the study flyer were sent to all potential participants by the unit administrator. The study flyer included a direct link to the study informational letter and survey. Once individuals completed the 18-item survey, investigators had access to the answers provided in Qualtrics. Investigators were not able to identify the identity of individuals.

Survey

An 18-item survey was developed to address the research questions. The survey consisted of four parts: demographics, perceptions about implementing mental health screening during contact tracing interviews, mental health screening tools, and potential barriers to screening and

referral. Demographic items included the participants' role at the university, professional license, and contact tracer experience. Participants were asked about their comfort in administering and scoring the PHQ-4. The PHQ-4 was provided for review because it was unknown if participants were familiar with this screening instrument. Although, this DNP Project was focused only on depression, another DNP Project was focused on anxiety and anxiety screening. Therefore, several survey items seek to gain insight on overall mental health screening.

A conceptual model, the transtheoretical model (TTM) (Prochaska & DiClemente, 1992), was used to guide the development of the survey. TTM, or the stages of change model, involves the progression through multiple stages. TTM is based on research done on addictive behaviors and the assumption that people do not change behaviors abruptly. Rather, people change behaviors through a cyclical process moving through multiple stages of change: pre-contemplation (no intention to change behavior or unaware of a problem), contemplation (aware that the problem exists and thinking about change but not committed to it), preparation (intending to act soon), action (modification of behavior), maintenance (prevention of relapse and consolidation of gains), and relapse (Prochaska & DiClemente, 1992).

Consistent with the research conducted by Brown et al. (2004) focused on readiness of home healthcare nurses to conduct depression screening, a goal was to categorize participants into one of three stages regarding depression screening. Since depression screening was not being conducted, the application of the pre-contemplation, contemplation, and preparation stages was most relevant. According to TTM, in the pre-contemplation stage, individuals have not considered that there is a reason to change. The survey included several questions to determine if the participants believed there was a problem or a reason to add depression screening to their routine procedures. The survey items included: Do you think that mental health issues are a

problem among positive COVID-19 individuals in the community? What percentage of the individuals with COVID-19 interviewed do you think are depressed? If individuals did not consider that there was a significant problem with depression or mental health, they were categorized as "pre-contemplators."

It is at the stage of "contemplation" (Prochaska & DiClemente, 1992) that the individual becomes aware of the existence of a problem. This stage is where the individuals recognize the advantages and disadvantages of change and feel torn about making a change. The survey included the following items focused on "contemplating" change: Have you ever thought about implementing depression screening in the context of contact tracing? What barriers would be encountered implementing depression screening during contact tracing interview? If individuals did consider that there was a significant problem with depression or mental health and had thought about implementing depression/anxiety screening in the context of contact tracing, they would be categorized as "contemplators."

In the preparation stage, individuals have made a commitment to change behavior and accept the responsibility for doing so (Prochaska & DiClemente, 1992). The survey included the following items focused on the "preparation" stage: After reviewing the PHQ-4, how comfortable are you performing screening for depression? If there is a positive screen for depression, are you prepared to make referrals for mental health services? If the individuals were comfortable performing screening for depression, and if they were prepared to make referrals for mental health services, they would be categorized as "persons preparing to take action."

Data Management and Analysis

The data was collected, stored, and analyzed using the Qualtrics server (password protected). The data analysis included the use of descriptive statistics to describe the

individuals' survey items. To examine the feasibility of including depression screening during contact tracing interviews, participants were classified into three groups based on the TTM (i.e., pre-contemplators," "contemplators," and "persons preparing to take action") as previously described.

Results

Eleven participants responded to the survey. Of the 11, five self-identified as contact tracers and one as an administrator (five people did not respond). Of the five contact tracers, three had previous experience (5 years; 4 years; 10 months), and two did not have previous experience as contact tracers.

Mental Health Significance and Screening

Four participants responded to the item inquiring about the significance of mental health issues among positive COVID-19 individuals at the university. One participant responded that the significance was 5, another responded 6, and two participants responded 7 on a scale from 0 to 10 where 0 = *non-significant* and 10 = *very significant*.

