

# NEWSLETTER

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# IN THIS ISSUE

3 ..... Meet Our Board

6 ..... Under the Spotlight

Unveiling Strength: A Family's Journey

Empowering Voices: Mrs. Nuhad's Journey

11 ..... Unleashing Potential: A Success Story

13 ..... Science Speaks

Cerebral Palsy

Autism Spectrum Disorder in the Dental Setting

Recent Updates in Asthma Treatment

Promising Breakthrough in Multiple Sclerosis Treatment

22 ..... Fun Facts

23 ..... Myth Vs. Fact

24 ..... The Arcade: Crosswords

25 ..... Creative Corner

Scoliosis Awareness Month: A Comic Strip

"The Fight Within" — Lupus Disease: A poem

29 ..... Appendix

# meet our BOARD

By: Tehreem Iman

## Meet: Dr . Omar Aljohari

### **Q: WHAT IS YOUR VISION REGARDING AADMD?**

"I believe we need to establish a community in which individuals with mental and physical disabilities are provided with sufficient support and their healthcare needs are fulfilled. We need to bridge the gap between people of determination and the community."

### **Q: WHAT PART OF YOUR JOB IN AADMD IS THE MOST DIFFICULT ONE?**

"The most difficult part is to talk with the authorities and heads of the centers for people with special needs. We face challenges when reaching out to them. Sometimes we even have to cancel events as we could not contact the authorities and the relevant people."

### **Q: HOW WILL BEING A MEMBER OF AADMD IMPACT YOUR CAREER IN THE FUTURE?**

"Being a member provides me with many opportunities to work in different places and increase my career prospects. Being a dentist, in the future, I could be invited to hospitals and events regarding people with special needs because I already have experience."

### **Q: WHY DO YOU THINK PEOPLE SHOULD JOIN THE AADMD?**

"Firstly because it is satisfying to help, contribute, and bring a smile to faces as we make people happy. People are motivated to be a part of AADMD when they are aware that they will help out people of determination."



*Dr. Omar Aljohari*  
TREASURER



*Dr. Abdullah Faris*  
HEAD OF SCIENTIFIC

## Meet: Dr. Abdullah Faris

### **Q: HOW DO YOU CONTRIBUTE AS A HEAD OF SCIENTIFIC SOCIETY TO AADMD?**

"My role is one of the most important ones because the vision of AADMD is mainly scientific. We are bridging the gaps between people of determination and the rest of the community either in the medical field or beyond. We have already done interviews with multiple physicians to raise awareness about our vision and in doing so have received recognition from other medical practitioners and associations that we have not achieved. We are planning to host workshops and webinars too to further broaden our scope."

### **Q: WHAT WAS THE PURPOSE BEHIND BECOMING A BOARD MEMBER?**

"I have been a member for 4 years. I like the vision of the AADMD, and I have always loved what this association does to raise awareness regarding people of determination. Therefore, I wanted to be a board member to help expand its potential."

### **Q: HOW HAS COVID-19 IMPACTED AADMD?**

"What I like about AADMD is that it doesn't stop working when there are adversities and problems like Covid-19. Since we couldn't attend events, mobile dental clinics, and visits to schools and nurseries had been restricted, AADMD started doing online interviews, webinars, and weekly educational posts to raise awareness with great responses to those initiatives."

### **Q: HOW CAN AADMD INCREASE ITS IMPACT ON SOCIETY?**

"I see that the vision of AADMD is a great one and AADMD has a beautiful impact on society. I want to get the association the recognition it deserves not only locally, but also internationally. We can associate our contribution with events like world autism day, oral health day and other events throughout the year. This will increase our impact and recognition in society. We hope to be able to create our own solo events in the future. I believe this will also result in a wider influence in society."

### **Q: WHAT ADVICE WOULD YOU GIVE TO OUR READERS?**

"I would advise the readers to always keep contributing and attending announced events because AADMD has taken a great initiative, especially for people of determination to always ensure that their voices are heard."

By: Nada Ashraf

## Meet: Raghd M. Darwish

### **Q: WHAT IS THE MOST IMPORTANT PIECE OF ADVICE YOU COULD PROVIDE TO OUR READERS?**

"I know this is cliché; however, trust me it is true, and something not easy to master, but is very satisfying when reached: Do not care what people think of you, how they perceive you in a certain aspect or field. Caring for how people perceive you when you do something or perform a task won't just hinder you from showing your true capabilities but will also leave you with a feeling of regret and self-deprecation. Everything is part of your learning journey. Remember that the people you are afraid of judging you, are also afraid of your judgement."



**"BE WILLING TO EXPERIMENT, EMBRACE TRIAL AND ERROR, BE PATIENT WITH YOURSELF."**

"I hope you can sense that this is coming from my heart. What I can say is, it took me a good amount of time and effort to reach this level of awareness and believe me, it's amazing here."

### **Q: WHAT DO YOU PREDICT WILL BE THE FUTURE DIRECTION OF AADMD DEVELOPMENT IN THE COMING YEARS?**

"Looking at the very passionate founders of the UOS Chapter of AADMD and the achievements reached since it started, the future of AADMD will be large. This will develop into a respectful association with various local and global connections."

### **Q: WHAT ARE YOUR PLANS FOR THIS YEAR'S AADMD VOLUNTEER ACTIVITIES?**

"I plan to convey medical and health information in an enjoyable way. I have already showcased one of my plans in the Green Run Marathon that AADMD participated in! I aim to correct the public's perspective on people of determination through our visits and engagements with them."

