Decreasing Wait Times in a Family Medicine Clinic - A Creative Approach

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Introduction

Wait times, a key cause of patient dissatisfaction with clinic visits, are a key metric in healthcare quality improvement programs. This preliminary study assesses art-making as an intervention in the waiting room to minimize patient perceptions of wait times.[1,2]

Wait times significantly affect self-reported levels of patient satisfaction. In fact, patients who wait less than 5 minutes expressed 95.4 percent satisfaction with increasing wait times lowering that percentage.[9] Reducing wait time betters the quality of care perceived, and thus is integral in the discussion to improve healthcare business outcomes by hospitals and local clinics. Instead of removing wait times, current studies explore the process of transforming them into spaces of healing.[3-7,8]

Many studies of waiting room utilization in the medical community, especially family medicine clinics, describe interventions involving technology, such as televisions with health education programming.[9,10] Such passive programming has been proven to help with providing a simple and welcome distraction.[11] However, the waiting room is notorious for being a place of stress, anxiety, and tension—all of which are detrimental to the visit. Research on overcoming anxiety, stress, and tension suggests that outlets for self-expression through active distractions, improves not only mood, but also self-confidence, individuality, and self-expression.[12] This study aims to fill in a gap of evidence-based art interventions in waiting rooms, trying to connect the positive effects of art-therapy and art-making for patients as noted by many programs, with the needs of a functioning healthcare business. This study introduces active art-making activities in the waiting room of an Albany family practice clinic to measure its impact on patient satisfaction as well as to see how its introduction impacts the work flow of the clinic. Art intervention is a low-cost strategy that if proved efficacious can be fiscally useful for management of clinics and hospitals, empowering for the patients, and improving the overall patient-provider experience.

Methods

The study was conducted at Community Care Physicians, LLP over a 20-day period in June and July 2015. The practice offers a full range of services to a diverse inner-city Albany population. Two variables--Art-making and No Art-Making/Placebo Intervention—were given to patients over the 20 day period, with 10 days randomly dedicated to each variable. A study by Curry and Kasser found that university students found greater stress reduction with mandala coloring as opposed to unstructured art making activity.[12,13]

The art-making intervention consisted of a face pain scale (FPS ©) to measure baseline stress followed by a simple mandala with coloring pencils. The placebo, a word search for words such as "tranquil", "peace", "centered", served to provide a non-art activity to measure the therapeutic effect of art-making as opposed to other

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calming activities. A student investigator gained consent and provided a clipboard with each intervention upon approval. Beyond time in the waiting room, there is a second wait time in the exam room. We included this in the study, totaling two wait times for each patient. Four times are recorded for each patient: time of entrance into the waiting room, calling back to the exam room, time of nurse exit from the exam room, and time of the provider entering exam room.

When the patient leaves the encounter with the provider, the investigator asked these questions:

- How long was the wait time for today's visit?
- Is this wait time acceptable for you?
- Rate your level of satisfaction with the visit (1-low, 10-high)
- Rate your level of stress or anxiety using the Face Pain Scale.

Averages of wait times, perceived and actual, stress before and after were measured. Providers for each patient as well as patient satisfaction were also recorded. The SPSS data analysis ran both two way T tests and one-way T tests for independent variables.

Results

79 patients participated in the study over a 20 day period, with 33 total participants on the No-Art/Word search day and 46 participants on the Art/Mandala coloring day. All data was insignificant ($p>0.05$). However, raw data indicated certain trends.

Mean perceived wait time decreased in both interventions, with a higher decrease in the art-making intervention compared to the placebo activity (Figure 1).

