Background/Aim: Alexithymia is the sub clinical inability to recognize and describe one’s feelings. In the medical field, students often become emotionally blind when dealing with the difficulties of their studies, which can lead to burnout syndrome. This study’s purpose is to assess prevalence of alexithymia and its association with burnout among medical field students at Umm Al-Qura University (UQU), Saudi Arabia. Methodology: A cross sectional survey of medical field students at UQU was conducted to assess the prevalence of alexithymia using the Toronto Alexithymia Scale and academic burnout, measured using the Maslach Burnout Inventory. T-tests were run to assess specialties and gender differences. Result: A total of 387 medical field students completed the study questionnaire. The prevalence of alexithymia among medical field students was 36.7% and alexithymia was detected among 42.2% of female students compared with 30.4% of male students (P=0.033). A significant relation was found between alexithymia among medical field students at UQU and their burnout (P=0.001). Conclusions: One third of the study participants may have alexithymia. Given the important association between burnout and alexithymia, increasing awareness of alexithymia and providing self improvement programs for burnout prevention is highly recommended. (Ref: Khafagy AA, Zafer DO, Alyamani NA, Abdulhaq WJ, Almalayo RO, Asiri JK. Prevalence of alexithymia and its association with burnout among medical field students at Umm Al-Qura University in Saudi Arabia. Medical Science 2022; 26:ms442e2432); (Image from: eiko ojala).
Prevalence of alexithymia and its association with burn out among medical field students at Umm Al-Qura University in Saudi Arabia

Abdullah Ahmed Khafagy, Dai Osama Zafer, Nawras Ali Alyamani, Warif Jameel Abdulhaq, Rania Othman Almalayo, Jamila Kamal Asiri

Background/Aim: Alexithymia is the sub clinical inability to recognize and describe one's feelings. In the medical field, students often become emotionally blind when dealing with the difficulties of their studies, which can lead to burnout syndrome. This study's purpose is to assess prevalence of alexithymia and its association with burnout among medical field students at Umm Al-Qura University (UQU), Saudi Arabia. Methodology: A cross sectional survey of medical field students at UQU was conducted to assess the prevalence of alexithymia using the Toronto Alexithymia Scale and academic burnout, measured using the Maslach Burnout Inventory. T-tests were run to assess specialties and gender differences. Result: A total of 387 medical field students completed the study questionnaire. The prevalence of alexithymia among medical field students was 36.7% and alexithymia was detected among 42.2% of female students compared with 30.4% of male students (P=0.033). A significant relation was found between alexithymia among medical field students at UQU and their burnout (P=0.001). Conclusions: One third of the study participants may have alexithymia. Given the important association between burnout and alexithymia, increasing awareness of alexithymia and providing self improvement programs for burnout prevention is highly recommended.

Medical Science, 2022, 26, ms442e2432

Common mental disorders among high school students during COVID-19 pandemic with online education satisfaction level in Pakistan

Noreen Maqbool Bokhari, Mubashir Zafar, Muhammad Maaz Arif, Ayma Azhar, Samina Kanwal, Khawaja Ghulam Mouinuddin

Objective: The objective of the study is to determine the prevalence of common mental disorders among high school students and their online education satisfaction levels in Pakistan. Study Design: It was an observational, cross sectional study. Place and Duration of Study: The study took place among students registered across various high schools at different cities in Pakistan. The duration of the study was about six months from January 2021 to June 2021. Material and Methods: A cross sectional study was conducted across different high schools in Pakistan. For a total of 275 selected study participants, structured and validated questionnaires were used to determine the common mental disorders such as anxiety, depression, and Psychosis. Chi square was used to determine the association between the satisfaction levels of online learning with mental disorders. Results: Among students 28% and 34.7% and 32%, suffered from severe anxiety, depression and Psychotic disorder respectively. The relationship of severe depression (r=0.7 (p=0.001)), severe anxiety (r=0.6 (p=0.036)) and severe psychotic (r=0.8 (p=0.002)) disorder had significant strong relationship with student's satisfaction with online classes. Conclusion: High levels of mental disorders among students during the pandemic and low satisfaction with online learning were common among students due to stress. It is recommended that the mental level of students should be monitored, and counseling services should be provided.

Medical Science, 2022, 26, ms443e2475

Social knowledge of symptoms, risk factors, causes, and preventive measures of CO poisoning among Saudi Arabia’s general population

Nasser AlMulhim, Mohammed AlJumaah, Ali AlGharash, Fahad AlMulhim, Mousa AlMazyadi, Noor AlAbbad, Sarah AlHerz, Hussain AlGhadeer, Laila AllBrahim, Mohammed AlHajji, Basel AlKishi

Background: Carbon monoxide (CO) is a highly poisonous gas that has no identifiable colour or odor. People could be affected by CO emissions from various sources that include gas stoves, water heaters, fire places and motor vehicles. Aim: The study aims to assess the perception & knowledge regarding symptoms, risk factors, causes and preventive measures of CO poisoning among the Kingdom of Saudi Arabia (KSA) general population. Subjects and methods: This is a cross sectional study of the general population of the KSA. The study targeted non health care providers using an electronic survey. The questionnaire mainly consists of three parts; socio-demographic data, knowledge assessment, habitual factors and practices related to CO poisoning. Results: Out of 568 participants, (52.8%) were aged between 18 to 25 years with (64.1%) being females. The majority had poor knowledge (67.6%), negative attitude (72.4%) but good prevention practices (64.4%). Conclusion: There was a deficiency in terms of knowledge and attitude. However preventive practices are inspiring. Respondents who have heard about CO poisoning tend to exhibit better knowledge and practices as compared to the rest of the population.

Medical Science, 2022, 26, ms444e2484

Oral health and oral hygiene related literacy and behaviors among Saudi school children in Al-Qassim region

Vivek Prabhu, Malik Abdulaziz Alayed, Sumona Bhattacharjee, Abdulaziz Sulaiman Alnasyan, Mohammed M Alzaben, Omar Fahad Altowairjri, Fawaz Pullishery

Background: Individual characteristics such as awareness, perspective, and routines significantly influence one’s oral health. This survey explored the Saudi school children’s knowledge, attitude and behaviors related to oral hygiene in the Al Qassim province. Materials and Methods: A cross sectional study using a pretested online questionnaire was conducted among school children in the Al Qassim region. The first section of the questionnaire recorded students’ age and dental history, and experiences
were recorded. The second part covered dental hygiene and dental visits. In the third part, students’ oral hygiene knowledge was tested. **Results:** Oral hygiene knowledge was found to be good in 39% of the students, whereas it was found to be significantly higher in those students who brushed frequently or twice a day (p<0.001). About 56.8% of the students reported having some dental problems, and 20.7% mentioned they had never been to the dentist in their lives. Students over the age of 12 years had a significantly higher frequency of dental visits last year (p=0.010). **Conclusion:** Schools in Saudi Arabia need to begin implementing a comprehensive oral health education program that targets not only the students but also their parents.

*Medical Science, 2022, 26, ms445e2485*

### Level of asthma control and frequency of emergency visits during COVID 19 pandemic: Cross sectional study


Asthma is a chronic respiratory illness associated with sudden attacks of shortness of breath that require emergency visits. Asthmatic patients were harmed by the pandemic because they were unable to receive regular follow-up. This cross sectional study was conducted in Riyadh, Saudi Arabia to assess emergency visit differences before and during the pandemic. An online survey of asthma control tests and other demographic information about the people who took part was also used to measure how well asthma was controlled. The results highlighted that there’s no difference between pre and during pandemic emergency visits. Additionally most patients were poorly controlled according to the asthma control test. Asthma control test results in Riyadh come in the mid-range if compared to studies at other locations in the kingdom. There was a link between smoking and increasing emergency visits and not doing well on control tests. Asthmatic patients should be told to stop smoking for their own health and to make it easier on health authorities.