### **Q: WHAT MOTIVATED YOU TO RUN FOR THIS POSITION?**

"I am a person who jumps into opportunities when provided. Especially an opportunity where I can provide to the community, and this is what AADMD presented to me. I get to learn from my peers, from AADMD, from my experiences, and from engaging with the public and people of determination, and nothing is more important to a medical student than that."

### **Q: HOW HAS YOUR ATTITUDE ABOUT INDIVIDUALS WITH DETERMINATION CHANGED SINCE JOINING THE ORGANIZATION?**

AADMD allowed me to engage with people of determination more often, and this has substantially helped me build the courage to learn how I can communicate with them. In addition, AADMD has widened my perspective on the types of people of determination, and I think that it is very important for every person to understand this whether they were in the medical field or not.



# under the SPOTLIGHT

## UNVEILING STRENGTH: A FAMILY'S JOURNEY

By: Tehreem Iman -&- Lubaina Ali

**IN THIS HEARTFELT INTERVIEW, WE SHED LIGHT ON THE INSPIRING STORY OF MOHAMED ABDEL BASET AND HIS FAMILY THROUGH THEIR REMARKABLE JOURNEY. JOIN US IN EXPLORING THEIR JOURNEY OF GROWTH, SUPPORT, AND UNWAVERING STRENGTH TO OVERCOME THEIR CHALLENGES.**

**Q: CAN YOU TELL US A LITTLE BIT ABOUT YOUR BROTHER'S CONDITION?**

"My brother, Mohamed Abdel Baset, was born in 2002 and is one year younger than me. He was born with intellectual disability."



**Q: WHAT ARE THE SIGNS AND SYMPTOMS THAT YOU NOTICED THAT LED YOU TO BELIEVE SOMETHING WAS DIFFERENT?**

"As we grew up together, I remember that he was different from the beginning. He would cry often. His speech developed slightly later than usual, and I remember that he did not start school when I did."

**Q: HAS YOUR BROTHER'S DIAGNOSIS AFFECTED THE DYNAMICS OF YOUR FAMILY BOND IN ANY WAY?**

"Of course. Our lives have changed significantly. I think we have become more affectionate and caring, especially to my brother, and we are definitely more patient in dealing with any of life's challenges."



**Q: WHAT ARE SOME OF THE THINGS THAT HAVE BECOME A PART OF YOUR DAILY ROUTINE AFTER THE DIAGNOSIS?**

"After more than three years of research and diagnoses, we found out that my brother has intellectual disability caused by genetic factors. From then on, we created a schedule of tasks in which each family member had to take care of and split caregiving responsibilities. I was responsible for his behavior outside the house when we –

went shopping or eating at restaurants. My mother was deeply involved in his academic journey; she taught him letters, numbers, and their pronunciation. She also managed his personal hygiene. My father focused on the disciplinary aspect, teaching my brother what was morally acceptable and what was not."

**Q: WHAT ARE SOME OF THE MILESTONES OR ACHIEVEMENTS YOUR BROTHER HAS ACHIEVED?**

"At first, we were not sure if my brother would be able to grasp the understanding of even basic skills; however, with continuous effort and perseverance, he now knows how to read, swim, and even ride a bicycle."



**Q: WERE THERE ANY MAJOR CHALLENGES OR OBSTACLES THAT YOU FACED AS A FAMILY?**

"Unfortunately, in Syria, our homeland, there were no specialized schools for children of determination, making it extremely difficult to continue my brother's academic pursuits. However, praise be to God, ever since we moved to the United Arab Emirates in 2011, my brother enjoys all necessary services from a school and a club that suits his needs."

**Q: CAN YOU DESCRIBE HIS LEARNING PROCESS AT SCHOOL?**

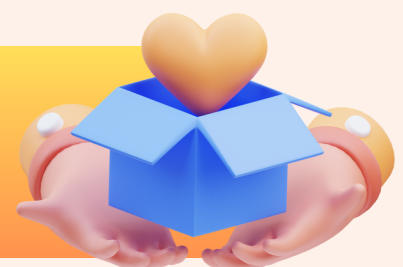
"I actually visited my brother's school, which was quite different from mine. First, there were only five students in each class, allowing the teacher to focus her attention on each student. The learning process was more activity-based and students were equipped with iPads as learning tools. Furthermore, my brother has made friends at school and talks about helping them quite often. Lastly, the school organizes weekly trips to shopping malls and other places so that the students can apply what they learnt in the classrooms into reality."

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**Q: WHAT IS ONE PIECE OF ADVICE YOU WOULD LIKE TO SHARE WITH OTHER FAMILIES THAT MAY BE IN A SIMILAR SITUATION?**

**"I WANT TO TELL ALL FAMILIES TO BE PATIENT, HOPEFUL, AND NEVER GIVE UP."**





# under the SPOTLIGHT

## EMPOWERING VOICES: MRS. NUHAD'S JOURNEY

By: Khadija Zaidan -&- Malak Bouali

**SINCE JUNE IS "BETTER HEARING AND SPEECH" MONTH, WE HAVE DECIDED TO INTERVIEW SPEECH THERAPIST NUHAD ALZUHAILLI, WHO IS AN EXPERT IN HER FIELD ESPECIALLY WITH CHILDREN OF MULTIPLE DISABILITIES.**



**Q: MAY YOU PLEASE INTRODUCE US TO SPEECH THERAPY, WHAT IS IT? AND WHY DID YOU CHOOSE IT AS YOUR CAREER?**



"I always knew that I wanted to help people, especially children with special needs. And speech therapy is a very humanitarian profession that helps me reflect who I am and what I aspire to be. Speech therapy is studying the science of communication and linguistics and using it to train others to speak more clearly so they can communicate with others through language. I would like to mention that humans use multiple ways for communication other than spoken language, like facial expressions, body language, and sign language."