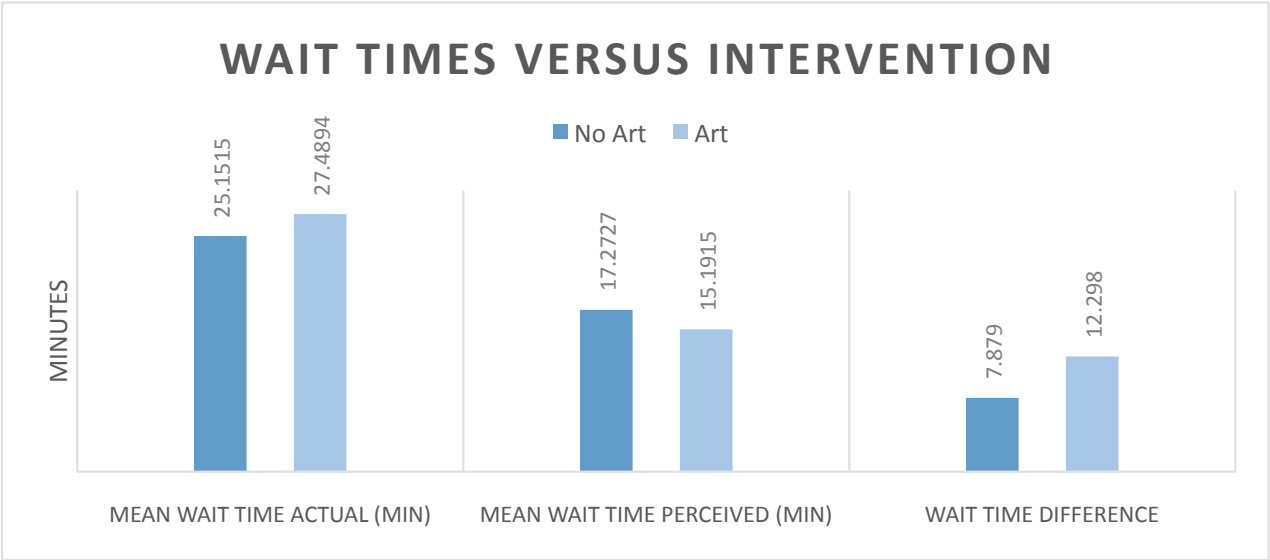

Figure 1- Wait Times verses Intervention Type. Mean wait time perceived by patients is generally lower than actual mean wait time for both interventions.

Stress levels before and after the intervention were recorded using the Face Pain Scale © (FPS) and averaged. Generally, mean post-intervention stress level decreased compared to pre-intervention level (Fig. 2). Mean difference in stress levels (mean stress before-mean stress after) was greater for Art versus No-Art.

Of the 79 total participants, 65 were female and 14 were male. More females participated in the art intervention than in the non-art intervention. Mean stress scores for pre-intervention and post-intervention for both art and non-art decreased for all races.

Conclusions

Despite the lack of significant data, two trends were noted. The first trend indicated that, while both interventions decreased perceived wait times, there was a larger decrease in wait time perception with the art intervention compared to the non-art intervention (Figure 1). The second trend noted the decreased difference in stress levels—the art intervention decreased overall stress levels of both genders and all races more than the non-art intervention (Figure 2).

The power of art-making is not in the quantitative data, but rather in the qualitative data. Conversations and comments made by both participants and providers further support the themes of patient empowerment and provider-patient connection. Patients were quick to share personal stories, advice, and opinions when approached to participate. For example, a pregnant patient requested coloring pencils for her intensely nervous husband who accompanied her while another patient revealed he lost his job and wanted to know if the colors he chose represented his internal emotions.

Art making crossed boundaries of language. An Iranian woman with a young daughter agreed to participate, despite having difficulty with the instructions. "I just moved here", she said. Due to a delay by the physician, the woman and her daughter waited over an hour to be seen. When asked her about her perceived wait time, she provided a completely colored mandala and stated that she felt that 20 minutes had passed by. "I used to make art when I was in Iran. I just came here a few days ago and I miss my family very much, which is why I say I have 10 level anxieties. I loved coloring in school" she said, and smiled.

Art also revealed internal judgments and perceptions of others. Another woman walked in with her head bent forward, a distorted neck and a twisted, paralyzed right hand. Unsure if she would be able to color, she was not approached. Instead, the patient requested to participate, stating, "I will use my left, non-dominant hand to do this project. It will take longer because I need to use one hand to pull out the colored pencils". When leaving, she said, "My stress level is still high. I am a high school science teacher and I love helping with projects like this. It is a good idea and keeps me calm. But I just got more bad news and now my stress level is worse". Not only did she share her emotions, but also a few details on her prognosis. Regardless of whether or not sharing such information is recommended, the openness and trust that formed through

