

**SHORT COMMUNICATION****Attention Deficit Hyperactivity Disorder among English language learners of Sterilization program amidst COVID-19**

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**Background:** This study explored the prevalence of Attention Deficit Hyperactivity Disorder (ADHD) among the students of 'sterilization program' while learning English language amidst COVID-19 in Saudi Arabia.

**Aim:** To diagnose ADHD among the learners, and later propose some digital strategies to motivate the learners for resilience.

**Methods:** A qualitative exploratory study was undertaken in April, 2020. A diagnostic tool was administered to 41 students pursuing 'Sterilization program' at King Abdulaziz University in Kingdom of Saudi Arabia (KSA). Later, learners with ADHD (N=9) were selected for in-depth study. Data was collected using the ADHD self-report scale V1.1 screener.

**Results:** Five professors from the concerned department were purposively selected for the interviews for qualitative analysis using thematic analysis. Confidentiality and anonymity was ensured as per the ethical standard. Many students demonstrate signs of ADHD, therefore there is a need of assessment and intervention. Teachers, counselors and managers need to take care of such learners.

**Conclusions:** Conclusions were drawn that students with ADHD need relevant interventions in general and specific pedagogy.

**Keywords:** ADHD, English language, sterilization, Attention deficit hyperactivity, digital strategies, motivation

**INTRODUCTION**

Attention deficit hyperactivity disorder (ADHD) is a complex and developmental disorder, and can be found in early years. It may continue throughout one's life. Therefore, one can't propose a definite solution. (Singh et al, 2015). However, at later stage of life, it does not remain very crucial because the individual with ADHD is used to his life style, and companions or family members don't much react (Khan, 2018). ADHD has been divided into three subtypes of disorder: inattentiveness, impulsivity, and hyperactivity. (Miller et al, 2010).

Long ago, it was explored (Weiss and Hechtman, 1993) that ADHD as a neurobiological disorder, its main characteristics is difficulty in controlling behavior and/or paying attention to anything. Such a behavior is often triggered by environmental factors especially unfavourable circumstances or difference of opinions. It can be observed by family members or teachers if they are little aware of such a disorder, but it is better to get clinically diagnosed by specialist or a professional. However, in academic setting, students are not always taken to specialists in normal cases. The school psychologist may report the case to the management and parents if they think it is crucial. Normally, neither the patient nor the family is so considerate to accept the fact of ADHD because they think it is a serious mental issue. A review of children with ADHD was carried out presenting to a Pakistan based outpatient psychiatric institute. (Qureshi and Thaver, 2003). There are many undiagnosed cases around the world. In most cases, individuals are not clinically diagnosed or assessed in educational setting. Therefore, there is nothing in hand to cope with the issue which affect the whole life of the sufferers in general and academic performance in particular.

**The COVID effect on society and academics:** The COVID-19 pandemic has already created unprecedented challenges; therefore, educational system is not an exception. Individuals with neuro-developmental disorders, such as ADHD, are particularly vulnerable to further psychological issues due to unrest, distress and confusions of different kinds, and these are attributed to nothing but the ongoing pandemic and physical distancing measures, consequently ADHD sufferers in particular demonstrate more behavioural issues Pakistan. (Cortese et al., 2020). In a different context, a study reported that ADHD is the commonest disorder even in Ireland. (McGrath, 2020). His study focussed on the progressive impact of the Covid-19 on mental conditions and related services for youth with ADHD in Dublin, since the outbreak of Covid-19 in Ireland. Such cases give an impression that cases like the existing pandemic affect mental status while academic activities require healthy mental state.

**Importance of ADHD diagnosis in educational sector:** Medical/Health Education stands at the peak of the most highly ranked institutions and academic curricula. Despite innovation of sophisticated pedagogy with technology integration, a lot of students find themselves under stress, so do the ADHD sufferers. The case of pandemic on a switch over to virtual teaching scenario has created a bigger issue as the teacher-students emotional bond is missing. ADHD affected learners are facing corona effect on the one hand, and academic stress on the other hand. Qiao et al (2014) pointed out earlier that students in general require certain level of cognitive ability to retain their knowledge. Some of their behavioural characteristics looked like the tendencies noticed among those suffering from ADHD among the undergraduate medical students (Hamid et al, 2020). Therefore, a prescribed diagnostic tool

was employed in this study to assess ADHD signs and symptoms prior to arriving at any conclusions.

