

stigma beliefs compared to participants who opted-out of in-office, $p = .001$. Participants who opted out of in-home viewed the therapist as less credible compared to participants who did not opt of any arm, $p = .004$. Multiple regression analysis found that baseline patient satisfaction, stigma beliefs, and credibility beliefs were not predictive of PTSD treatment outcomes, $p > .05$. DISCUSSION/SIGNIFICANCE OF IMPACT: Combat PTSD patients may opt out of in-office therapy due to mental health stigma beliefs, and visibility in mental health clinics may be a concern. For patients who opted out of in-home therapy, lack of credibility may have decreased participants' desire for therapists to enter their home. Despite concerns of mental health stigma and the credibility of the therapy in certain treatment arms, patients in each treatment arm significantly improved in PTSD symptomatology. Moreover, patient characteristics, including satisfaction, stigma, and credibility of the therapy, did not significantly predict treatment outcomes, which demonstrates the robustness of Cognitive Processing Therapy.

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Prostate cancer multiparametric MRI comparison study of 3T versus 7T in terms of lesion detection and image quality*

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OBJECTIVES/GOALS: The goal of this study was to perform a comparative, multi-reader, retrospective clinical evaluation of prostate multiparametric MRI (mpMRI) at 3 Tesla (3T) vs. 7 Tesla (7T) primarily in terms of prostate cancer localization. Subjective measures of image quality and artifacts were also evaluated. METHODS/STUDY POPULATION: Nineteen subjects were imaged at 3T and 7T between March 2016 and October 2018 under IRB-approved protocols. Four radiologists retrospectively and independently reviewed the data, and completed a two-part assessment for each dataset. First, readers assessed likelihood of cancer using Prostate Imaging Reporting & Data System (PI-RADS) guidelines. Accuracy of cancer detection was compared to findings from prostate biopsy. The numbers of correctly or incorrectly classified sextants were summed across all four readers, then used to summarize detection performance. Second, readers assigned a score on a five-point Likert scale to multiple image quality characteristics for the 3T and 7T datasets. RESULTS/ANTICIPATED RESULTS: Sensitivity and specificity of 3T and 7T datasets for sextant-wise cancer detection were compared by paired two-tailed t-tests. Readers identified more sextants harboring cancer with the 3T datasets while false-positive rates were similar, resulting in significantly higher sensitivity at 3T with no significant differences in specificity. Likert scores for image quality characteristics for 3T and 7T datasets were compared by applying paired two-tailed t-tests to mean scores of the four radiologists for each dataset. Readers generally preferred the 3T datasets, in particular for staging and assessment of extraprostatic extension as well as overall quality of the contrast-enhanced data. DISCUSSION/SIGNIFICANCE OF IMPACT: Readers agreed 7T prostate mpMRI produced images with more anatomic detail, though with equivocal clinical relevance and more pronounced artifacts. Reader unfamiliarity with 7T images is a major extenuating factor. Forthcoming technological developments are anticipated to improve upon the results.

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Recruiting hidden and sensitive populations: methods for recruitment of pregnant women who regularly use cannabinoids

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OBJECTIVES/GOALS: Prenatal cannabinoid use is increasing and more studies are needed to describe the neurodevelopmental impact on the fetus. However, pregnant cannabinoid users are a "hidden population," which makes identification of these individuals for research difficult. Our study will employ three methods of recruitment and evaluate the success of each method. METHODS/STUDY POPULATION: We will recruit a total of 40 women in the third trimester of pregnancy who regularly use cannabinoid products thought to contain tetrahydrocannabinol (THC) and/or cannabidiol (CBD) throughout their pregnancies, and 20 control pregnant women who do not use those products. The purpose of this study is to evaluate the effects of prenatal cannabinoid use on the neurodevelopment of their offspring over the first year of life. We will employ three recruitment methods. First, targeted recruitment will occur in two university-based obstetrical clinics, where the obstetrician will present the study material and contact information. Second, we will utilize social media advertisements targeted to a specific demographic of Facebook users. Finally, we will employ the traditional method of distributing flyers in a non-targeted manner. We will track methods of recruitment success and gather information from the mothers on their preferences for recruitment approaches. RESULTS/ANTICIPATED RESULTS: Recruitment will start in January 2020 and continue for several months. We anticipate that the targeted method will yield the highest number of participants, and participants with the best fit for the inclusion criteria. However, it is possible that those women will be deterred by fear of having their drug use status revealed to their care providers, even though all research activity will occur independently from clinic visits and will not be transmitted to the electronic health record. The inclusion of a control group will also help foster "anonymity" for participants. The social media method has the potential for the greatest reach, but we expect many of these potential participants will fail to meet inclusion/exclusion criteria, as this is not as targeted as the first method. We anticipate a similar issue with the flyer-based approach. DISCUSSION/SIGNIFICANCE OF IMPACT: Optimizing recruitment of hidden and sensitive populations is crucial for clinical and translational research. Our goal is to identify strategies that can lead to best practices for engagement of those populations. Our conclusions could be applied in recruitment of sensitive populations for other clinical and translational research projects.

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Relationship between recent drinking history, subjective response to alcohol, and sex in HRV in non-dependent drinkers

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OBJECTIVES/GOALS: Previous research has shown acute and chronic alcohol effects on cardiac function, including elevated heart