Four participants responded to the item inquiring about the percentage of individuals that participants thought were depressed during contact tracing interviews. Their responses were 10%, 25%, 45%, and 60% depression prevalence.

Three participants had considered conducting depression screening as part of the contact tracing interview, and two had not considered conducting depression screening as part of the contact tracing interview (six people did not respond to the item).

Current Barriers

Five participants identified multiple barriers to conduct depression screening during contact tracing interviews, including lack of cooperation by participants, lack of time, and lack of

training (six participants did not answer the item). Four participants reported that it is feasible to include the PHQ-4 screening tool during the interviews (seven did not answer). Two of the responders reported that "contact tracers are not prepared to refer a patient with a positive screening;" two answered that "contact tracers are prepared to refer individuals with positive screening;" and seven did not answer.

The two participants indicating contact tracers are not prepared to refer individuals with a positive PHQ-4 reported that making mental health referrals would require a list of campus mental-health services, local health services, web-based services, educational materials, and additional training. Participants were asked to indicate all of the reasons why mental health screening was not being conducted. Five participants thought mental health screening during contact tracing interviews has not been done for multiple reasons including "no screening tools available on current tracing form"; "not sure what to do with a positive screen;" "not familiar with the resources at the university and local resources;" "not enough time;" "inconsistency with the overall goal of contact tracing, and lack of support from leadership."

Four participants agreed with conducting mental health screening during contact tracing interviews but thought training was necessary to implement screening procedures. Specifically, participants reported that adding screening tools to the current electronic-based system, education on how to score the tool, and more time was needed to conduct depression screening (seven people did not answer this survey item).

Discussion

Consistent with the literature (Ahmed et al., 2020; Bueno-Notivol et al., 2021; Ettman et al., 2020; Jia et al., 2020), most respondents viewed depression as a significant problem among persons contacted during contact tracing interviews. The prevalence estimates reported by the

participants was overall around 35%, further indicating they were aware of the problem. Interestingly, this high prevalence rate is consistent with the high rates found in the literature (Ahmed et al., 2020; Bueno-Notivol et al., 2021; Ettman et al., 2020; Jia et al., 2020).

A number of survey items focused on the feasibility of conducting depression screening as part of the contact tracing procedures. Most of the respondents "contemplated" the need to conduct depression screening and believed depression screening during contact tracing interviews was feasible. However, respondents reported many barriers to implement this change. These individuals did not feel prepared to refer people with a positive screen to a clinician. Some of the barriers reported include lack of cooperation by participants, lack of time, and lack of training. Additionally, survey respondents reported that they would require information about campus mental-health services, local health services, web-based services, and educational materials. Consequently, it is not surprising that contact tracers are not confident to identify and refer individuals suffering with depression. The implications of these findings support the need for mental health support services information, additional training, and educational materials that target both contact tracers and administrators at the contact tracing unit.

Use of depression screening tools alone will not address the problem of depression during the COVID-19 pandemic. Contact tracers would need to refer people with a positive depression screen to clinicians for further evaluation by a primary care provider or mental health professional. Further efforts must target how to transfer the information collected during contact tracing interviews to primary care providers or mental health clinicians.

Limitation of the Study

This small survey study had many limitations. First, several participants did not answer all the survey items. Therefore, conclusions regarding these data should be interpreted with

caution. Second, the changing pandemic case count may impact survey responses. For example, the feasibility of conducting mental health screening may not seem feasible when the contact tracers are very busy. Finally, the contact tracers interviewed have differing professional backgrounds, and it is unknown if these differences impact survey responses.

Conclusion

These results indicate that it would be feasible to conduct depression screening as a component of a contact tracing interview with training and organizational support. Several contact tracers "contemplated" the need to conduct depression screening as part of the contact tracing interview but did not feel comfortable identifying and referring individuals suffering with depression (Prochaska, 2000). To move toward the "preparation" stage, additional educational programs, support services, and tools are needed to address this significant community health problem. Further, an analysis and evaluation of current contact tracing training programs about mental health problems, including depression, is warranted.