**Q: SO, YOU ARE SAYING THAT CHILDREN WITH DISABILITIES MIGHT NEED SPEECH THERAPY, CAN YOU ELABORATE WHY? AND WHO NEEDS IT AS WELL?**

"Speech therapy is needed for anyone who suffers from language delays, such as autism, hearing deficiency, cerebral palsy, Down syndrome, and learning difficulties. Even children who do not suffer from these conditions may have a language delay resulting from environmental conditions due to parental or environmental neglect, maybe they got selective mutism because of PTSD."







**Q: HOW DOES THE INITIAL VISIT LOOK LIKE USUALLY? WHAT SETS YOUR EXPECTATIONS FOR THE PATIENT?**

"When the child usually comes to the clinic for the first time with his parents, the first step is to take detailed history including birth and any complications postnatally or admission to the NICU. I must ask and assess all the developmental milestones that the child has achieved, including motor, cognitive and speech aspects."

"After documenting all needed information, the next step is to perform several tests; tests that we choose from depend on age and history of the patient. The most common test that I use is the language test, which shows pictures to the child while asking if they know it. And if the child doesn't, then I document these concepts in the case report, and based on them, we decide where to start with the child. The pronunciation test is about verbal sounds. The child must pronounce all the verbal sounds from A to Z at the beginning, middle, and end of the word. For example, the letter "F" must be pronounced in: Fall, golF, and buFFalo. The same example applies in Arabic and other languages. Of course, it must be taken into consideration that the child is growing up and developing, as there are sounds that he does not acquire at his age, and that in certain languages there are some letters that are usually acquired later in life."



**"DEPENDING ON THIS DATA WE DRAW A PLAN WITH A CERTAIN NUMBER OF SESSIONS, AND WE TAKE IT FROM THERE, WITH CONTINUOUS ASSESSMENT USING MULTIPLE TOOLS EVERY COUPLE OF MONTHS."**



**Q: CAN YOU PROVIDE AN OVERVIEW OF YOUR EXPERIENCE AS A SPEECH THERAPIST? COULD YOU GIVE US AN EXAMPLE FROM YOUR PRACTICE, IN WHICH WE COULD UNDERSTAND WHAT HAPPENS DURING THE SESSION?**

"We always start with concentration sessions, which increases his attention, and most importantly, eye contact. It is very important to feel that the child is paying attention and responding. One rule we follow in special teaching is the number of minutes equals 'x+1' in which x is the child's age. For example, if the child is three years old the concentration session should last for four minutes, and then gradually increase it. I do this because I need the child to focus with me for a full 4 mins so he can learn a new word such as apple. During the session, I also recorded his voice saying the words. The audio recording is auditory feedback for the child, and because of it, the child feels happy and accomplished. Therefore, I send this recording to the mother for the child to hear and repeat at home. Finally, I might give the parents some exercises to do at home with their kid as well."

**Q: HOW DO YOU ENGAGE AND MOTIVATE CHILDREN OR INDIVIDUALS WITH LIMITED ATTENTION SPANS?**

"When the child comes to me, I am a stranger to him, so he/she may turn away from me and not respond. A great strategy for communicating and teaching is toys, my clinic is filled with all kinds of toys. It is very necessary that the child likes his specialist, so he responds easily, and that work is flexible. Toys are a great way of teaching as well."



**Q: HOW COULD YOU SAY THAT THESE CHILDREN ARE GETTING BETTER? AND IF THEY DIDN'T PRACTICE AT HOME, HOW COULD THAT AFFECT THE CHILD'S LIFE?**

"When a child is linguistically prepared, he can communicate with society, family, and friends. The child must have self-confidence so that he can express his feelings and thoughts. However, if the child cannot speak and express himself properly, he will always have psychological problems, sadness, avoidance, distance from others, and anxiety."

**Q: WHAT IS YOUR PHILOSOPHY OR BELIEF REGARDING THE IMPORTANCE OF EARLY INTERVENTION FOR SPEECH AND LANGUAGE DISORDERS?**



"Early intervention for children is very necessary. If there is any doubt that there is a speech delay, the parents should go to a pediatrician. The first test usually done is a hearing test because early hearing issues will affect speech development due to not being able to store language components well."

"If hearing is affected then follow up with an ENT doctor, then a speech therapist. As for children with disabilities, early intervention must be by a multidisciplinary team, that includes psychiatrists, speech therapists, special education, occupational therapy, and others depending on the condition."

**Q: THANK YOU FOR THIS LOVELY CHAT, IS THERE ANYTHING YOU WOULD LIKE TO ADD?**

**"MY ADVICE TO ALL PARENTS IS TO PAY ATTENTION TO THEIR CHILD'S DEVELOPMENTAL MILESTONES. IT IS ALSO NECESSARY FOR PARENTS TO KEEP TALKING TO THEIR CHILDREN REGARDLESS OF THEIR AGE BECAUSE THAT IS HOW CHILDREN LEARN HOW TO TALK IN THE FIRST PLACE."**



# UNLEASHING

Potential



## AHMED'S TRIUMPH, A SUCCESS STORY

By: Maya Jamil

Ahmed, a determined and resilient student in grade 4, faced the challenges of dyspraxia, a developmental disorder affecting his motor skills and coordination. Despite the obstacles he encountered, Ahmed's indomitable spirit, combined with the unwavering support of his occupational therapist, Ms. Farah, his parents, and the support team at his school, propelled him to achieve remarkable progress both academically and in life.