*Medical Science, 2022, 26, ms446e2525*

### Impact of caffeine consumption on local anaesthesia failure: Study based in Hail region, Saudi Arabia

Mohammad Saud Saad Altamimi, Rakan Abdulkarim Brahim Alrakkad, Nawaf Mubarak Faleh Alshammari, Abdulrahman Abdulaziz Salem Alghuraymil, Ibrahim Abdulkarim Brahim Alrakkad, Ammar A. Siddiqui

**Background:** Many patients believe that drinking coffee reduces the effectiveness of local anaesthetic. Caffeine is widely used on a global scale in the form of coffee, tea, and chocolate. All through the day. It is also traditionally regarded as a show of societal charity, particularly in Saudi Arabia. Local anaesthetic acts by interfering with the inflow of Na channels across the neural membrane. **Methodology:** Cross-sectional epidemiological observational research was conducted in Ha'il. The data was collected over two months from 1/7/2022 to 1/9/2022 and included people who attended dental facilities in the Hail region. **Result:** The current study included 131 persons, with 47.69% being female and 52.31% being male. However, when we assessed patients’ knowledge and opinions, we discovered that 32% agreed that coffee can help prevent local anaesthetic failure. Only 10% were aware of the scientific evidence associating coffee consumption with local anaesthetic failure. **Conclusion:** Caffeine has been shown in trials to hasten the recovery from anaesthesia and to be effective even at high anaesthetic dosages. According to the only available evidence, caffeine reverses the effects of general anaesthesia. According to the existing scientific data, caffeine can affect cognitive function by boosting alertness, and sleep deprivation causes stress and anxiety, which helps to explain in part why coffee drinkers have trouble administering local anaesthetics. To lower the failure rate of local anaesthetic, a dentist should use stress reduction techniques on a regular basis.

*Medical Science, 2022, 26, ms447e2529*

### Post-infection chronic fatigue following coronavirus disease-19: cross sectional study

Faheem Mohammed Alanazi, Waleed Khalid Alhowikan, Dalia Ali Aljrany, Alanoud Abdullah Alqawili, Fahad Mohammed Algharbi, Hala Khamis Alghamdi, Hamad Bandar Alotaibi, Hamoud Shaya Alotaibi, Majed Maseer Almutairi, Rawan Hamdan Aljehani, Sarah Abdulhadi Alghumdi, Saud Abdullah Alhasoun

Coronavirus disease has a wide range of symptoms, from asymptomatic infection to critical illness, which may even lead to death. Fatigue is the most prevalent symptom in COVID patients during and after the acute phase of the disease. Fatigue in COVID patients still with unknown etiology. This cross-sectional study used data from KSMC hospital records and direct interviews with patients affected by chronic fatigue following confirmed COVID. Data were analyzed using SPSS V24 and multiple regression analysis. Pearson correlation, chi square test were used in the analysis process. Our results found that vaccination status is strongly affecting chalder fatigue scale; also age, comorbidities and COVID severity affect the scale. Comorbidity was found to be high in older participants; also higher comorbidities associated with increased disease severity.

*Medical Science, 2022, 26, ms448e2535*
### Periapical cemento-osseous dysplasia: Case report

Ambikathanaya UK, Sunil Tejaswi KL, Suneeth Shetty, Nagabhushana Doggalli

**Background:** Periapical cemento-osseous dysplasia (PCOD) is an asymptomatic non malignant lesion which is rare where healthy bone is replaced by fibrous tissue, with meta-plastic bone and neo-formed cement. Its pathogenesis remains unknown it can represent a reactive and dysplastic process, so that dentist should have knowledge about this lesion to avoid inappropriate approaches which can compromise the patient’s health. **Case report:** Patient report to the clinic complaining of numbness in the right lower lip. Clinical examination reported no H/O swelling & pain in relation to 46. IOPAR shows 46 root canal treated tooth with satisfactory obturation & radiolucency in periapical region of distal root of 46 & 47. Due to patient’s discomfort Cone beam computed tomography [CBCT] was taken, which showed large radiolucent lesion with irregular & discontinuous borders with diagnosis as Periapical cemento-osseous dysplasia. **Conclusion:** Periapical cemento-osseous dysplasia can mimic other types of cemento-osseous dysplasia and benign lesions where the dentists need to be aware of asymptomatic intra osseous lesions and should have conventional therapeutic approach.

*Medical Science, 2022, 26, ms449e2479*

### A near miss case of PPCM a diagnostic dilemma and an intriguing challenge - a case report

Mahak Choudhary, Kamlesh Chaudhari, Neeta Verma, Sanket Bakshi

The period of pregnancy is quite vulnerable for the female, taking into consideration her health and the changing physiological conditions in her body, the adaptations that are made to adjust to the pregnant condition, sometimes may put a burden over her body. Amongst the morbid conditions, cardiovascular abnormalities have a higher rate and chances to have a dreadful impact on the pregnant situation. Due to the increased load and change in the body physiology. Postpartum Cardiomyopathy (PPCM) is the foremost cause of an unsuccessful pregnancy. Because of the degrading impacton the cardio vascular system of the mother, postpartum cardiomyopathy stands to be one of the leading causes of morbidity during the pregnancy period.

*Medical Science, 2022, 26, ms450e2101*

### Physiotherapeutic management of 72 year male patient with Parkinsonism: A case study

Shrutika Harivijay Wankhade, Ragini Dadgal, Vikrant Salphale, Rakesh Krishna Kovela

Parkinson’s disease is a neurological condition which consists of motor and non motor symptoms. In this case, we present the case of 72-year male having complaints of slowness of movement, heaviness while performing movements in limbs. With this complaints patient visited nearby hospital at avbrh and has undergone investigations and was diagnosed with hyponatremia. On physical examination patient has slowness of movement, difficulty in walking and tremors and was further diagnosed with Parkinson’s disease. After that physiotherapy treatment was given to the patient for 6 weeks. Physiotherapy interventions show significant improvement in patients’ functional activities.

*Medical Science, 2022, 26, ms451e2209*

### In hospital phase of postoperative cardiac rehabilitation in elderly patient with aortic valve replacement: A case report

Dhanashree Ghive, Rashmi Walke, Ruhi Kumbhare

**Introduction:** Aortic stenosis (AS) is brought on by a restriction in the aortic valve’s opening, which results in enlarged and dysfunctional left ventricles and increased pressure in the lungs and right side of the heart. Aortic valve replacement is a surgical operation in which a failing aortic valve is being replaced by a prosthetic heart valve. Cardiac rehabilitation after surgery involves physical activity promotion, exercise training, cardio vascular risk management, and health education. A 59 year old female presented with complaints of breathlessness on exertion and during activities, chest pain, palpitations, sweating and dizziness since 1 month. She was diagnosed with severe aortic stenosis the patient was evaluated and was suggested for Aortic Valve Replacement surgery and successfully underwent the same. She was started with 12 weeks of cardiac rehabilitation from postoperative day 1. **Conclusion:** In this case study, the physiotherapy protocol used has a significant effect on improving functional independence, reducing cardio vascular risk factors related to prolonged bed rest, and gaining an optimal level of physical fitness through cardiac rehabilitation.

*Medical Science, 2022, 26, ms452e2262*

### Repair of right main bronchus tear after blunt chest trauma: A case report

Ayman Fahad Yousef, Albaraa Mubarak M Alsaeedi

**Background:** Tracheobronchial injuries (TBIs) are uncommon life-threatening injuries to the tracheobronchial tree that follow trauma. As TBI manifests with non-specific signs and symptoms, early detection is the main key to proper management and decrease in the high mortality and morbidity rate. **Case presentation:** A 17-year-old male was the victim of a car roll over road traffic accident. Pan Computed Tomography (CT) was done and showed severe subcutaneous emphysema with pneumomediastinum, bilateral pneumothorax and a proximal right main bronchus wall defect. Fiberoptic bronchoscopy confirmed the diagnosis which was repaired by right thoracotomy. **CT scan of the chest was done 6 months after the operation which showed an intact wall of the right**
main bronchus. Conclusion: TBIs are rarely seen in trauma cases, but they carry high mortality and morbidity rates. This case report highlights the importance of management of TBI is early detection as diagnosis might be challenging.

*Medical Science, 2022, 26, ms453e2516*

**RESEARCH**

### Nerve supply of extra ocular muscles


**Background:** The extra ocular muscles are supplied by oculomotor, trochlear and abdicants nerves. **Aim of our work:** Is to study the pattern of motor innervations of the extra ocular muscles in goat. **Material and Methods:** This study was carried on nerves supplying the oblique and rectus muscles extra ocular muscles of goat. 13 orbits were obtained from 4 goat's right after killing. The distribution of fiber sizes and the sensory pathway in the stem of oculomotor nerves, oculomotor, trochlear and abducants were investigated. The technique of silver block impregnation was employed to research muscle innervations. Toludine blue was used to block and stain semi thin slices of the nerves Oculomotor, Trochlear and Abdicant as well as muscle specimens. **Results:** The nerve supply of extra ocular muscle is relatively rich. The global zone of the muscles was supplied by thin nerve fibers. Different types of pro prospective organs found in extra ocular muscles. **Conclusion:** The intricate design and operation of the extra ocular muscles control eye movements.

