



Individualized Clinical Treatment for Individuals with Intellectual and Developmental Disorders: A Single Case Design Study

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Background

Participants: Individuals with intellectual and developmental disabilities (ID/DD) with phobia of receiving blood draws that disrupts activities of daily living

- ID/DD population is at risk for health issues and comorbid disorders at the same or higher rates as the general population
- Difficulty with cognition and communication poses additional medical challenges for those with ID/DD:
 - Associating medical procedures with health maintenance
 - Difficulties expressing/communicating symptoms

Typical management of blood draw avoidance in ID/DD:

- Sedation or general anesthesia if other options fail and situation is critical
- The individual does not get their blood drawn

Needle Phobia: A longstanding intense fear or avoidance of medical procedures involving the use of needles

- Current effective treatment protocols for needle phobia require a high level of verbal ability as participants have to analyze, describe, identify thoughts, and self-monitor symptoms
 - This approach is not accessible to those who do not have typical verbal and cognitive abilities

Objectives

- To collect and report data from behavioral treatment of blood draw phobia in ID/DD
- To develop and test a behavioral intervention that is considerate of the individualized needs of the ID/DD population to help reduce their anxiety towards blood draws

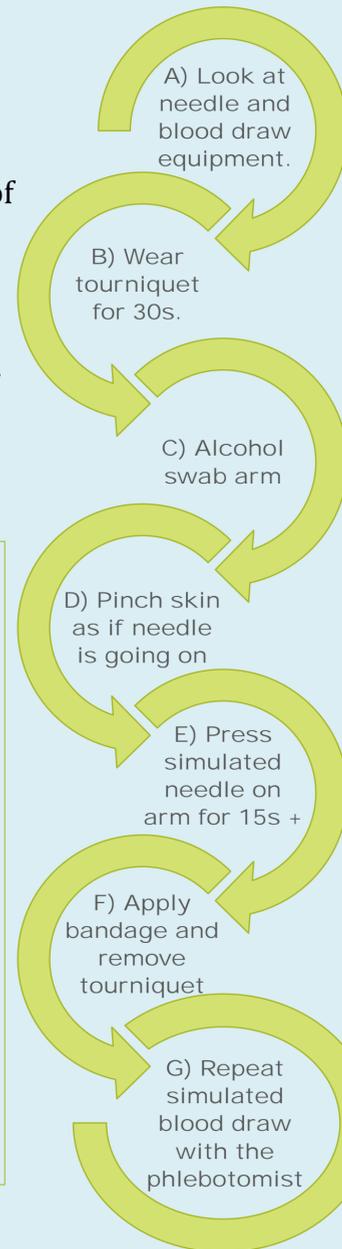
Method

Selection Criteria:

- Up to 10 individuals, 18 years of age or older, WIHD clients, with fear of blood draws
- Presently 3 participants, one on hiatus due to hospitalization, one mid-treatment, one recently started.

Phases of Treatment:

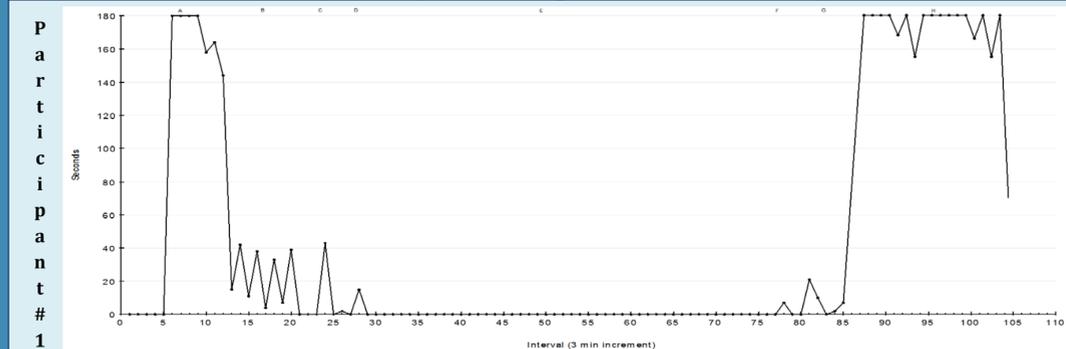
- Treatment is comprised of steps, or phases (8 in this case)
- Phases culminate a blood draw simulation in session followed by an actual blood draw on site
- Time spent engaging in avoidance is collected and analyzed across phases (illustrated in graphic to the right)



Data Collection:

- Behavioral data is collected during session and analyzed. Behaviors most associated with blood draw avoidance are chosen
- Behaviors observed in participant 1: physically moving away, shouting profanities, making verbal threats, crying
- Duration of behaviors timed to the second within 3 minute blocks
- Standard single case study design model is used to collect baseline data, develop a standardized treatment protocol, conduct treatment, and generalize treatment gains

Results / Progress to Date



- Plotted points mark the duration of avoidance behavior observed in 3-minute intervals
- Phases are indicated by dashed vertical lines marked (A-H)
- A new phase is started when avoidance behavior decreases

Analysis: Avoidance behaviors decreased as treatment and individual progressed through phases. Participant's absences account for some slowed progress and regression. Although this participant completed a blood draw in session she has not returned due to hospitalization resulting from chronic health conditions.

Discussion / Next Steps

- Continue to collect, graph, and report data for current participants - as of present, none of the participants have completed the treatment
- We anticipate that future data will show a consistently low level of avoidance when receiving blood draws, as well as maintenance of reduced avoidance when treatment is withdrawn

Community Partners

Special thanks to Dr. Stephanie Bader, Director of Behavioral Psychology at WIHD for her participation as Community Partner