At the start of his therapy, Ahmed struggled with tasks that his peers found relatively simple. Tying shoelaces, buttoning his shirt, or holding a pencil presented significant challenges. However, with Ms. Farah's compassionate guidance and expertise, Ahmed embarked on a transformative journey.

Upon receiving Ahmed's diagnosis, his parents sought out professional help, and he began attending occupational therapy sessions three times a week with Ms. Farah. Recognizing the unique needs of Ahmed's condition, Ms. Farah devised a tailored program aimed at improving his motor skills and overall development.

During their sessions, Ms. Farah employed a variety of interactive exercises and activities designed to enhance Ahmed's fine motor skills and coordination. She incorporated puzzles, drawing exercises, and handwriting drills to improve his hand-eye coordination and dexterity. Additionally, she introduced therapeutic games and activities that focused on balance, spatial awareness, and body control.

Ahmed's journey was not without its hurdles, but his perseverance and Ms. Farah's unwavering support allowed him to overcome each one. With time and practice, Ahmed's progress became evident. His handwriting, once barely legible, transformed into a neat and legible script. This newfound skill boosted his confidence, allowing him to actively participate in writing assignments and express his thoughts more effectively.

Furthermore, Ahmed's coordination and balance showed remarkable improvement. He no longer shied away from physical activities, as he now possessed the skills and confidence to engage fully. Participating in sports and playground games became a source of joy rather than anxiety. Ahmed's newfound physical abilities enabled him to build friendships with his peers and forge a sense of belonging within his school community.

The benefits of Ahmed's occupational therapy extended beyond his motor skills. Ms. Farah incorporated activities to enhance his cognitive abilities, attention span, problem-solving skills, and organizational abilities. Ahmed's improved focus allowed him to excel academically, actively participating in class discussions and absorbing information more effectively.

Ahmed's success story transcended the confines of the classroom, positively influencing his personal life. His enhanced social skills enabled him to interact confidently with his classmates, fostering strong relationships. Previously feeling isolated due to his coordination challenges, Ahmed now thrived in group settings, engaging in team projects and extracurricular activities with enthusiasm.

Ahmed's achievements are a testament to his resilience and the transformative power of occupational therapy. With the steadfast support and guidance of Ms. Farah, he overcame dyspraxia's obstacles and achieved significant progress both academically and socially.

Today, Ahmed continues to flourish, applying the skills he acquired during occupational therapy to overcome new challenges that come his way. His story serves as an inspiration to others, illustrating the importance of early intervention, personalized support, and the indomitable spirit of determination.

In the face of adversity, Ahmed's unwavering determination and the guidance of Ms. Farah demonstrate the potential within each of us to overcome the obstacles and achieve greatness. Ahmed's success story exemplifies the transformative impact of occupational therapy, showcasing that with the right support, anyone can overcome challenges and realize their full potential.



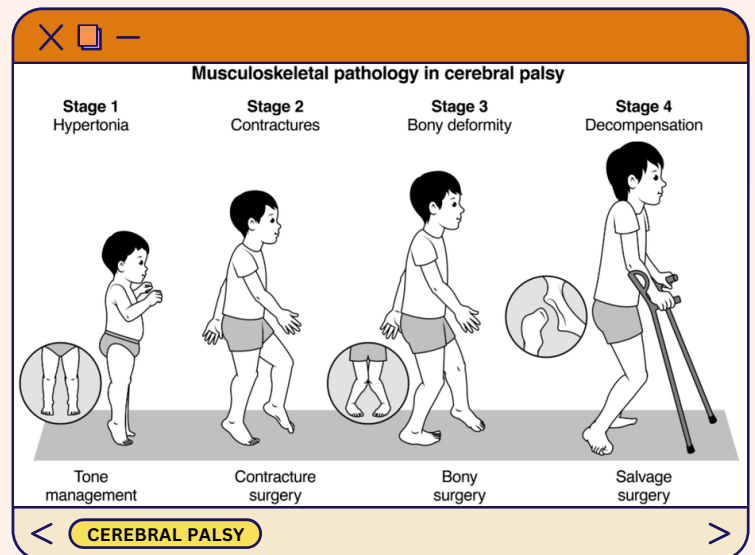
# SCIENCE SPEAKS

## Medical Research

By: Nada Nadima

### CEREBRAL PALSY: IN BRIEF

Movements, muscular tone, and posture are all impacted by a spectrum of conditions known as cerebral palsy (CP). CP is a chronic condition that is caused by injury to the developing brain, which usually occurs before birth. Symptoms first arise during early childhood or preschool years, and the movement impairment caused by cerebral palsy is accompanied by increased reflexes, floppiness or spasticity of the limbs, involuntary movements and unstable walking.



Swallowing issues and eye muscle imbalance, which cause the eyes to not focus on the same object, are frequent in people with cerebral palsy. Moreover, they could have a restricted range of motion at various body joints as a result of muscular stiffness.