*Medical Science, 2022, 26, ms454e2527*

**ANALYSIS**

### Current status of bariatric surgery perceptions in Hail region, Saudi Arabia

Fauwaz Fahad Alrashid, Saadeldin Ahmed Idris, Hassan Abdullah Alshammari, Abdullah Dawas Altamimi, Hamoud Saad Alsalwah

**Background:** Obesity is a chief communal health dilemma that considered an epidemic worldwide including Saudi Arabia, where the preferred method for weight loss is bariatric surgery. The presence of some misconceptions among some people in Saudi society may cause a decrease in the level of making the right decisions and the appropriate way to deal with their weight. **Aim:** The current study conducted to evaluate the awareness of the adult population in the Hail region as regards to the safety, usefulness, as well as the consequences of bariatric surgery as an option for weight loss. **Methodology:** A cross sectional web survey administered to include Saudi adults’ population older than 15 years of their age in the Hail region, from January to August 2022. **Results:** A 400 participants from Hail, Saudi Arabia responded to the web survey. With respect to demography, 76% of participants were aged 15-30 years old. Most (61.5%) were male. A 56 (14%) of the participants had a medical history of obesity. Regarding participants’ perceptions regarding obesity, factors that aid in weight reduction, and bariatric surgery, it was found that most participants had an intermediate level of awareness. **Conclusion:** It should shed light on the role of physicians and health educators in informing patients and providing them with the essential details to augment their knowledge and awareness regarding obesity, ways to lose weight and bariatric surgery.

*Medical Science, 2022, 26, ms455e2486*

### Prevalence of dry eye disease symptoms among medical students in Al-Madinah

Hanan Makhdoum, Mohammed Khoshhal, Turki Algethami, Waleed Alshehri, Ahmed Albelowi, Husain AlHabuobi, Nasser Alsuhyami

**Introduction:** Dry eye disease (DED) is a multi factorial disease of the ocular surface and tears that result in various symptoms. Although there are several studies on the prevalence of DED in general prevalence among medical students is still limited and sparse. Therefore, the aim of this study is to estimate the prevalence of DED among medical students in Al-Madinah, Saudi Arabia. **Methods:** This study was carried out among clinical and pre clinical medical students from March 2022 to May 2022 in two separate Universities in Al-Madinah, Saudi Arabia. The questionnaire was taken from previously published project and reviewed by two ophthalmologists. **Results:** A total of 680 medical students were included. Most of them (n = 462, 67.9%) were reported to have DED. About half of those with DED were considered to have severe disease (n = 219) the rest had mild and moderate disease. **Conclusion:** Dry eye disease symptoms among medical students were highly prevalent. Many factors were found to have a role in developing DED.

*Medical Science, 2022, 26, ms456e2476*

### Staining effect of herbal immune boosters used during Covid-19 pandemic on teeth shade: In-vitro study

Khalid Alhazmi, Khaled Aldalaan, Abdulmajeed Alrumi, Sluman Alnashwan, Tariq Al Swayyed

**Objective:** Assessment of staining effect of herbal immune boosters used during COVID-19 pandemic on teeth shade. **Material and method:** 70 extracted premolars (N=10) were assigned to different solutions which were formulated to mimic the impact of herbal
immune boosters on teeth. A baseline reading was performed using in-vitro VITA Easy shade Advance 4.0 and one day later, seven days later, and fourteen days later. The data was entered into SPSS software version 26. Results: A statistically significant difference was noticed in orange, lemon, and curcuma. Conclusion: The consumption of some herbal products has an impact on teeth’s shade. Moreover, some materials such as, orange, lemon, and curcuma had the ability to change the teeth shade faster and stronger effect on teeth shade.

Medical Science, 2022, 26, ms457e2534

The prevalence of topical steroid use and steroid induced Rosacea among Saudi Population, Hail city: A cross sectional study
Fawwaz Freih Alshammrie, Yasmin Saleh Alhamzani, Razan Safir M Alsuhbi, Taïf Mohammad Alhumayan, Shouq Nasser Alruwaili, Hadeel Saleh Alhamzani, Wael Saleh Alanazi

Background: The use of topical steroids for an extended period of time causes rosacea like dermatitis with varying clinical manifestations. In 1951, the first topical corticosteroids were approved for usage. Since then, uncontrolled usage (abuse) has resulted in a variety of responses similar to rosacea steroid dermatitis or steroid induced rosacea. Multiple mechanisms for such reactions have been hypothesized, including rebound vasodilation and pro inflammatory cytokine release. In the current study, the incidence of steroid induced rosacea and other side effects of steroids in the Hail population of the Kingdom of Saudi Arabia will be evaluated. Methods: A descriptive cross sectional study was conducted from January 2022 to April 2022. Raosoft was used to calculate the sample size, with a confidence level of (95%). Results: The study included 399 patients. Among them there were 341 females and 214 from the age group 40-59 years. There were 163 participants responded to the study questionnaire. The frequently mentioned side effect associated with using cortisone was Telangiectasia (13.5%), followed by acne (12.9%) and hypopigmentation (22.2%). The most common symptom associated with the use of cortisone was skin dryness (44.4%), followed by erythema (38.9%), and burning or stinging sensation (22.2%). Long term use of cortisone (>1 month) was significantly associated with Telangiectasia (p=0.044) in comparison to those who did not know about the side effects of cortisone (p=0.021). Conclusion: Using topical corticosteroids excessively can lead to rosacea like symptoms and various other side effects in people who have never been diagnosed with the condition.

Medical Science, 2022, 26, ms458e2509

Beliefs, perceptions, knowledge and psychological impact of acne vulgaris among youths in Alqunfudhah District, Kingdom of Saudi Arabia: A cross sectional study
Safa Alkalash, Safiah Aldabali, Zahraa Alrashdi, Amwaj Almantashri, Raghad Alqarni, Hind Alhili, Waad Alsharqi

Introduction: Acne vulgaris is one of the most prevalent skin conditions, especially in adolescents, youths and young adults. Acne has negative effects on the body, society and the mind. This study aimed to measure beliefs, perceptions and knowledge determine the psychological symptoms associated with acne vulgarity among youths in Alqunfudhah District, kingdom of Saudi Arabia. Methods: A cross sectional study was conducted on a sample of 1092 in Alqunfudhah district, KSA in the time from May to July 2022. It was selected by a simple random sampling technique. Data were collected using a predesigned self-administrated questionnaire. Results: Based on the results, 64.9% of the participants (709) were suffering from acne. Around three quarters of the participants’ age ranged from 20-25 years, 80.4% were females. Nutrition was the commonest factor believed to cause acne. The most common treatment used for acne was ointment from the pharmacist, 44.4% reported their worry about acne and dark spots made them anxious about acne. Conclusion: Acne vulgaris is more prevalent among female youths. Only one third of the participants had a good knowledge level about it.

Medical Science, 2022, 26, ms459e2524

Knowledge and attitudes towards COVID-19 vaccination among medical and paramedical students
Fahad S Alshehri, Amal Binsalman, Raeeah Jamal, Saja Al Namlah, Futoun Sharaf, Amal Fallatah, Thikra Alqarafi, Sarah Al Sharif, Mahmoud Essam Elrggal, Rania E Mufti

Background: Vaccine hesitancy poses severe challenges in achieving population immunity. Achieving high COVID-19 vaccination acceptance rates to ensure medical students’ coverage as future health care providers is necessary. This study aims to assess the knowledge and attitude towards the COVID-19 vaccine among medical and paramedical students to determine factors and barriers influencing vaccination decision making. Method: A cross sectional, survey based study was conducted among Al Rayan medical and paramedical students. Data were collected via an online questionnaire and analyzed by SPSS with descriptive statistics. Results: In total, 465 students completed the survey. Over all, students expressed good knowledge of vaccination safety. However, students expressed different opinions towards receiving the vaccine. 52.4% of students showed great uncertainty towards the vaccine, 20.9% refused to take it and only 26.7% expressed that they would take it with great confidence. However, 50.5% of students expressed doubts about the vaccine’s efficacy and 52.7% thought the vaccination process was expedited. In addition, 50.6% of respondents think they do not need to be vaccinated because they are still young and healthy. Conclusion: Medical and paramedical students have different outlooks toward vaccination. Several factors contribute to their decision, such as the lack of confidence in data provided by the media and authorities regarding the safety and validation process. Therefore, there is a severe need to educate young adults regarding the importance of vaccination to minimize the negative consequences of COVID-19.