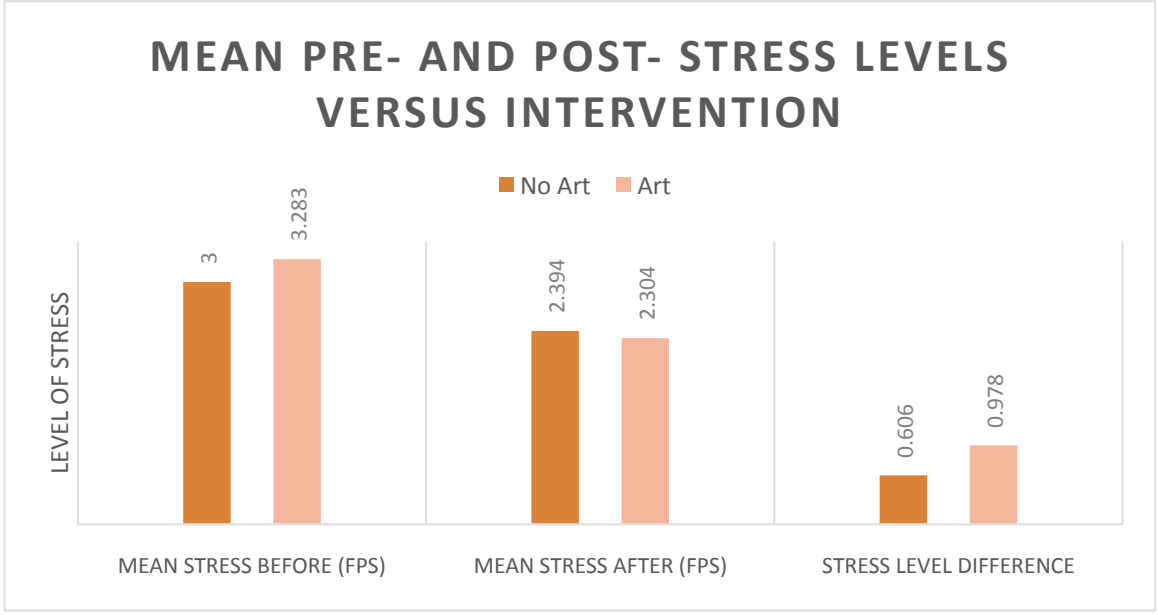

Figure 2 - Pre- and Post-Mean Stress Levels Versus Intervention Type. Mean post-stress level is generally lower than mean pre-stress level for both interventions.

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conversations with the investigator demonstrates the qualitative power of art-making as an intervention. Art, in its simplicity and accessibility, leveled the playing field and removed stereotyped judgments of ability.

Working with many sick individuals with little break may cause providers to become hardened to details, make stereotyped judgments, or to feel negatively—all signs of early burnout.[14] The art intervention helped to change the visit for both the patient and the provider. Apart from providing a positive distraction and being a novel conversation starter, the art making redirected the physician to the abilities rather than the disabilities of a patient. This seemingly small shift in perception echoed in the office, with the nurses making jokes and laughing with patients about their coloring skills and the doctors giving them space to color before starting their assessment. One doctor pretended to read the color schemes and judge patient stress to ease the tension in the room. One of the most impactful experiences, however, was the reaction of the physician to the paralyzed patient described above. The physician stated, "I think this art idea is good for the patients. I was not so sure before, but seeing her makes me think differently about her ability and illness". Art-making not only reduces the perception of wait times, but also improves attention to details, expands creativity, and connects the clinic with the patients to improve overall health outcomes.

Introducing art-making and coloring to a waiting room is simple and inexpensive. Place a stack of clipboards with attached boxes of colored pencils on the back. Leave a few simple sharpeners near the front desk, out of reach of young children. There are a variety of mandalas online that can be printed and added to the clipboards. Allow patients to color in the examination rooms as well, bringing their clipboards with them. Another idea is to start a program with medical students or local high school students to spend a few hours coloring in the waiting room with patients. Having students actively coloring sets an atmosphere of inclusion and community through art. Whatever is chosen, know that introducing art transforms not only the waiting room and levels of patient satisfaction, but also changes how patients connect with their providers and how they approach their healing encounter.

Endnotes

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