### THERE ARE NUMEROUS POTENTIAL CAUSES AND FUNCTIONAL RAMIFICATIONS FOR CEREBRAL PALSY.

Some individuals may experience intellectual disability, while others may not be affected by the disorder. It's also possible to have epilepsy combined with blindness and deafness. Despite the fact that there is no cure, medications can help improve CP.



## THERE ARE FOUR MAIN TYPES OF CEREBRAL PALSY:

- 1. Spastic cerebral palsy:** This is the most common type of cerebral palsy, affecting about 80% of people with the condition. It causes stiff muscles, making movement difficult and sometimes painful.
- 2. Dyskinetic cerebral palsy:** This type of cerebral palsy causes involuntary movements that can be slow, fast, jerky, or writhing. These movements can affect the arms, legs, and face.
- 3. Ataxic cerebral palsy:** This type of cerebral palsy affects balance and coordination, making it difficult to walk or perform fine motor tasks such as writing or buttoning clothes.
- 4. Mixed cerebral palsy:** This type of cerebral palsy involves a combination of the above types.

## SYMPTOMS

Cerebral palsy signs and symptoms might differ widely from person to person. The entire body may be affected by cerebral palsy, or it may only primarily affect one or two limbs.

### 1. Movement and coordination

This major symptom is characterized by stiff muscles and exaggerated reflexes (spasticity) which is the most common movement disorder. Variations in muscle tone, rigidity, lack of balance and muscle coordination (ataxia), tremors or jerky involuntary movements, slow writhing movements, and difficulty in walking, such as walking on toes and a crouched gait are other presenting symptoms.



### 2. Speech and eating:

They are mainly characterized by delayed speech development, difficulty speaking, difficulty in chewing or eating, and excessive drooling or problems with swallowing.

**3. Damage to the brain can contribute to other neurological problems,** such as seizures, difficulty in hearing, problems with vision and abnormal eye movements, constipation and urinary incontinence, and mental health conditions, such as emotional disorders and behavioral problems.



## TREATMENT

Cerebral palsy may require lifelong care from a medical care team for both children and adults. The team comprises therapists, mental health professionals, a pediatrician, a physiatrist, and a pediatric neurologist to manage the

child's medical care as needed. These specialists can collaborate with the main care physician and pay particular attention to requirements and problems that are more prevalent among people with cerebral palsy.

### TREATMENT OPTIONS INCLUDE MEDICATIONS, THERAPIES AND SURGICAL PROCEDURES.

- **Medications:** Medications are used to enhance functional abilities, reduce pain, and manage the consequences associated with spasticity and other symptoms of cerebral palsy.
- **Muscle or nerve injections:** Doctors might suggest Botox or similar injections that alleviate tightness in a particular muscle. Injections need to be repeated every three months.
- **Oral muscle relaxants:** Muscle-relaxing medications include baclofen, tizanidine (Zanaflex), diazepam (Valium), and dantrolene (Dantrium).
- **Physical therapy:** Muscle-building exercises and training can improve the child's strength, flexibility, balance, motor development, and mobility. Parents also learn how to safely meet their child's regular needs at home, such as bathing and feeding. One can continue working at home in between therapy sessions with the help of their therapist.
- **Occupational therapy:** Occupational therapy aims to enhance a child's independence in daily tasks and routines at home, school, and in the community. Parents or caregivers may be advised to get the child walkers or canes with wide bases, standing and seating aids, or electric wheelchairs.
- **Orthopedic operations:** Surgery on bones or joints may be necessary for children with severe contractures or abnormalities to realign their arms, spines, hips, or legs. Furthermore, surgical procedures can stretch or reposition muscles and tendons that have been crushed by contractures. These modifications can improve movement and lessen discomfort. The operations may also make it simpler to utilize crutches, a walker, or other aids.



**To conclude, cerebral palsy is a complex neurological disorder that affects movement and muscle coordination. While there is no cure for cerebral palsy, treatment options are available that can help manage symptoms and improve quality of life. With proper support and care, people with cerebral palsy can lead fulfilling and meaningful lives.**



# SCIENCE SPEAKS

## Dental Research

By: Rand Alkhalidi

### AUTISM SPECTRUM DISORDER

Autism spectrum disorder (ASD) is a complex neurodevelopmental disorder characterized by impaired communication skills, restricted or repetitive behaviors, and sensorimotor defects. The etiology of ASD is not fully understood yet. However, current evidence suggests that the disorder could be multifactorial, involving genetics and environmental factors.

Typically, ASD manifests before the age of 3. Early signs and symptoms can include the baby not seeking parental attention, failure to cuddle, and the lack of reaction to known faces.

### ASD & ORAL HEALTH

Children with ASD often have challenges with tongue coordination, leading to a preference for soft and sweetened foods. This preference of food along with difficulties in brushing and flossing and high sensitivity to the taste of toothpaste, leads to an increased susceptibility to dental caries.

Self-injurious behaviors, including oral habits like lip biting, tongue thrusting, gingival pricking, and nocturnal bruxism, are common among individuals with ASD. Such habits can result in malocclusions, crowding, and an open bite.