Medical Science, 2022, 26, ms460e2446
Knowledge, attitude and practice towards irritable bowel syndrome among young adults in Jeddah, Saudi Arabia
Lotfi Fahmi Issa, Yasseer Sonbul, Saud Alzahrani, Randa Bajunaid, Omar Alqefari, Yasser Alahmadi, Khaled Alharbi, Khames T Alzahrani

Background: A non-organic gastrointestinal disorder called irritable-bowel-syndrome (IBS) is characterized by recurring stomach pain or discomfort and irregular stool habits. Many academics have taken an interest in it since it is a global issue that affects people’s health and economies. This paper intends to identify knowledge, attitude and practice regarding irritable bowel syndrome among young adults in Jeddah city. Methodology: In Jeddah city, cross-sectional research was conducted. All individuals who volunteer to participate in this study filled a self-administered anonymous questionnaire in Arabic and in English. In the survey, demographic data was collected, and IBS knowledge, attitude and practice of participants were evaluated. Data was statistically analyzed using the (SPSS) program, version 25. Results: The study consisted of 542 participants 39.5% of them were males and 60.5% were females. 56.6% of participants aged between 20-25 years old. 56.5% have heard of irritable bowel syndrome. Only 18.5% have been diagnosed with irritable-bowel-syndrome (IBS) by a doctor. 67.3% of participants think that IBS reduces quality of life. Conclusion: This study shows that the general Saudi population knows insufficient about irritable bowel syndrome. Enhanced quality of life for IBS patients may encourage them to seek medical care as soon as possible, while also lowering anxiety and reducing the number of times they need to visit the hospital. These benefits could result from educating the general public about IBS to improve understanding and reduce misconceptions about the serious disease’s development.

Medical Science, 2022, 26, ms461e2481

CASE REPORT

Coronally advanced flap with a button to reclaim the gingival position: A case report
Tamil Selvan Kumar, Fairlin P, Ramesh Raja S, Maria Beulah J, Gokulvathi Rajkumar, Jeffy M, Hari Prasat AS, Ahamed Faizal M

Gingival recession pose various problems to the patients in terms of aesthetics, sensitivity and possibility of root caries in the future. Therefore, early diagnosis and management of gingival recession is considered significant. The success of the root coverage mainly depends on stability and retention of the soft tissues over the denuded root surface following treatment. Many root coverage procedures have been introduced with varying results. This case report is directed towards the management of Miller’s class I gingival recession and to discuss the advantage of positioning the flap coronal to treat those conditions. Coronally advanced flap have shown varying results and various modifications have been proposed. In this case report, the flap which was advanced coronally was maintained stable with the support of orthodontic button fixed on the tooth surface. This technique resulted in superior aesthetics and complete coverage of the exposed root.

Medical Science, 2022, 26, ms462e2514

Large mitral valve vegetation in a 59 year old patient that was thought to be atrial myxoma: A case report
Osama Abdullah Abdulrahman, Fawaz Saeed Baalaraj, Saad Fardan Alqahtani, Mohammad Hani Baharith, Dyaa Esam Habeeb, Abdulhalim S Serafi

The detection of masses is prevalent in heart diagnostic techniques including echocardiography and cardiac imaging. The most frequent masses are tumor, vegetation and thrombus, which are easily confused with each other because the characteristics of the mass can vary depending on regional location, mass morphology and clinical syndrome. Surgical and histopathological interventions are required for a conclusive diagnosis. Infectious endocarditis (IE) is a bacterial infection of the endocardium that can affect a heart valve or an implanted cardiac device. It is linked to vegetation that can be found on heart valves or any implant devices, as was the case in our patient and it can spread through the vegetation of various sizes.

Medical Science, 2022, 26, ms463e2355

ANALYSIS

Population awareness and knowledge of thyroid diseases signs, symptoms and risk factors in Taif Saudi Arabia
Hani Abozaid, Reem Saad Albaqami, Hatoon Muaid Aljuaid, Elaf Hamoud Alotaibi, Amal Saeed Althagafi, Hanin Abdulaziz Alghamdi

Background: There have been many studies from different parts of the world that assess the awareness of thyroid disorders. The studies done in Saudi Arabia revealed a good overall knowledge. To assess Taif population awareness and knowledge about thyroid disorder and if there is a correlation between the awareness & awareness knowledge of thyroid disorders with nationality, age, gender, social status, residency, education level, employment and income. Methods: The general population in Taif city, Saudi Arabia was the target of this cross sectional survey. Males and females of various age groups (18-65 years), both Saudi and non-Saudi, were included in the sample. Health workers and medical students were excluded from our research. An Arabic language version of a self administered questionnaire was utilized to acquire data. Results: Our study included 911 respondents, 86.5% of them were females, 63.6% aged 18-30 years and 74.8% have university education. Only about 14% of the studied populations have poor knowledge about thyroid diseases, and about 21% have average knowledge, and about 65.3% of them have high knowledge.

The level of knowledge regarding thyroid disorders is significantly influenced by gender (p-value = 0.002). Age, country had no discernible effects on participants’ awareness of thyroid diseases, according to our study (p values = 0.027, 0.229, 0.0169 and 0.29, respectively). Conclusion: Only small percentages of the Taif population have poor knowledge about thyroid diseases. We also recommend conducting large services to measure the awareness level of the public in Saudi Arabia about these important disorders.

Medical Science, 2022, 26, ms464e2499

The association between gastro esophageal reflux disease and bariatric surgery
Fauwaz Fahad Alrashid, Saleh Ali Alsanea, Abdullah Ibrahim Alrasheed, Hamoud Ali Almatrood, Saadeldin Ahmed Idris

Background: Obesity is ordinarily accompanying gastro esophageal reflux disease. Thus, losing weight will improve it. In contrary it can occur after bariatric surgery as a complication and in some cases, it may appear and develop for the first time as consequence of bariatric surgery. Aims: To determine the association between gastro esophageal reflux disease and bariatric surgery among patients underwent bariatric surgery in Hail region, Saudi Arabia. Methodology: From February to June 2022, a cross sectional study included all patients who underwent bariatric surgery in Hail region. The extracted data had been manipulated statistically using IBM SPSS version 22.0. Results: Out of 477 patients that managed by the mean of bariatric surgery, 379 participants were responded effectively to the study survey. In consideration of demographics, 41.7% of the participants were aged 15-30 years. Most of them (55.9%) were male. Before surgery, 32.7% had gastro esophageal reflux disease and 60.5% of them had shown improvement after surgery. Post surgical procedure, 16.1% of the participants had a newly developed gastro esophageal reflux disease. Nearly, 67.3% of the participants had a laparoscopic sleeve gastrectomy and 48.8% were diagnosed with gastro esophageal reflux disease. Statistics indicate that bariatric surgery and gastro esophageal reflux disease are significantly correlated (P=0.000). Conclusion: Each patient should be made aware of the risks of gastro esophageal reflux disease accompanying such procedures.

Medical Science, 2022, 26, ms465e2502

The prevalence and severity of burnout syndrome among school teachers in Makkah city, Saudi Arabia: A cross sectional study
Mohammad Almatrafi, Ethar Alsulami, Raghad Saleh, Ghadeer Sadaqa, Renad Alamoudi, Jumanah Althagafi, Faisal Alghamdi, Reda Goweda

Background and aim: Burnout syndrome (BS) is described by emotional exhaustion, depersonalization and a lack of personal accomplishment. It is now recognized as a syndrome affecting a broader range of professions. Teaching is a profession with numerous job related stressors. In this study, we aimed to determine the prevalence of BS among primary and secondary school teachers in Makkah, Saudi Arabia. Methodology: Using a standardized questionnaire, a cross sectional study of Makkah city population in Saudi Arabia was carried out. Any primary, secondary and high school teachers in Makkah, male and female, Saudi or not, met the inclusion criteria. In this study, burnout was measured using The Maslach Burnout Scale (MBS). Data were extracted, reviewed, coded, and then entered in to statistical software IBM SPSS version 22. (SPSS, Inc Chicago, IL) P value less than 0.05 was considered statistically significant. Result: The study survey was completed by 354 teachers in total. The exact 228 (64.4%) teachers were females (36.7%) of the teachers who experienced high BS levels. BS was significantly higher among young aged teachers (42.2% vs. 23.7%) and female teachers (42.1% vs. 27%). Also, there’s a significant association between the number of classes per week and BS, additional factors included social issues, chronic diseases and the fear of being forced to work. Conclusion: BS is wide spread among teachers, as evidenced by the fact that 36% of respondents scored highly for (BS). These results demonstrate the requirement for programs to support teachers’ mental health in order to improve the educational process.

