Medication Management for Young Adults with Intellectual Disabilities

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Introduction

- Individuals with intellectual disabilities experience high rates of morbidity and co-morbidities that may result in significant levels of medication usage.
- Approximately 88% of people with an intellectual disability between the ages of 18 and 39 to over 94% of people over 60 years of age manage prescription medications (Sheerin, 2019).
- It is estimated that medication adherence rates are between 20-50% for individuals with intellectual disability. "These data suggest that people with disabilities are systemically excluded from the medication adherence intervention literature (Schwartz & Unni, 2021).
- Medication management programming was developed for students at The Horizons School, a post-secondary school for young adults with intellectual disabilities.
- Due to the lack of resources for intellectual disability settings for medication management, it is important that patients and caregivers are provided the information to manage their care and safety (Global Safety Action Plan WHO, 2021-2030).

Methods

Theory-based medication management programming was developed for students at The Horizons School using the Social Cognitive Theory. All eight first-year students participated in weekly, one hour group sessions. Each session focused on a different learning area of medication management. Individual sessions were conducted with nine participating Horizons students after completing the consent process. This group was comprised of five first-year students and four third-year students. Each individual session addressed specific medication needs of the participant.

Purpose: To improve medication management skills and medication adherence for participants.

Individual Session Inclusion Criteria:

a) Student currently enrolled at The Horizons School
b) Between the ages of 18-26
c) Diagnosed with an intellectual disability
d) English language speaker

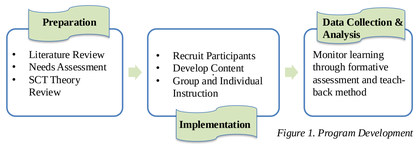


Figure 1. Program Development

All participants completed pre-post surveys using the following methods:

- Adherence to Refills and Medications Scale (ARMS)
- Semi-structured interviews
- Health literacy module quizzes

Table 1. Group Instruction Modules

Learning Area of Medication Management	Week	Content
Program Introduction	**1**	Program description and consent form explanation.
Health Literacy- Medication Labels	**2**	Reading over the counter and prescription medication labels.
Organizers and Reminder Systems	**3**	Exploring visual, auditory, and tactile reminder options. PILL MAP interactive lesson.
Prescription Refills	**4**	When, where, and how to refill a prescription medication.
Health Literacy- Insurance	**5**	Learning the purpose of health insurance and definitions of key terms.
Communication with Healthcare Providers	**6**	Preparing for healthcare appointments, and communication and self-advocacy strategies.

Methods Continued

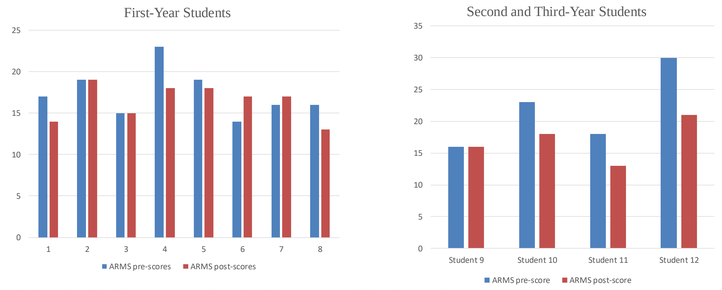
Social Cognitive Theory's Influence on Instruction

Social Cognitive Theory Constructs	Application to Medication Management Program
Reciprocal Determinism	•Address learning new skills within new environment •Many students' learned experiences involve family taking care of it for them; leading to gaps in knowledge of how medication management processes work.
Behavioral Capability	•Students will learn what to do and how to do it through modeling and individualized medication management interventions •Instructors will provide instruction, practice opportunities, and support.
Observational Learning	•Instructors will model effective medication management strategies •Instructors may use the teach back method to assess student learning
Reinforcements	•May include: • Alleviation/worsening of symptoms • Faculty/Family expectations • Increased independence
Expectations	•May include: • Struggling in class if medication is missed • Faculty/family-imposed consequences
Self-Efficacy	•May be lacking due to dependence on family members •Want to target this area; increase independence

Table 2. Social Cognitive Theory Application

Results

Adherence to Refills and Medications Scale (ARMS)



ARMS scoring: Possible scores range from 12-48. Lower scores indicate better adherence.

Common Themes

Student Strengths	Student Challenges
Most students were able to name the purpose of their medications.	Most students lacked experience and opportunity to participate in the refill and pick-up process for prescription medications.
Most students were able to describe their diagnoses and/or conditions.	Most students were unable to name and/or pronounce the names of their medications.
Most students expressed openness to learning new medication management skills to improve adherence and health literacy skills.	Most students would often forget to take their medication and utilize alarm reminder systems.
Most students were willing to learn and practice calling their pharmacy and healthcare providers with support.	Most students lacked experience communicating with their healthcare providers independently and retaining information from appointments.
Students were able to self-advocate for their medication management needs with support. For example, one student was able to prepare a script to share with their parent that they wanted to practice independence during their healthcare appointment. Another student requested that the pharmacy prepare pill packs because the pill minder was not successful for them.	Most students did not prepare questions prior to appointments or take/request notes during appointments to better retain healthcare information.

Discussion

- The purpose of this program development and pilot implementation was to gain a better understanding of the medication management needs of young adults with intellectual disabilities and improve medication adherence.
- Learning barriers present for this population include, but are not limited to, diagnosed learning disabilities, limited focus and attention, emotional barriers, resistance to change, lack of experience and previous knowledge, and motivational barriers.
- Successful instructional supports implemented for the medication management program consisted of plain language used in printed materials, visual supports, breaking down step-by-step instructions, team activities, materials read aloud, scheduled breaks during group instruction, role play, and repetition of practice skills.
- Recommendations for future program expansion include implementing medication management education within settings serving adolescents and young adults with intellectual disabilities and their caregivers. Settings may include schools, healthcare clinics, outpatient therapy clinics, and within the home.
- Medication management education could implicate improved health and well-being, decreased hospitalizations, increased independence and self-efficacy, and improved occupational performance.
- Limitations of this program included a small sample size, implementation time constraints, reliance on self-reported data, and lack of previous research on the topic.

Conclusion

- This program demonstrated that young adults with intellectual disabilities can improve medication management, health literacy, and independent living skills with individualized supports.
- Individuals need increased opportunities to engage in their healthcare appointments and refill processes to increase independence.
- Young adults with intellectual disabilities are also able to self-advocate for their medication management needs with support and opportunity.
- More research is needed to provide medication management assessments and interventions developed for this population.

References

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