## DENTAL MANAGEMENT OF PATIENTS WITH ASD

- It is recommended to schedule short and well-organized appointments, ensuring that the waiting time does not exceed 10 to 15 minutes. This is important to prevent upset as individuals with ASD often have a limited attention span.
- The patient should be treated in a calm, isolated clinic with reduced decoration and dimmed lights.
- Oral commands should be in the form of simple, short, and clear sentences.
- Creating a calm and soothing dental environment through relaxing light conditions and rhythmic music can help reduce adverse reactions and promote positive engagement during dental treatment.
- Autistic children tend to have a high level of peripheral vision and are easily distracted. Therefore, anyone involved in patient management should reduce their movements.
- Certain patients may benefit from the use of assistive communication devices, including options such as the Smart/Scan 32 pro, an augmentative communication device (see Fig. 1), or the Picture Exchange Communication System (PECS) (see Fig. 2).
- As some children with ASD may have high sensitivity to the taste of toothpaste, other alternatives can be introduced to the child such as a washcloth, toothbrushes of different textures and designs, or an electric toothbrush.



**Fig. 1: Smart/Scan 32 pro, an augmentative communication device**

 I want		 I see		 Thankyou	
 Drink	 Biscuit	 Apple	 Cake	 Crisps	 Banana
 Book	 Sand	 Bricks	 Pens	 Farm	 Puzzle
 Shoe	 Junper	 Trousers	 Coat	 Sock	 Hat

**Fig. 2: Picture exchange communication system**

# SCIENCE SPEAKS

## *Pharmacological Research*

By: Habiba Mohamed



### **UBLITUXIMAB: A PROMISING BREAKTHROUGH IN MULTIPLE SCLEROSIS TREATMENT**

Multiple sclerosis (MS) is a chronic autoimmune disease that affects the central nervous system, causing a wide range of symptoms and complications. Over the years, researchers and physicians have worked tirelessly to find new advanced treatments to manage the symptoms and slow the progression of MS. One such breakthrough was the approval of a new drug called Ublituximab (1). In this article, we will explore the features, benefits, and potential impact of Ublituximab on individuals with MS.

Ublituximab, a novel treatment for multiple sclerosis (MS), offers a unique approach compared to other available agents. While traditional disease-modifying therapies (DMTs) such as interferon beta drugs or glatiramer acetate, work by modulating the immune system or reducing inflammation, Ublituximab targets specific types of immune cells called B cells (7).

Ublituximab is a monoclonal antibody designed to attack and destroy antibodies producing B cells. In MS, B cells are found to be the causative agent that destroys myelin, the protective layer of nerve fibers. By selectively targeting and eliminating these B-cells, Ublituximab aims to suppress the immune response and reduce inflammation in the central nervous system (2).

### **CLINICAL TRIALS ON UBLITUXIMAB**

Clinical trials assessing the safety and efficacy of Ublituximab have shown promising results. A pivotal phase 3 study, called ULTIMATE I and II, showed that Ublituximab compared with placebo significantly reduced annual relapses in patients with relapsing MS. In addition, the drug slows the progression of the disability and reduces the rate of new inflammation brain lesions seen on MRI scans (5).



## UBLITUXIMAB ADMINISTRATION



Ublituximab is administered as an intravenous agent, divided into two treatment cycles spaced two weeks apart. The goal of this dosing regimen is to significantly decrease B cells up-regulation and maintain therapeutic benefit over time (4). Ublituximab intravenous therapy is administered every six months, making it a viable treatment option with better compliance. This reduction in medical burden can provide patients with adherence and overall quality of life has increased. (3)

### LIKE ANY DRUG, UBLITUXIMAB COMES WITH POTENTIAL SIDE EFFECTS.

Common side effects include infusion-related reactions, such as headache, fatigue, and nausea. In addition to infection, infusion site allergic reactions such as rash or swelling, and temporary decreases in certain blood cell counts. However, these side effects are generally manageable and can be minimized by symptomatic treatment and careful monitoring during infusion. Overall, the safety profile of Ublituximab is satisfactory, and it is well tolerated by most individuals with MS. (4)



### THE APPROVAL OF UBLITUXIMAB IS AN IMPORTANT MILESTONE IN THE MANAGEMENT OF MS.

However, it should be noted that the overall potency and long-term effects of Ublituximab are still under investigation. Ongoing research aims to understand its efficacy in other forms of MS, such as primary progressive MS, and to investigate its role as first-line therapy(6). The positive results seen in clinical trials, coupled with better safety, give hope for improved outcomes for individuals with MS.

# SCIENCE SPEAKS

## Pharmacological Research

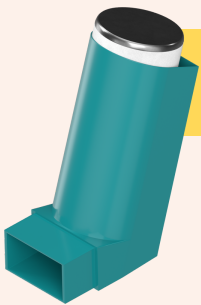
By: Habiba Mohamed

### RECENT UPDATES IN ASTHMA TREATMENT: A STEP FORWARD FOR PATIENTS



Asthma, a chronic respiratory disease that affects millions of individuals worldwide, requires ongoing research and development to improve treatment. Fortunately, recent advances in this field have brought progress promising results, offering new hope for individuals with moderate to severe asthma.