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Prevalence and physician factors associated with Vitamin B12 prescriptions at King Khalid University Hospital
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Background: Recent studies suggested a high prevalence of Vitamin B12 prescriptions; most lack evidence of Vitamin B12 deficiency. This research aims to estimate the prevalence of Vitamin B12 prescription without laboratory evidence of deficiency at King Khalid University Hospital, assess the physician characteristics associated with such B12 prescribing, and compare between gender and sub-specialty. Methods: A retrospective cohort study perfumed at King Khalid University Hospital using health system administrative databases (E-sihi system). All patients who received at least one prescription of oral Vitamin B12 between January 1st, 2021 to August 31st, 2022 were included. Results: A total of 19920 oral Vitamin B12 were prescribed to 10980 patients by 947 physicians. Most physicians were male, 61%. 57% are specialists. 10417 (94.8%) patients received oral Vitamin B12 prescriptions without laboratory evidence of deficiency. Type of practice and physician gender was not significantly related to inappropriate prescriptions. Medicine and emergency department are most likely to prescribe inappropriately, whereas family medicine is more likely to prescribe appropriately. Conclusion: As much as 94.8% of vitamin B12 prescriptions were written despite a lack of laboratory evidence of a deficiency, suggesting that such widespread use is unnecessary. In addition, the highest prescription rates were related to medicine and the emergency departments, whereas the lowest rates were linked to family medicine. Therefore, we suggest campaigns be launched to draw physicians’ attention to such practice and its consequences and encourage them to examine the available evidence about Vitamin B12.

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The influence of mental illness and poor psychiatric monitoring programs on students' performance in Umm Al-Qura University

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Background: Mental illness is a term used to prescribe a variety of diseases that characterized by abnormal thoughts or behavior or mood of the affected individual. This survey-based study aimed to determine the influence of mental illness and poor psychiatric monitoring programs on medical students attending Umm Al-Qura University. Methods: This is a survey based study conducted in June 2022 that utilized an online questionnaire designed in Google Form. The study included all medical students in their second to sixth year at Umm-Al-Qura University. Results: There were 410 total students who participated in this study. About three quarters of the students were males (73.7%) and most of them were Saudis (97.3%). More than half of students were aged <22 years (59.6%). In general, 11.7% of students had been diagnosed with a mental health condition and 8.3% of students had received medications for mental health conditions. Additionally, 11.2% of students were following-up with a mental health specialist (psychiatrist or psychologist) and 8.3% of students were receiving medications for mental health conditions at the time. Conclusion: Our data shows that having a mental illness can have a negative effect on students' academic performance. Importantly, competent psychiatric monitoring programs can minimize the influence of mental illness.

Assessment of awareness, information of latest Alzheimer sickness studies and treatments among health-related students in Umm Al-Qura University, Makkah city a cross-sectional study


Background: Alzheimer's disease (AD) is considered as the most dominant neurodegenerative disease that destructs neuronal brain cells. Globally, the prevalence of AD has increased in the last decades; accounting for fifty million new cases per year with ten million new people diagnosed each year. This survey-based study aimed to determine the level of knowledge and awareness of the recent management of AD among health-related students at Umm Al Qura University (UQU), Makkah city. Methods: From June 2021 to August 2021, students were given an online survey to complete. An adequate statistical analysis was performed once the data was collected. Results: In total, 392 students from the second to the sixth year took part in the survey. A majority of the students (69.13%) were between the ages of 21 and 23, and a little over half (54.6%) were male. The percentage of responses from medical students was highest (39%), coming from those in their fifth year of school. Most students (81.89%) had only a basic understanding of the available treatments for AD, and only 17.86% had a moderate level of knowledge. In contrast, only 0.26 percent was considered to have a high level of knowledge. Conclusions: Further studies and educational programs are needed to improve healthcare students' understanding of Alzheimer's disease.

Extent of awareness of diabetic foot care in diabetic patients and their families at Al Baha city, Saudi Arabia

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The incidence for diabetes mellitus in Saudi Arabia is high, along with its associated complications especially those of multiple micro and macro-vascular complications with special concern to diabetic foot. The aim of this study is to assess the awareness of diabetic patients and their relatives about the care of diabetic foot at Al Baha province. Material and methods: A descriptive cross-sectional study is performed and the data was collected through online self-administered questionnaire. The collected data was coded and analyzed by SPSS version 28, in which both inferential and descriptive statistics were adopted. Student T-test and ANOVA were used. P<0.05 was considered significant. About 385 diabetic patients were included in this study, 52.7% was female. 45.2% were aged between 20-29 years, patients experienced diabetes mellitus for < five years were 37.9% and >ten years were 36.6%. Results: 74.4% of the patients bear a satisfactory knowledge, 76.9% revealed a satisfactory practice and 59.70% showed a positive attitude, those patients who read and write only and below 20 years showed a low mean knowledge score. Furthermore, those having history of Diabetes ranged from 5 to 10 years and attained a middle school revealed a low attitude score and finally those suffering from DM >10 years showed a low practice, with significant difference. Conclusion: The awareness of diabetic foot care was good depending on the educational level and duration of diseases. So, more efforts with good counseling are needed to improve the awareness of diabetic patients and reduce its complications.

Saudi mothers' knowledge, attitude and practice towards glucose 6 phosphate dehydrogenase deficiency: A cross sectional study

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Introduction: Glucose 6 phosphate dehydrogenase (G6PD) deficiency is an inborn genetic condition resulting in the hemolysis of red blood cells after exposure to the risk factors. Its prevalence in Saudi Arabia is 4.76%. Objectives: The aim of this study was to
evaluate the attitude and knowledge of Saudi mothers toward G6PD deficiency to guarantee the avoidance of triggering factors. 

Method: In this cross sectional study, 480 Saudi mothers from different cities across Saudi Arabia were recruited to assess their knowledge and attitude toward G6PD deficiency using an online questionnaire. Results: A total of 71% had not heard about G6PD deficiency and 291 (60.6%) had a poor knowledge level regarding G6PD deficiency anemia. Highly educated mothers had significantly (P=.007) higher scores than low educated mothers, mothers with children diagnosed with G6PD deficiency, females who had undergone a medical consultation before marriage and mothers who had genetic assessment before had recorded higher statistical significance (P=.001). As for risk factors, the most known among study mothers were eating fava beans (54.8%). Pallor was known for 56.7% of the study mothers regarding clinical presentation of G6PD deficiency anemia. 214 (44.6%) mothers agreed that G6PD deficiency anemia is a severe disease and 253 (52.7%) reported that consanguinity is a cause of G6PD deficiency anemia.

Conclusion: About half the Saudi mothers had never heard of G6PD deficiency. Therefore, the knowledge levels were considered low. To ensure better prevention of the triggering factors, it is recommended to provide health education programs on G6PD deficiency.

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Awareness and level of knowledge of interventional radiology among clinical year’s medical students at Tabuk University


Background: Interventional radiology (IR) is a comprehensive specialty that covers a wide variety of image guided minimally invasive diagnostic and therapeutic procedures. Although IR is constantly growing, many people are misinformed regarding the responsibilities of IRs in clinical settings. This study aimed to see the awareness and knowledge among clinical year’s medical students at Tabuk University regarding interventional radiology. Methodology: A cross sectional, self-administered questionnaire study. Our target population was the clinical year’s medical students at Tabuk university Ethical approval was obtained from the ethical committees of the University of Tabuk. Results: More than half of the participants said that they have an adequate and good knowledge about IR. And (53%) did not think that interventional radiologists have outpatient clinics or even do ward rounds in the hospital (51%). Also, 70% did not believe that they treat patients at all. And 55% believed that interventional radiologists must finish training in Surgery and Radiology, while 30% only correctly identified radiology as a method of training. Regarding the procedures done by interventional radiologists they were familiar to the majority of the participants. Conclusion: The results of this study suggest that the awareness of IR among senior medical students in Tabuk and Saudi Arabia are higher than other countries. However, there are still low career considerations for IR due to lack of interest. This can be addressed by increasing the IR exposure in medical school through improving the curriculum related to IR increasing IR trainings.

