SHP Student Interns for Research and Scholarly Activities
Application of Project Proposal Form

Instructions:
Please fill out the form and return via email to Michele Sisco (mcoral@shp.rutgers.edu) by **March 25, 2024**. **Please fill each box to the right of each required field.** If you are sending attachments, please ensure your contact information is added to all your forms.

Faculty Contact Information:

Date submitted:	Feb 22, 2024
Faculty Name:	Shristi Rawal
Department/Program:	SHP-CLINICAL & PREVENTIVE NUTR
Telephone number:	
E-mail:	shristi.rawal@rutgers.edu

Project Detail:

Project Title: (56 characters max)	Effect of mobile health intervention on self-monitoring of glucose and blood pressure among women with gestational diabetes
Hypothesis:	Using a user-centric design approach, we developed a mobile application for self-management of gestational diabetes in Nepal. Here, we propose to evaluate the impact of our mobile app intervention on i) compliance with self-monitoring of glucose and blood pressure (BP) levels, and ii) proportion of glucose and BP readings with elevated values (above clinical target ranges), from recruitment to delivery, iii) maternal and fetal outcomes. We hypothesize that the intervention group will have better compliance to glucose monitoring and a lower proportion of elevated levels.

Description: (Include design, methodology, data collection, techniques, data analysis to be employed, evaluation and interpretation methodology for research component)	We recruited 95 women newly diagnosed with GDM from Dhulikhel Hospital in Dhulikhel, Nepal, and randomized them to either GDM-DH app + standard care, or standard care alone, from 27±3 gestational weeks to delivery. The intervention group (n=45) were asked to measure their glucose (fasting and postprandial), weight, and blood pressure (systolic, diastolic) readings once a week at home and log them directly onto the mobile app. The control group was instructed to follow the same measurement schedule and record the readings on a paper log which was later entered into a database by a study nurse. Self-monitoring compliance was calculated as the actual number of entries divided by the expected number of entries, multiplied by 100. Using the data from REDCAP, Mobile app database and hospital EMR, the effect of compliance on maternal and fetal outcomes will be analyzed.
Specific Student Responsibilities:	Extract data from sources Data coding and cleaning Develop statistical analysis plan. Data analysis using SPSS. Draft presentations, abstracts and manuscript Present the results in scientific presentations and manuscripts
Start / end date of project:	June 1- Aug 31

Educational:

WHAT OTHER EDUCATIONAL OPPORTUNITIES ARE AVAILABLE TO STUDENTS? (e.g., journal club, seminars, clinic, rounds)	Presentation in scientific conference
WHERE DO YOU PLAN TO PRESENT OR PUBLISH THE FINDINGS WITH THE STUDENT? (e.g., national or state meetings, newsletter or	ASN – national conference

journal, SHP poster day)	

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CHECK ALL APPROPRIATE BOXES BELOW AND PROVIDE REQUESTED INFORMATION.

This project is: ☒ clinical   ☐ laboratory   ☐ behavioral   ☐ survey   ☐ educational

☒ Other: please specify_____secondary analysis of clinical research data_____

☒ This project involves the use of human subjects (including chart review, retrospective studies and questionnaires).

Pending ☐   Approved ☐   IRB Protocol Number ___ Pro2019001883_____

IRB approval must be obtained by June 2024

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JANEZIEGLER

_____   _3/6/2024_____
Signature of Department Chair   Date

OR-For internal use
Form: (1)
Reviewed date:_____
Date processed on website:_____