Some obvious characteristics of students with ADHD include academic underachievement, poor academic performance, and educational problems (Barry, 2002). Such students show impairment of body functions, and a low level of IQ. With regards to social participation, such cases participate less than the required amount, however they show increases in repeated grades. It has been noticed that remedial academic services are beneficial for them in addition to special education classes compared with controls (Biederman et al, 1996).

**ADHD and English language learners:** Though ADHD creates problems for all kinds of learners, it is interesting to note that the affect of ADHD becomes more crucial while learning a subject which is not easy for the target learners. Since English is learnt as foreign language in KSA which serves specific purpose, the learners of English exhibits more inattentiveness in the class due to difficulty levels. It is noted that some students are usually lost in the world of imagination which is not only attributed to the ADHD but also the difficulty of the subject in addition to the ineffective strategy employed by the instructor.

**Motivating students with ADHD:** Having seen the effect of Covid-19 on life in general and academics in particular, the biggest task for an academician or a counsellor is to support ADHD cases to deal with any situation like the Covid-19 pandemic. Students suffering from ADHD are usually nervous, slow and passive. Covid-19 triggers nervousness and stress, therefore learning becomes more challenging. Therefore, it is important to motivate learners to raise their level of confidence. Academically, digital pedagogy such as video sharing, blended learning strategies can enhance the motivation level especially when the teachers are aware of learners' style.

**Resilience of nervous students:** As we know that 'resilience' is the ability to cope with dark sides of the life which leads to pessimism. In other words, it is the 'mental status' that enable individuals to fight back any challenges or negativity. Following few tips can promote resilience among students in the classrooms. Teachers can build up positive relationship with such students to enjoy well being and academic achievement. Student teacher relationships were found closely connected to student academic activities and achievement. Teachers can also enhance positive emotions by creating an attachment and belongingness so the learners are relaxed and positively motivated to their life goals. The role of 'school' and teachers is considered as a protective factor for mental health and academic performance of all students. (Roorda et al, 2017).

**Digital strategies:** There are many teaching strategies to teach students with ADHD. The teachers can develop a nice environment in which target learners are comfortable to engage themselves. Interesting activities can be designed as strategies to impart knowledge to reluctant ADHD learners. Differentiated instruction (DI) can be utilised as a teaching strategy. It is also possible to integrate technology along with general strategies to make the activity digital and simultaneously interesting for the learners.

Teachers can show interesting images, diagrams, infographics, videos, educational films and documentaries which ADHD sufferers can enjoy, learn and feel relaxed. Technology integration or blended learning can de-burden the target learners.

## SUBJECTS AND METHODS

A qualitative exploratory study was undertaken in April, 2020 which continued till October, 15, 2020. A diagnostic tool was administered to 41 students of English language pursuing 'Sterilization' as associate program at faculty of applied studies of King Abdulaziz University, Jeddah-Saudi Arabia. Later, after identifying ADHD affected learners (n=9) were selected for in-depth study.

After getting a university project, approval from the concerned faculty was sought to undertake the project/study. Since the researcher was the part of university academic staff as well as the principal investigator, no technical issues were faced. The sample was selected employing convenient-purposive sampling technique. Both local administration and participants were informed and consent take. It was clarified that it was not mandatory to take part in research, and formal consent was taken keeping ethical standard in view. As mentioned, data was collected according to the research protocols such as informed consent etc. Though the Adult ADHD Self-Report Scale (ASRS) V1.114 was administered to all the subjects, (<https://add.org/wp-content/uploads/2015/03/adhd-questionnaire-ASRS111.pdf>), only 9 students were diagnosed as affected by ADHD. Later, 5 teaching faculty were interviewed (Appendix-A). Data were recorded/ transcribed and presented as following sub-themes:

### Theme: ADHD diagnosis

Table-1

Sub-theme:1- Sign of ADHD	Sub-theme:4- Reasons of underachievement
Sub-theme:2- Need of diagnosis	Sub-theme:5-Need of professional counseling
Sub-theme:3-Types of diagnosis	Sub-theme:6- Inclusive classroom
Sub-theme:7-Management of ADHD cases	

## RESULTS

**Signs of ADHD:** Interviews revealed that certain signs of ADHD were noticed by the teacher, however it was not confirmed with them if they knew about ADHD. Therefore indirect questions were asked to elicit required information. Prominent signs were: lack of attention, passive attitude, inappropriate body language, and underachievement despite teachers' hard work.