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CASE REPORT

Treatment of Thyroid Carcinoma with Radioactive Iodine (¹³¹I) following total thyroidectomy with incomplete neck dissection

Layal K Jambi

Treatment of follicular thyroid carcinoma (FTC) is well documented in this case. An unusual case of total thyroidectomy, Central Neck Dissection (CND), Left lower parathyroid re-implantation and resection of Right Internal Jugular Vein (RIJV) tumour thrombus followed by second operation of excision of lymph nodes metastasis have been described. Three Radioidine therapiess were delivered to the patient.

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ANALYSIS

KSMC referred cases characteristics and outcomes: Retrospective study


This retrospective hospital records-based study focused on KSMC emergency department as one of the crowded hospitals in the country. Some delays were observed regarding the referral system from primary, secondary or tertiary hospital which plays an important role in the admission process in this hospital, so it’s necessary to investigate the nature of referred cases and the final outcome. Our study based on hospital records data to collect information regarding patient’s status, arrival time, interventional time, final outcome additionally to other variables. Statistical analysis was performed using frequency, descriptive statistics, chi-square test, fisher exact test, Pearson correlation, relative risk and odd ratio. Our results found that there’s some delay in a patient’s arrival to the emergency department. But no significant delay was observed after the patient’s arrival; also, the delay of intervention was observed to be correlated with poor final outcome.
Awareness of esophageal cancer among the adult population in Arar city, Saudi Arabia

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**Background:** Early detection of cancer and better health seeking behavior depend on cancer awareness. Lack of awareness may result in a slow adoption of screening techniques and delayed diagnosis. **Objectives:** To assess the awareness of esophageal cancers (EC) risk factors, protective factors and symptoms among the general population in Arar city, northern Saudi Arabia. **Subjects and methods:** Descriptive cross-sectional study design was conducted included 385 participants using self-administered questionnaire. **Results:** The study included 385 participants, their mean age 31±10.2 years old. The highest percentage of the respondents reported that smoking is risk factors for EC (83.9%) weight loss reported by more than half of the participants (56.9%) as a symptom of EC. The majority of the participants mentioned that early detection of EC decreases the mortality associated with it. **Conclusion:** Although Saudi is citizens in the city of Arar are relatively well aware of the risk and protective factors of EC, the prevalence of the disease in Saudi Arabia is high.

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Coronary artery disease risk factors in Saudi Arabia: Knowledge, awareness and prevalence assessment

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**Background:** The group of disorders known as cardio vascular diseases (CVDs) severely impact the human circulatory system and are often regarded as the leading cause of disability and death. The main contributors to the higher morbidity and death associated with it were genetics and lifestyle variables. When people have a better grasp of the risks associated with CVDs, it makes it easier for them to assess their own risk appropriately, motivates them to change their behaviors and is associated with increased risk reduction efforts. This research aims to investigated Saudi Arabia’s knowledge, awareness and prevalence of CVD risk factors. **Methods:** An electronic questionnaire was used to collect the data for this descriptive cross-sectional study, which involved 2397 Saudi citizens in Saudi Arabia. The information was then input and analyzed using IBM SPSS statistics. **Results:** A total of 2397 participants, 34.4% of whom were men and 65.7% of whom were women. They were 95.2% Saudi smokers made up 12.9% of all participants 3.6% were found to have cardiovascular disease. 82% of our participants know smokers have a higher probability to develop the cardiovascular disease, 72.8% said that not exercising regularly increases the incidence of cardiovascular disease also, 72.8% know that eating fast food elevates the risk of cardiovascular disease. Obesity, Anxiety and stress, High blood pressures were reported by 59.2%, 87.9%, 73%, 74.1% respectively as increasing the risk of cardiovascular disease. **Conclusion:** In conclusion, participants in our study show a level of knowledge about coronary artery disease risk factors that is generally unsatisfactory.

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Mother’s awareness about immunization

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**Background:** Proper children immunization lowers the cost of treating illnesses. The safety and effectiveness of child vaccines are frequently questioned by parents. **Objectives:** This study sought to evaluate women in KSA who had children under the age of five about their knowledge, attitudes and practices towards immunization. **Methods:** A cross sectional study done in KSA, on 406 mothers a questionnaire to collect data about participants’ demographics and their knowledge, attitude and practice regarding childhood vaccination. **Results:** 98.3% of mothers felt that immunizations are essential for children’s health (96.8%), the prevention of infectious diseases (90.9%), the reduction of death or disability (80%) and the maintenance of childhood health (96.8%). Mothers believed that immunizations are useful in 97.5% of cases and are safe in 96.1% of cases. Of these, 84.7% are in favor of the Ministry of Health’s mandatory vaccination policies. In terms of mother’s behavior, 98.3% said their children had got mandatory vaccines and 96.1% said they adhered to scheduled mandatory immunization programs. Among them, 78.8% of the moms had a high level of vaccination knowledge, 83.5% had a positive attitude and 67% had a high level of practice. Mothers >35 years old were significantly more likely to have a high level of vaccination practice and knowledge scores were significantly positively correlated with attitude and practice scores as well as knowledge and practice scores. **Conclusion:** The majority of studied mothers had good knowledge, attitude and practice regarding childhood immunization. The level of parents’ KAP was associated with mothers’ age.

Medical Science, 2022, 26, ms476e2556

Cytological changes and ki-67 protein expression in oral mucosa among water pipe users in the KSA


**Objective:** The aim of this study was to detect cytological changes and Ki-67 protein expression in oral mucosa among water pipe users. **Methodology:** A case control study was study was carried out in Saudi Arabia from January to October 2022, two cytological oral smear samples were taken from 500 volunteers 300 were water pipe users (case) and 200 were normal individuals (control) and...
were stained using the Papanicolaou staining procedure and immunocytochemical method to show the expression of Ki-67. Result: Inflammation, infection, atypia and keratinization were interpreted from Papanicolaou stains. The prevalence of cytological inflammation was higher among water pipe smokers (77/300, 25.6%) than among non water pipe users (12/200, 6%). Reverse cytological infection and atypical were higher in water pipe smokers than in control, 9% versus 4.5% and 4.3% versus 0.5%, respectively, while keratinization was only identified in water pipe users (3.6%) versus control groups. The Ki-67 protein is expressed at a higher level in water pipe users compared to non users. Conclusion: The study results concluded that water pipe users had more atypical cells and more Ki-67 protein expression in the oral mucosa as compared to their non water pipe users' counter parts.

Medical Science, 2022, 26, ms478e2519

Knowledge and perception of risks and use of e-cigarettes among adults in Saudi Arabia: A cross sectional study
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The prevalence of e-cigarette use is increasing worldwide. Evaluating the impact of e-cigarettes on public health and taking preventative and intervention strategies in to account would necessitate an understanding of how to describe and analyse e-cigarette use, awareness and misconceptions. This study aimed to determine the current level of understanding and perception of the hazards and use of e-cigarettes among Saudi Arabia's adult population. Between July and October of 2022, a cross sectional online survey was administered. Logistic regression was used to determine the characteristics that predicted knowledge about e-cigarettes. This study included 495 participants in all. Participants in the study demonstrated a reasonable degree of knowledge of electronic cigarettes with a mean score of 7.0 (1.4), representing 63.6% of the highest possible score. Males, students and individuals with a high-income level (more than 300,000 SAR) were significantly more likely to be knowledgeable about e-cigarettes (p≤0.01). Approximately one-third of them (36.0%) confirmed prior usage of e-cigarettes or vaping. The two most often cited reasons for using e-cigarettes or vaping were convenience of use (73.6%) and contemporary size and shape (15.7%), respectively. E-cigarette use is widespread in Saudi Arabia and the public must be made more aware of their detrimental health effects. It is recommended that policy makers intensify health activities in order to improve public awareness of this significant health risk and counteract commercial companies' promotional efforts that encourage the use of e-cigarette devices. More research is required to develop techniques that could effectively reduce e-cigarette use.

Medical Science, 2022, 26, ms479e2562

Interest and practice of complementary and alternative medicine among the physicians working at primary health care centres of Qassim Province
Hala Saleh Mohammed AlZuyaydi, Chandra Sekhar Kalevaru

Background: In the recent past, there is increase demand of alternative and complimentary medicine (CAM) use increased among the patients globally. During our regular practice at Primary health care centres (PHCC), some patients are requesting us to prescribe and discussing about certain products of CAM. This could be due to advertisements on the television and information from other sources. The present study was planned with the objective of opinions, interest and practice of physicians about CAM use for their patients. Methodology: A cross sectional study was conducted among the physicians working at the PHCC and all family medicine residents enrolled at Family Medicine academy. During COVID 19 pandemic, questionnaire distributed through google forms and 261 physicians responded. Data was analysed with statistical package for social sciences (SPSS). Necessary statistical tests were applied. Results: In the present study, female physicians were 85%. About 75% of PHC physicians up to the age of 30 years and mean age were 29 years. In the current study, about 61.7% were prescribing CAM to their patients at PHCC and also observed 40.6% were prescribed CAM for the self purpose. There was no significant association was observed with CAM practice with gender, qualification of physician, position of physician, marital status and nationality (P>0.05). Conclusions: There was increased use of CAM to their patients in the study. One of the limitations of the study was type of CAM product, duration and frequency such product details not taken. Need further studies are required to substantiate the present study findings.

