

SURVEY ON THE ACCEPTABILITY OF A FETAL MONITORING DEVICE

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Abstract: Pregnant mothers living in rural areas are faced with reduced access to adequate maternal and fetal healthcare, leading to disparities in delivered care and contributing to increased adverse birth outcomes for mothers and babies. Using remote monitoring may help mitigate these issues. This project focuses on piloting a survey that will allow pregnant mothers to provide their input to the design process of a wearable fetal echocardiogram (fECG). This monitor will allow continuous monitoring of fetal health and the communication of this information to healthcare professionals. This fECG would allow healthcare providers to better monitor fetal health in order to provide more timely medical interventions for high-risk patients, thereby reducing fetal mortality. The survey includes 30 questions evaluating participant demographics and using a five-point Likert scale to determine the acceptability of using a wearable medical device during pregnancy. A convenience sample of women of childbearing age (18-49) will be used for the pilot survey. Data collection will occur in March. At the end of the survey, participants will be asked follow-up questions concerning the survey methodology. Results will be analyzed using descriptive statistics and qualitative methods will be used to summarize the main themes of the open-ended questions. A principal objective of the pilot survey is to determine the most effective means of conducting a survey, whether online, verbally or by paper form completion of surveying participants is superior. Additional objectives include assessing whether the survey is easily understood, participant cooperation, and ways of improving and optimizing the survey method. The project goal is to refine and fine-tune the survey to maximize participant cooperation and comprehension, as well as the quality of the data gathered.

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