### AIRDUO® RESPIClick®: A NEW QUICK RELIEF MEDICINE




One of the most important advances in the treatment of asthma is the AirDuo® RespiClick®, approved by the Food and Drug Administration (FDA). This remedy is designed to speed recovery in adults with moderate to severe asthma. AirDuo® RespiClick® combines an inhaled corticosteroid (ICS) with a long-acting beta-agonist (LABA), which complement each other in reducing airway inflammation and relaxing airway muscles, respectively; improving quality of life. (1)

### DUPIXENT®: AN INNOVATIVE DRUG COMBINATION TREATMENT

FDA approval of combination therapy for adult asthma is another important milestone. Developed by Regeneron Pharmaceuticals and Sanofi, Dupixent® (Dupilumab) is a natural injectable drug that targets specific pathways associated with inflammation. Provides valuable treatment. The drug, when used in combination with other asthma medications, has shown promising results in reducing exacerbations and improving lung function. This breakthrough provides a valuable treatment option, particularly for patients with uncontrolled moderate to severe asthma. (2)



## BENRALIZUMAB FOR EOSINOPHILIC ASTHMA



Eosinophilic asthma, a form of asthma in which there are large numbers of eosinophils (a type of white blood cell) in the airways, often requires specialized treatment.

AstraZeneca and Avilion LLP Advance FDA-directed company manufactured Benralizumab as a monoclonal antibody, targeting the interleukin-5A receptor designed as an alternative mechanism of action enabling specificity and reducing side effects in patients with severe eosinophilic asthma in patients aged 12 years and older. Clinical trials have shown it to be effective in reducing exacerbations, improving lung function, and improving patients' quality of life. (3)

These recent innovations in asthma medicine offer tremendous benefits to patients, potentially changing their management strategies. The introduction of AirDuo® RespiClick® which addresses immediate asthma symptoms provides a convenient and effective medication option that provides rapid relief.

Dupixent® approval as a combination therapy highlights the importance of targeting specific pathways involved in allergic asthma, which may reduce the burden of asthma exacerbations. It specifically offers new hope for patients with eosinophilic asthma as well, enhancing control of symptoms and reducing severity.

### IT IS IMPORTANT TO NOTE THAT ASTHMA TREATMENT PLANS SHOULD BE TAILORED TO A PATIENT'S SPECIFIC NEEDS.

Consultation with healthcare professionals, including pulmonologists and allergy specialists, is crucial for an accurate diagnosis and the determination of the most appropriate treatment options. They can provide personalized guidance and treatment plans based on the latest updates and guidelines.



Recent advances in asthma treatment including the approval of AirDuo® RespiClick®, the introduction of Dupixent®, and the advent of Benralizumab are important steps in the management of moderate-to-severe asthma. These advances offer hope to patients by expanding available treatment options and improving symptom management.

# FUN



# FACTS

By: Menatalla Abdelmomen -&- Ridha Umar

Asthma symptoms can exhibit variability:

Although asthma symptoms may diminish during childhood, there is a possibility of recurrence during adulthood

According to epidemiological data, many adults with asthma continue to experience symptoms despite the availability of effective treatment options.

Lung function tests, such as spirometry, can help confirm an asthma diagnosis that has been made clinically.



Dogs protect children from asthma: Babies born in houses with dogs have a lower incidence of being diagnosed with asthma.

Asthma is more prevalent in adult women compared to men. While asthma is more common in young boys than girls. The reason behind the change in prevalence is due to ovarian hormones.

Diagnosing asthma can be more challenging in older patients and children under the age of five. Childhood asthma symptoms may resemble recurrent chest infections, while symptoms in the elderly can be misdiagnosed as heart failure.

# MYTH FACT

## Elderly Abuse Awareness

By: Awab Musaad Suliman

### MYTH 1: ELDER ABUSE IS NOT COMMON.

**FACT:** Elder abuse is more common than most people realize. Many incidents go unreported because of ignorance and underreporting. Due to their dependency on their abusers or feelings of dread or humiliation, elderly people may be reluctant to disclose abuse.

### MYTH 2: ELDER ABUSE HAPPENS MAINLY IN THE NURSING HOMES.

**FACT:** Although abuse can happen in institutional settings like nursing homes, it is not just exclusive to these places. Elder abuse can occur in the family home, in public places, or even at the hands of family members or caregivers.

### MYTH 3: ELDER ABUSE MEANS A PHYSICAL VIOLENCE PRACTISED ON THE ELDERLY.

**FACT:** Abuse against elderly people can take many different forms, including neglect, as well as physical, emotional, sexual, and financial abuse. Psychological abuse of older people, such as verbal threats, intimidation, or isolation, can have a serious negative effect on their wellbeing.



### MYTH 4: ELDER ABUSE CAN BE DETECTED EASILY.

**FACT:** Bruises, scars or visible injuries can be present in some cases and can raise the suspicion of elderly abuse, but in many cases, harm signs could be hidden under clothes for example. Psychological abuse -which is a major contributor to elderly abuse- cannot be detected by external features.

### MYTH 5: ELDER ABUSE SHOULD ONLY BE DISCUSSED INSIDE THE FAMILY SINCE IT IS A PRIVATE AFFAIR.

**FACT:** Neglecting elderly people is a severe social problem that calls for help and response. Keeping it secret encourages abuse and prevents victims from receiving the support they require. For the protection and well-being of elderly people, it is essential to report any suspicions of abuse to the appropriate authorities.