**Need of diagnosis:** It has always been a challenging issue for teachers to conclude if the learner is a case of ADHD or otherwise. Some resemblances may be found in signs of ADHD and other behavioural issues. Therefore, a proper diagnosis is always recommended.

**Types of diagnosis:** There are two types or diagnoses or assessment: medical diagnosis and educational assessment. Most ADHD cases are not medically diagnosed and many patients don't like a proper diagnosis. Therefore, it is a good idea to assess students with ADHD

so that digital or other strategies can be evolved or remedial teaching can be provided.

**Reasons of underachievement:** Underachievement can be attributed to different factors. One of the reasons could be lack of interest, focus or motivation. Students with ADHD are characterized by lack of attention which leads to underachievement.

**Need of professional counseling:** Some learners need medical diagnosis and medical intervention, but academic counseling is required if the teachers need to raise the level of attention, interest, motivation leading to underachievement.

**Inclusive classroom:** It was found that inclusive education is a good idea to teach ADHD affected learners with normal students. However, 'differentiated instruction' is a good teaching strategy to deal with different kind of learners.

**Management of ADHD cases:** Since ADHD affected learners have different issues, they can't perform as good as other group of students. They usually show lack of interest, and sometimes engage themselves in other than learning activities. The teachers are initially responsible for managing such a class with learners with ADHD. Next, managers and counselors need to pay attention to such issues in order to cater the need of such learners.

## DISCUSSION

Findings showed that there were 9 students who were suffering from ADHD. The interview and literature reviews demonstrated that important signs of ADHD were: lack of attention, indifferent attitude, passive body language, poor academic performance despite the fact that teachers leave no stone unturned in imparting knowledge and required skills. Results also showed that it has always been difficult to assess or diagnose if X students is a real case of ADHD or he is having similar issues that resemble ADHD signs. It was noticed that a proper medical diagnosis or academic assessment of ADHD is always needed. There are two kinds of diagnoses: medical diagnosis and assessment for ADHD signs to design a strategy for teaching students with ADHD. It is sad that most parents and patients don't accept that they might suffer from ADHD so they don't want to consult a specialist. As a result, the problems persist and continue to affect teaching-learning. The study revealed that there are many reasons of poor achievement. The reasons are poor interest, inadequate focus or lack of genuine motivation. Therefore, there is a need of professional counseling as some learners with ADHD need medical diagnosis and appropriate intervention. At the same time, academic advising or counseling under an expert is also in demand to cope with such an issue like ADHD. Despite the fact that students with ADHD require special attention, it won't be a good idea to separate them from the main class. In this given situation, remedial teaching or specific digital strategy can be of great help.

## CONCLUSIONS

A significant number of adult learner in sterilization associate degree program showed symptoms which match with ADHD. Such students need medical diagnosis and intervention or specialized professional counseling in academic setting. Special strategy should be evolved in addition to remedial teaching if needed. Finally, teachers, counselors and institutional management need to take care of.

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**Appendix-A**  
**INTERVIEW QUESTIONS**

- Q-1. What signs of ADHD do you find with some students?
- Q-2. Why do you think lack of attention is a definite sign of ADHD in some students?
- Q-3. Why do you think it is important to report such cases to the school psychologist or a professional?
- Q-4. Why do you think there is a need of specific strategy for students with ADHD symptoms.
- Q-5. Why do you think ADHD affected students can still learn together with other students?
- Q-6. What digital strategies can yield better results?
- Q-7. What could be reason of underachievement in case of some of your students?
- Q-8. Why do you think there is a need of professional counseling?
- Q-9. How can such ADHD cases be managed without clinical intervention?
- Q-10. Is ADHD manageable in the class by teachers?