



Primary Provider Education Regarding Adults with Autism Spectrum Disorder

Gerri Ann Chesebrough, DNP, RN, CNE

College of Nursing and Health Innovation, Arizona State University and Mountain Park Health Clinics, Phoenix, AZ

Abstract

My project looked at the relationship between education about Autism Spectrum Disorder (ASD) and knowledge, attitudes and beliefs in adult primary care providers. The project addresses the transition challenges adults with ASD have finding a primary care provider who is comfortable and competent with ASD. Education was provided to adult primary care providers in a multi-site primary care clinic in a large metropolitan city in the Southwestern United States. The Modified Knowledge/Attitudes/Belief instrument was used. A pre-test was administered before the education session, then a post-test and a one-month post-test were given afterward. Results showed that attitudes and beliefs increased after the education and continued to increase more in the month following. Knowledge improved after the education session but declined after a month although scores were not back to the pre-education level. Primary care providers receiving education about ASD may be more comfortable caring for this population and more likely to welcome adults with ASD into their practice. Education for primary care providers is key to improving health outcomes for adults with ASD.

Introduction

In the Institute of Medicine Report: The Future of Disability in America (2007) the challenge of transitioning from pediatric to the adult care system for the disabled was identified as an issue that needs to be addressed. One identified goal of *Healthy People 2020* is to eliminate health disparities across populations. Many of the challenges in accessing healthcare for adults with autism are directly related to the symptoms of Autism Spectrum Disorder (ASD). These symptoms include impairments in spoken as well as nonverbal communication, difficulty in understanding emotions and altered sensory perception.



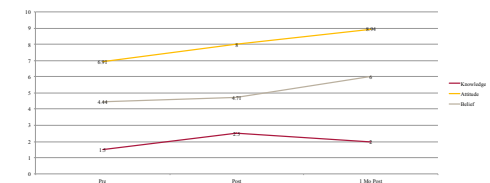
Without early intervention, adults with autism are likely to have chronic health conditions like diabetes, heart disease, heart failure, arthritis, and cancer. The literature reports that healthcare providers are unable to accommodate to the needs of this population. There are many reasons for this disparity in access to healthcare with physician training, comfort level and reimbursement as the main factors.

Methods

The IRB at Arizona State University granted approval for this project. An approval letter was also obtained from the participating institution, Mountain Park Health Center. There were five clinics within the MPHIC system. Four clinics ultimately participated. Participants were adult primary care providers at the clinics. All providers were invited to participate. Participation in the project was voluntary, and anonymous and presented no anticipated risk of harm. Data was collected anonymously. All potential participants were provided with a letter outlining the project. Completing surveys and attending the education summit was taken as consent to participate in the project. Participants completed a pre-education questionnaire. The education session was delivered in person at provider meetings followed by a post-education questionnaire. Approximately one month after the education, participants filled out another post-education survey.



Results



Results

A total of 30 (66.7%) providers out of 45 participated in some aspect of the project. Twenty-eight participants (66.2%) completed the pre-survey demographics, the KAB pre-test and the education session and immediate post-test. Of those 28 participants, 17 (37.8%) completed one month post-test survey. SPSS statistics software was used to manage and store all data. Descriptive statistics were used to describe the sample and outcome variables. Friedman's ANOVA is a nonparametric test was used to analyze the outcome variables. A p value of <0.05 was used to determine statistical significance.

A non-parametric Friedman test of differences among repeated measures was conducted and rendered a Chi-square value of 130.483 which was significant (p<0.001). A chi-square goodness of fit test was calculated comparing total scores for knowledge, attitudes and beliefs on the pre-test, post-test and follow-up surveys. The null hypothesis stated that there would be no significant difference in scores after the education intervention. Significant deviation from the hypothesized values was found ($\chi^2(8)=130.48, p<0.001$). The null hypothesis is rejected. There was statistically significant improvement over time in knowledge, attitudes and beliefs.



Conclusion

The project focused on determining if an education program for adult care providers about ASD would increase knowledge, attitudes and beliefs. Based on the results of this project, there was a significant change in all areas. The evidence suggests that additional education sessions like the one from this project would be beneficial to adult care providers. Attitudes and beliefs may have increased over time due to further learning about ASD or possibly having the opportunity to practice what was learned with ASD clients in the clinic. Strengths of this project were that participation was voluntary and included multiple types of providers. Limitations were the location of the project to one geographic area and one health care clinic system. Results may have been different if there had been a broader cross-section of providers either in the area or from different parts of the country. The length of the education session was short. Future areas of study would be to replicate the project in a different geographic location. Including all members of the clinic team such as nursing and reception staff would help to develop greater awareness throughout the clinic and hopefully create a better patient experience for adults with ASD.

Acknowledgements

I would like to thank Mountain Park Health Center for collaborating on this project, especially Dr. Wiley Carhartt for being my site liaison. Also, I owe many thanks to my mentor Dr. Kara Mangold from Arizona State University and Dr. Uriri-Glover, Statistics Consultant from Arizona State University. Their help was so valuable. Dr. Christina Nicolaidis from Portland State University was extremely generous with sharing her time and resources with me. Dr. Daniela Bordini from the Universidad Federal de Sao Paulo was kind enough to share her knowledge tool with me. Thanks to my father in law, Don Louderback for his expertise in translating Dr. Bordini's tool from Portuguese to English.

For more information

Contact Gerri Ann Chesebrough at gerikonneski@gmail.com

