Background/Introduction

• Pediatric autoimmune diseases are among the most common chronic medical conditions affecting children, even more common than both cystic fibrosis and sickle cell anemia.1,2

• Estimates are that 1 in 250 children have a form of juvenile arthritis or other autoimmune condition, which is almost 300,000 pediatric patients nationwide.3

• Despite the prevalence, there are only 407 practicing pediatric rheumatologists across the country as of 2015.4

• Estimates suggest 10% of these rheumatologists will retire in the next several years and demand already exceeds supply by 25-50%.5

• Currently patients who do have access to care often travel 4+ hours to receive care and new patients often have to wait weeks to months for an appointment.6

• Exposure to pediatric rheumatology teaching for residents is limited and several medical schools and residency programs do not have access to this type of curriculum causing PCPs to be ill equipped to diagnose and provide preliminary treatment7

• In institutions with pediatric rheumatology, average exposure and teaching time is estimated at 5 hours for the entirety of residency

Hypothesis

• A standard curriculum covering "bread and butter" pediatric rheumatology in a case based format will help increase resident comfort level with history taking, physical examination, work up, and referrals for patients who present with signs and symptoms concerning for autoimmune diseases

Objective

• To develop a curriculum to increase comfort level of pediatrics residents with regards to history taking, physical exam skills, laboratory evaluation, and referral patterns pertinent to patients who present with concerns for autoimmune disease

Methods

All pediatrics and med-peds residents at our institution were anonymously surveyed to get their opinion on what topics in rheumatology they thought were most important and also on their preference for content delivery

Based on responses, a series of six lectures were composed in a case based, interactive format

The project includes 30-minute case based lectures received by second year pediatric and third year med-peds residents rotating through the inpatient rheumatology service as well as real time feedback on physical exam skills in clinic

Pre and post surveys were used to evaluate improvement in comfort level with rheumatology topics

Results

• During this clinical experience, residents were shown the pediatric gait, arms, legs, and spine (pGALS) exam by a fellow or attending

• After allowing for practice, they were observed performing the exam and given real time feedback and evaluation

• They were also encouraged to download the pGALS app as a reference

Conclusion/Future Direction

• We were able to effectively increase comfort level with regards to history taking, physical exam skills, laboratory evaluation, and rheumatology referrals for those patients who present with concerns for an autoimmune process

• We plan to continue using this curriculum for those residents rotating through rheumatology

• We also plan to expand the topics to include additional lectures on rheumatic fever, chronic nonbacterial osteomyelitis, etc

• We may also introduce workshops for interested community PCPs in order to expand their fund of knowledge regarding pediatric rheumatology topics

References


5. JAIDS Jmir. (2017). A standard curriculum covering "bread and butter" pediatric rheumatology in a case based format will help increase resident comfort level with history taking, physical examination, work up, and referrals for patients who present with signs and symptoms concerning for autoimmune diseases.

6. JMIR. (2017). A standard curriculum covering "bread and butter" pediatric rheumatology in a case based format will help increase resident comfort level with history taking, physical examination, work up, and referrals for patients who present with signs and symptoms concerning for autoimmune diseases.

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