Title of Proposal: Project MAT: An Educational Intervention to Address Parental Health Literacy Pertaining to the Atopic Triad

BCM Mission Area: Community

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Abstract:
Managing the Atopic Triad (Project MAT) is a project that was developed as part of the Care of the Underserved Pathway at Baylor College of Medicine. This pathway aims to provide medical students with the knowledge and skills necessary to provide culturally sensitive and compassionate care to diverse populations and improve health equity in underserved communities. Project MAT was created to address parental/guardian discomfort related to managing the conditions that make up the atopic triad: asthma, atopic dermatitis, and allergic rhinitis. It is an outreach program with the goal of educating parents/guardians that may have lower health literacy or face barriers to accessing adequate medical care. Multiple studies have demonstrated that decreased parental understanding of asthma leads to worse asthma control and increased emergency room visits, and we suspect similar inadequate control with other pediatric conditions. The project is designed as an educational session, available in both English and Spanish, consisting of a short verbal presentation, demonstrations using visual aids, and an opportunity to ask questions. A pre- and post- survey were provided to English-speaking participants to assess the effectiveness of the intervention on parental understanding and comfort level. A pilot study was conducted at a back-to-school health fair in Houston’s Second Ward with a sample size of nine English-speaking adults. At the health fair, attendees had the option to stop by the Project MAT table where they were provided with individualized
education regarding their child’s asthma, atopic dermatitis, and/or allergic rhinitis. Topics included aggravating/relieving factors, proper use of medications, and nonpharmacologic therapies. The pre-surveys indicated that parents had the most difficulty with identifying what worsens and improves allergic rhinitis and with treating atopic dermatitis. Following the educational session, there was a statistically significant improvement in parental comfort in regards to managing allergic rhinitis ($t < 0.05$) and atopic dermatitis ($t < 0.05$). The finding was not significant for the asthma arm of the intervention. In addition to the pilot study, a needs assessment was conducted which identified that a majority of the health fair attendees were Spanish-speakers (71%), with a large proportion of this group taking care of a child with asthma, atopic dermatitis, and/or allergic rhinitis. These individuals, although not included in the pilot study, had demonstrated interest in receiving education regarding management of these conditions, especially on using a spacer and knowing which types of lotions help with atopic dermatitis. In the future, Project MAT hopes to expand its outreach and incorporate a more diverse group of participants by including Spanish-speakers in the data collection and identifying potential differences in health literacy across various groups. In this way, Project MAT aims to continue to address health disparities and improve health equity by providing educational resources to underserved communities.