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Knowledge and attitude of dental professionals towards shortened dental arch concept: A cross sectional study in Saudi Arabia
Majed Bedah Al-Otaibi, Abdalmajeed Jamal H Alanazi, Ammar Abulkhalqiq O Alarnous, Ali Yahya Alfari, Faisal Mohammed Alzain, Bader Soliman Alhussain

Introduction: This survey aims to investigate knowledge and attitudes among general dental practitioners (GP) and specialists/consultants toward the shortened dental arch (SDA) concept in Saudi Arabia. Method: A web-based survey was under taken in general dental practitioners (GP) and specialists/consultants in Saudi Arabia. A structured, close ended and self-administered questionnaire consisting of demographic information and twenty items on the SDA concept was administered to the study participants. The questionnaire enquired about study participants’ perspectives on the awareness, indication, contraindication, function, aesthetics and comfort of SDA therapy. It also probed about the risks related to SDA treatment (temporomandibular joint problems, tooth movement, speech). All the collected data were analyzed using the Chi-square test.
How do young Saudi men prefer to receive fertility information? A population: Based survey in Al Kharj

Background and objectives: The factors that contribute to male infertility are poorly understood by men. Men's awareness of their own fertility has not been the subject of extensive research. Men are generally less aware of issues with fertility and reproductive health according to research on both men and women.

Methods: Over the course of three months in 2022, a web-based survey on male fertility and reproductive health included a regionally representative sample of Saudi men in Al Kharj city. Men between the ages of 19 and 67 were included in the study.

Results: There were 395 male volunteers with an average age of 25. Male infertility causes were listed by each participant and their understanding of fertility was assessed by two open ended questions and a comprehensive list of related risk factors and medical disorders. The general level of understanding of fertility remained consistent across most demographic parameters. Seventy percent of the males surveyed said they were familiar with male fertility and reproduction.

Conclusion: Relatively few men learnt about fertility through doctors or the internet relative to television and radio.

Medical Science, 2022, 26, ms481e2560

Role of head CT in diagnosis of headache in Saudi population

One of the most common global public health issues that results in a large demand for medical services is headache disorders. It is one of the most prevalent complaints in clinical practice globally and as a result, it has a significant social cost. The goal of the study was to determine whether or not patients needed neurological imaging for a correct diagnosis and to provide guidelines for the use of computed tomography in the diagnostic process. The investigation conducted from February 2022 to September 2022 at the Radiology Department of King Khalid Hospital in Al-Kharj, Saudi Arabia. Across sectional study that used the CT scan documentation found in the patient files of patients who were referred to the radiology department with headaches of any kind. There were 197 patients in the data. There were 90 females and 107 males. The causes of headaches varied among Saudi citizens; tension headaches were the most common variety, accounting for 25.3% % of all headache patients, followed by cluster headaches (23.8%) and migraines, which had the lowest proportionality. The majority of patients had normal CT scan results. The public health agenda must include headache diseases. The predominance of primary headaches is tension, migraine and cluster headaches. There is statistically no significance or need for a CT scan if there are no anticipated or existing injuries or conditions that could endanger life.

Medical Science, 2022, 26, ms482e2566

Blood donation knowledge and attitude in the Kingdom of Saudi Arabia

Background: Currently, there is a shortage of an adequate supply of blood and blood products due to the unavailability of voluntary, non-remunerated donors from low-risk populations. Therefore, it is important to address the reasons for the unavailability of blood donors in order to increase recruitment. Aim: This study determined the level of knowledge and attitude in the wider Saudi Arabian population towards blood donation.

Methods: A cross sectional study was conducted using an online questionnaire between November 2021 and October 2022.

Results: Of the 1506 individuals, only 17.9% were donors, of whom 11.2% had donated blood before. Through analysing the knowledge score, 81.9% of participants possessed knowledge regarding the necessity of screening a donation for infections and 90.5% positively confirmed that the HIV virus could be spread through the blood donation route, however, they were not familiar with other infections, such as syphilis. With regards to the levels of attitude, 74.2% of respondents strongly agreed on raising awareness of the importance of blood donation, whilst 54.2% strongly agreed that the availability of mobile blood donation centres would increase the level of donation drastically.

Conclusions: Although the study showed that respondents were aware of certain factors regarding blood donation, there was an insufficiency of knowledge and attitudes regarding blood donation. This finding highlighted the need for identifying and addressing the defect of the knowledge that leads to an undesirable attitude towards blood donation.

Medical Science, 2022, 26, ms483e2576
The influence of maternal overweight and obesity on breastfeeding among women in Al-Madinah, Al-Munawwarah

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Background: Breastfeeding has advantages for both infant health in the short and long term, and the mother. The study aimed to identify the prevalence of prenatal overweight and obesity among breastfeeding women and to determine the effect of breastfeeding duration on obesity in postpartum females in Al-Madinah, Al-Monawwarah. Methodology: A cross section research was conducted from March 2022 to October 2022. An inconvenient sample was carried out among the postpartum females in the Maternity and Children's Hospital in Al-Madinah Al-Monawwarah, KSA. A self administered semi structured questionnaire was used. Results: A total of 163 postpartum women were included. Of the total participants, 44.7% of women were in the obese or overweight category. The findings of the study showed a relation between breastfeeding duration and body mass index (BMI) levels (p = 0.044). Moreover, a significant negative correlation between BMI level and duration of breastfeeding (p = 0.002; r = -0.25) was found. This means that the lactation period was affected by increasing BMI levels. Additionally, Weight before and after conception and the length of breastfeeding had a strong negative correlation (r = -0.162, p = 0.039, r = -0.184, p = 0.019, respectively). Conclusion: The duration of lactation is reduced in pregnant women who are overweight or obese. These findings show that weight control before, during and after pregnancy should be a priority of prenatal control. Further more, these factors consist of increasing breastfeeding among obese pregnant women.

Medical Science, 2022, 26, ms484e2580

Evaluating the level of awareness about urolithiasis among the general population of Hail, Saudi Arabia

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Background: Urolithiasis is one of the most prevalent urinary tract disorders. It concerns stones that form in the urinary tract, usually in the kidneys or ureters. People with renal stone may experience dysuria, fever and flank pain. The risk factors of nephrolithiasis include hypertension, obesity and dehydration. Methodology: A cross sectional study conducted in 2022, over duration of four months. The study was undertaken to Evaluating the level of awareness about urolithiasis among the population of the Hail region in Saudi Arabia. The questionnaire contains 27 questions. All data was analyzed using SPSS 22. Results: The study included a total of 1,150 participants, who ranged from the age of 18 to 68 years the mean age is 26.3 ± 12.8 years old. 585 (50.9%) participants were males and 1,100 (95.7%) were Saudi. 683 (59.4%) were found to have a low level of awareness regarding urolithiasis, 448 (39%) were moderately knowledgeable, while only 19 (1.7%) had a high awareness level. Increased age was associated with 12% more likelihood of higher awareness. Female participants also had 36% more likelihood of higher awareness than males. HCWs had doubled the probability of a good awareness level than did the other participants. Moreover, participants with a history of urolithiasis had nearly doubled the probability of a good awareness level than did those without such a history. Conclusion: Study participants have shown low awareness of urolithiasis, especially among non-medical professionals. There was a significant association between age, gender, history of urolithiasis and participants’ level of awareness.