Implications for Advanced Practice Nurses (APNs)

Including depression screening during COVID-19 contact tracing interviews may help in early recognition of individuals suffering from depression. APNs play an important role in the screening, diagnosing, and treating individuals with depression. Barriers for depression recognition include stigma related to mental health conditions, denial, clinician's knowledge, limited time, and others. Depression screening during contact tracing and proper and timely referrals is feasible with support and proper training. Contact tracers and administrators will need education to address this problem. APRNs are optimally positioned to provide education and training about coronavirus disease, conduct depression screening, and make appropriate depression referrals.

Appendices

Appendix A: IRB Approval Letter

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Office of Research Integrity
Research Compliance, MARC 414

MEMORANDUM

To:	Dr. Ellen Brown
CC:	Eliza Burdier, Lazara Medina
From:	Maria Melendez-Vargas, MIBA, IRB Coordinator
Date:	June 7, 2021
Protocol Title:	"Mental Health and Covid-19 Contact Tracing: A Survey"

The Florida International University Office of Research Integrity has reviewed your research study for the use of human subjects and deemed it Exempt via the **Exempt Review** process.

IRB Protocol Exemption #: IRB-21-0228   **IRB Exemption Date:** 06/11/21
TOPAZ Reference #: 110454

As a requirement of IRB Exemption you are required to:

1) Submit an IRB Exempt Amendment Form for all proposed additions or changes in the procedures involving human subjects. All additions and changes must be reviewed and approved prior to implementation.
2) Promptly submit an IRB Exempt Event Report Form for every serious or unusual or unanticipated adverse event, problems with the rights or welfare of the human subjects, and/or deviations from the approved protocol.
3) Submit an IRB Exempt Project Completion Report Form when the study is finished or discontinued.

Special Conditions: N/A

For further information, you may visit the IRB website at http://research.fiu.edu/irb.

MMV/em

Appendix B: Project Flyer

Did you know *that communities have faced mental health challenges related to COVID-19–associated morbidity, mortality, and mitigation activities?*

Protecting FIU community Mental Health during COVID-19 outbreak

We are inviting the FIU Contact Tracing Unit and Response Team to explore their perceptions on the feasibility of including depression and anxiety screening during routine Covid contact tracing calls by completing an online survey.

Take Survey!!!

https://fiu.qualtrics.com/jfe/form/SV_6mN9YUmlQBOp4YS

- ♦ **Expectations:** This study will **benefit society** by examining the possibility of conducting mental health screening during contact tracing calls.
- ♦ **Location:** Complete online survey **from the comfort of your home.**
- ♦ **Time:** Survey will take **less than 10 minutes**

If you need more information, please contact **Lazara Medina** or **Eliza Burdier.**

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Appendix C: Informational Letter

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INFORMATIONAL LETTER
THE EFFECTS OF ANXIETY AND DEPRESSION ON COVID-19 CONTACT
TRACING EFFORTS

Hello, our names are Eliza Burdier and Lazara Medina. We are FIU students. You have been chosen to be in a research study as you are a member of the FIU Covid Contact Tracing Team or FIU Covid Response Team. The purpose of this study is to obtain your perspective for the feasibility of screening for anxiety and depression among positive Covid-19 students, personnel who are interviewed by the contact tracing team. If you decide to be in this study, you will be one of 11 people in this research study. Participation in this study will take 15 minutes of your time. If you agree to be in the study, we ask you to do the following things:

Complete an online survey

There are no foreseeable risks or benefits to you for participating in this study. It is expected that this study may benefit society by helping screening for anxiety and depression among patients with Covid-19. You will remain anonymous.

There is no cost or payment to you. If you have questions while taking part, please stop and ask. If you have questions for one of the researchers conducting this study, you may contact Eliza Burdier 305-781-5427or Lazara Medina at 786-461-6091. Or contact Dr Ellen Brown the PI for this study at 917-204-5493.