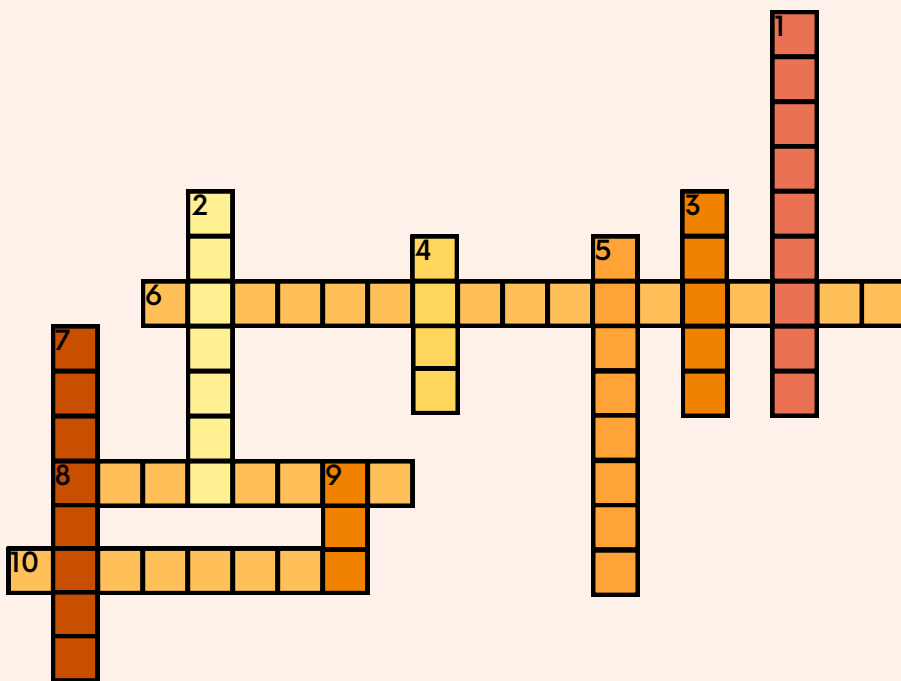
### MYTH 6: WHEN A SENIOR DENIES ABUSE, IT'S TRUE.

**FACT:** Elderly abuse victims often hesitate to report caregivers to authorities or loved ones, fearing repercussions. Cognitive decline and diseases like dementia can hinder abuse recognition. Thus, families of seniors in outside care must be vigilant for signs of abuse and neglect.

# THE ARCADE



By: Afrah Hajmydeen



Looking for a fun challenge? Test your crossword skills with these statements related to developmental disabilities. Fill in the blanks and use the letters provided to solve the puzzle horizontally or vertically according to the numbered clues.

Click the **START** button to play it online.



Answer key in the appendix

## MENU

### ACROSS

6. Parkinson's disease is a \_\_\_\_\_ disease.
8. \_\_\_\_\_ therapy helps improve motor control and strength.
10. The chemical that gets lower in this disease.

### DOWN

1. \_\_\_\_\_ gait is observed in affected individuals.
2. most common first symptom.
3. Deep \_\_\_\_ stimulation is a possible surgical option.
4. \_\_\_\_\_ injury could be a risk factor.
5. main medication prescribed.
7. diagnosis is usually done based on \_\_\_\_\_.
9. higher the \_\_\_\_\_, the higher the risk.



# CREATIVE CORNER

## Scoliosis Awareness Month: A Comic Strip

By: Hajir Saeed



# CREATIVE CORNER

## Scoliosis Awareness Month: A Comic Strip

By: Hajir Saeed



The Next Day

And yet, I realize that despite having scoliosis, I am not caged. I am capable of enjoying the life I have because I am supported by those who drive me to stand high and confident.



# PROLOGUE TO "THE FIGHT WITHIN"

Lupus Disease: A poem

By Mohamad Assker

In a world veiled in purple, a hidden fight ensues,  
Where nightmares take form, yet remain unseen clues.  
Within the mirror's gaze, a pink butterfly appears,  
A symbol of a battle, fought through hidden tears.

The body, once an ally, now a treacherous foe,  
Mentally crushing, it seeks to overthrow.  
A common yet rare disease, a burden to bear,  
A stomach full of pills, a heavy chain to wear.

Through the storm raging inside, with relentless rain,  
She vows to endure, fight through the pain.  
Facing fears, she perseveres year after year,  
Seeking glimmers of hope, dispelling the fear.

No longer invisible, awareness takes its stand,  
United by purple ribbons, lending a helping hand.  
On May 10th, they share, spreading the call,  
Lupus awareness, united, standing tall.



A decorative header featuring several thick, expressive brushstrokes in shades of purple and magenta, overlapping each other. The background is a soft, light purple with several white starburst or sparkles scattered across it.

# The Fight Within

Lupus Disease: A Poem

## P O E M

By Hind Al Khalaf

Purple is the ribbon we wear  
We suffer an invisible nightmare  
Waking up each day not knowing what's in store  
If I could just shut this door once and for all  
Staring at the mirror and all I can see  
The pink butterfly, a sign of my disease  
A badge of honor I never asked to receive

My body is my enemy  
It's crushing me mentally  
A disease common yet so rare  
A stomach full of pills, I can not bare!

Finding out who we truly are  
Calmness feels like a distant star  
Doctors come and doctors go  
Revealing what they truly know..

it's like a storm inside of me, With no end to the rain  
But I'll fight through this horrible pain!  
Facing my fears, I'll persevere, year after year!  
Through the darkness, there is light  
A glimmer of hope, shining so bright

It's no longer an invisible nightmare  
If we're all aware, and show our care  
Wear the purple ribbon and be there  
Lupus awareness, may 10th let's all share.

# APPENDIX

## The Arcade Answer key

- |              |                      |
|--------------|----------------------|
| 1. shuffling | 6. neurodegenerative |
| 2. tremors   | 7. symptoms          |
| 3. brain     | 8. physical          |
| 4. head      | 9. age               |
| 5. levodopa  | 10. dopamine         |

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