If you would like to talk with someone about your rights of being a subject in this research study or about ethical issues with this research study, you may contact the FIU Office of Research Integrity by phone at 305-348-2494 or by email at ori@fiu.edu.

Your participation in this research is voluntary, and you will not be penalized or lose benefits if you refuse to participate or decide to stop. You may keep a copy of this form for your records.

Appendix D: Survey Questions

Instructions: Please complete the following survey items regarding your professional background and opinion about the mental needs of persons contacted by the FIU Covid-19 Contact Tracing Team. We are interested in your response to all of the items even if you're unsure of the best answer. Although you may not be conducting contact tracing interviews at FIU we are very interested in your opinion as a member of the FIU Covid-19 response team.

The survey will take **10 minutes or less** to complete. THANK YOU

1. What is your Gender?

   Male   Female   Prefer not to answer

2. What is your role at FIU?

   _Contact Tracer   _Administrator   ___ Other_____

3. What is your professional license, if any (all that apply)?

   Drop down box:

   MD

   APRN

   SW

   RN

   LPN

   OTHER_____

4. If you are a contact tracer, have you had other contact tracing experience (prior to contact tracing

   at FIU)?

   Yes   No   Non applicable

4a. If yes, how many months of contact tracing experience do you have in total?

   _____ months

5. Have you ever considered that conducting depression screening as part of the contact tracing interview would be beneficial?

    Yes   No

6. Have you ever considered that conducting anxiety screening as part of the contact tracing interview would be beneficial ?

    Yes   No

7. How significant of a problem do you think mental health issues are among positive COVID19 individuals at FIU? Please select a number between 0 and 5 indicating the significance.

    Not Significant   **Very Significant**

    0   1   2   3   4   5

8. What percentage of the individuals interviewed with COVID19 do you think are depressed? (i.e., depressed mood requiring evaluation). Your best estimate.

                    %

9. What percentage of the individuals interviewed with COVID19 do you think are anxious? (i.e., anxiety symptoms requiring evaluation). Your best estimate.

                    %

10. What barriers do you think would be encountered implementing anxiety screening during a contact tracing interview?

    Lack of time   Lack of cooperation by participants   Lack of training

11. What barriers do you think would be encountered implementing depression screening during a contact tracing interview?

    Lack of time   Lack of cooperation by participants   Lack of training

Here is an example of a depression and anxiety screening tool, the Patient Health

Questionnaire – 4 Items (PHQ-4).

Over the last two weeks, how often have you been bothered by the following problems?	Not at all	Several days	More than half the days	Nearly every day
Feeling nervous, anxious or on edge	0	1	2	3
Not being able to stop or control worrying	0	1	2	3
Feeling down, depressed or hopeless	0	1	2	3
Little interest or pleasure in doing things	0	1	2	3
TOTALS				

12. Is it feasible to include the PHQ-4 during the FIU contact tracing interview?

   Yes   No

13. If there is a positive screen for depression or anxiety, do you think contact tracers are prepared to

   make referrals for mental health services?

   Yes   No

14. If no, what do you think is needed to make referrals for mental health services? (select all that

   apply)

   List of campus mental- based services

   Local health services

   Web- based services

Educational materials

Additional training

All

Other_____

15. In contemplating doing mental health screening during a contact tracer interview, why do you

think it has not been done? (select all that apply)

_Inconsistent with overall goal of contact tracing

_ Lack of support from leadership to include

_Not enough time to interview

_No screening tools available on current contact tracing form

_Not sure what to do with a positive screen

_Not familiar with the resources at the university and local resources

_ Not comfortable talking about mental health issues

Other _____

16. Do you agree or disagree with the implementation of mental health screening during a contact

tracing interview?

Agree   disagree

16a. If you agree, what do you think would be needed to implement depression and anxiety

screening for this population ? (select all that apply)

__ Training

__ Add screening tool to Redcap system

__ Learn how to score the tool

__ Tool scored by the Redcap system

__ More staff

__ More time

__ Professional license

__ Other

THANK YOU

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