Medical Science, 2022, 26, ms485e2573

The use of herbal medicines for treatment of androgenic alopecia in Riyadh, Saudi Arabia


Androgenic alopecia is a process of hair loss that occurs in both males and females, whereby hair becomes weak and thin. Plants have long been used to aid hair growth, with evidence suggesting benefit of some plant and herbal products in treating androgenic alopecia. This descriptive cross-sectional, facility-based study involved all patients with androgenic alopecia attending dermatology outpatient clinics in Riyadh, Saudi Arabia. Data was collected using an author designed selfadministered questionnaire. All 384 participants reported having previous knowledge about herbal products used in androgenic alopecia, with social media (71.4%) and family and friends (78.6%) being the most commonly sources of information. Henna (61.2%) and aloe (56.3%) were the most commonly used herbal products, with hair damage being the most common indication (73.4%). Yogurt (54.4%) and eggs (49.5%) were among the most commonly mentioned home remedies for androgenic alopecia. The distribution of herbal product usage among research participants was rather balanced, with female individuals reporting more frequent use than male participants (p 0.001). Approximately 15.4% of participants said herbal remedies were unhelpful, while 61.7% said they were beneficial in treating AA. Patients with androgenic alopecia frequently employ a variety of herbal treatments and home remedies, including henna, aloe, yogurt and eggs. Hair damage treatment was the most frequent usage of natural and home treatments. In addition to being safe when used with other treatments for androgenic alopecia, herbal remedies were thought to be a successful therapy.

Medical Science, 2022, 26, ms486e2569

CASE REPORT

Double pathology in cases of cold abscess neck: A case report
In 2022, a 20-year-old male patient came to our OPD with a complaint of slight neck pain and swelling in the anterior side of his neck for two months. On observation, the swelling was present in the anterior aspect of the neck in the midline above the suprasternal notch. USG in the neck shows a heterogeneous lesion with moving echogenic debris in the anterior aspect of the neck. MRI showed a well-defined T1 isointense T2 hypointense peripherally enhancing lesion showing no diffusion restriction/blooming in the right cerebellum. While CBNAAT detected the presence of mycobacterium tuberculosis, high dose contrast enhanced computed tomography shows ill defined hypointense peripheral enhancing collection in the right anterior aspect of the neck with multiple peripherals enhancing necrotic lymph nodes. Tissue culture shows no growth. The pathology report revealed the presence of persistent necrotizing granulomatous inflammation with tuberculosis neck with MRI brain showing cerebral tuberculoma. A thorough assessment and prompt treatment are necessary to avoid a fatal prognosis because cerebral tuberculoma might manifest with very minimal neurological symptoms while having massive lesions.

Medical Science, 2022, 26, ms488e2410

Autism children dietary habits in Hail, Saudi Arabia: A parents’ survey
Albandri Abdullah Bin Ammar, Sarah Saud Almuhaini

Background: Developmental disabilities like autism are brought on by variations in the brain. Confined or repetitive habits or interests, as well as social engagement and communication, are common struggles for people with autism. The purpose of this study was to evaluate the dietary habits of autistic children in Hail, Saudi Arabia. Methodology: This is a cross sectional descriptive observational study conducted at Tawasol Medical Centre for Autism in Hail, Saudi Arabia. About 80 autistic children and their parents were enrolled in the study to analyze the children's food habits based on parental confession. During the months of March and April 2022, data were collected from two Tawasol Medical Centres for Autism and one Hdka Medical Centre for Autism. Results: There were 67.5% boys and 32.5% girls among the 80 children, for a male: Female ratio of 2.07:1.00. Constipation and Bulges is the most common Child digestive ailment, followed by both (Constipation, Bulges) and (Diarrhea, Diarrhea and Bulges), accounting for 29%, 24%, and 11%, respectively. Most children "cry or scream at mealtimes" on occasion (38%), followed by frequently (28%). The probability of female children constantly "crying or screaming at mealtimes" is 2.4231 (0.9049 to 6.4884), P = 0.0782. Conclusion: Autism is frequent in Saudi Arabia, with a male to female ratio that is lower than worldwide recorded ratios. Various gastrointestinal issues exist among Saudi autistic children, necessitating specific instructions. Many autistic children have unfavorable behavioral and dietary habits, necessitating community level interventions.

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Impact of patients’ knowledge of hypertension on adherence to antihypertensive drugs in Qassim region, Saudi Arabia
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Background: Hypertension is a common disease in Saudi Arabia. Non adherence to hypertension treatment is a common reason for failure to reach the target blood pressure. Multiple studies have shown a direct relationship between patients’ knowledge of hypertension and their adherence level to antihypertensive drugs. Aim: The study’s aim is to identify the association between hypertension knowledge and adherence to antihypertensive drugs among hypertensive patients in Qassim region. Methods: A cross sectional study performed in the Family Medicine clinics of Qassim University Medical City. A self-administered questionnaire was distributed among hypertensive patients. The questionnaire includes socio-demographic characteristics, General Medication Adherence Scale (GMAS) and Hypertension Knowledge Test (HKT). Results: Of the 452 hypertensive patients, 56.4% were females and 36.1% were aged between 31 to 50 years old. The overall mean GMAS score was 28.1 (SD 5.15), with 51.3% categorized as having high adherence. The overall mean HKT score was 12.6 (SD 3.75), wherein 58.4% was considered to have average hypertension knowledge. There was a notable positive correlation between the GMAS score and the HKT score. Conclusion: Patients with hypertension in Qassim region showed a high level of adherence to their antihypertensive drugs and only moderate knowledge of their disease. Greater drug adherence is more common in patients who are aware of their disease than in other hypertension patients. More investigations are required to determine the level of knowledge and adherence among hypertension patients in our region.

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The blood donation: Knowledge and attitude of female students at the faculty of applied medical sciences, Al Baha University, Saudi Arabia
Background/aim: Blood donation is one of the main ways to save lives. The students at health faculties supposed to have well knowledge and positive attitude about blood donation. Our study aimed to evaluate levels of knowledge and attitude about blood donation among female students at Faculty of Applied Medical Sciences, Al Baha University, Saudi Arabia. Methods: This is a non-experimental, cross-sectional survey it was conducted in September to October 2022. A number of 70 students participated in this study from female section at the Faculty of Applied Medical Sciences at Al Baha University. A questionnaire was adopted and validated then it was prepared and distributed online. The authors used SPSS program for analysis. The demographic characteristics of students were assessed and shown in tables and figures. The relationships were also assessed and analyzed. Results: The study findings demonstrated that 34.0% of female students had good 31.0% had average and 35% had poor knowledge related to blood donation. Among them 33% had a well attitude, 50% had a fair one and 17% had poor attitudes toward blood donation. Conclusions: The study concluded that more than one-third of the female students in Faculty of Applied Medical Sciences at Al Baha University had good knowledge about blood donation and the majority of them had positive attitude towards blood donation.

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Knowledge, awareness and attitudes of adults towards the practice of testicular self-examination in the Kingdom of Saudi Arabia: A cross sectional study
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Introduction: The appearance of swelling may be temporary in certain circumstances, but it may also be an indication of danger in others. There is evidence that a regular self-exam can successfully detect testicular issues in their early stages, including testicular cancer. Testicular self-examination is therefore advised. Aims: Measuring the prevalence of testicular swelling in males in Saudi Arabia, the awareness knowledge of the adults toward the practice of testicular self-examination and investigating the role of social and demographic factors in their level of awareness and knowledge. Methodology: From August 2021 to March 2022, 3,500 adult participants from all regions of Saudi Arabia, between the ages of 18 and 50 participated in a cross sectional survey. Results: Most of the participants had limited knowledge and compared to the other participants, most of them belonged to the age group (18 to 25 years old), unmarried, bachelor's degree holders and residents of Mecca. In terms of the frequency of testicular swelling in men, 668 individuals reported having it and 191 people detected it through self-examination of the testicles. Conclusion: Shedding light on launching educational initiatives on testicular self-examination and its significance and boosting people's self-efficacy, particularly fathers.

Medical Science, 2022, 26, ms492e2515

The level of Systemic Lupus Erythematosus awareness and its barriers, Qassim, Saudi Arabia
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Systemic Lupus Erythematosus (SLE) is a multi systemic multi factorial autoimmune disease. Organ's damage and failure may occur during life time. Severe SLE presentations may lead to life threatening complications even at younger age. Therefore, general populations need to increase their awareness about SLE to reduce SLE complications. The purpose of this study to assess the levels of SLE awareness and the barriers that affect the SLE awareness among Qassim University members, Saudi Arabia, 2022. The items of the questionnaire used in this study includes socio demographic characteristics, source of SLE information, knowledge about the symptoms and treatment of SLE, assessment about the awareness toward SLE and barriers to SLE awareness. Sample size that has been collected during this study was 206 participants. The overall mean awareness score was 3.08 out of 10 points with a poor awareness level compromising of 82.3% while only 17.7% had good awareness. Factors associated with increased awareness were being a female or being a medical student, etc.

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Psychological well-being and its effect on suicidal behavior among medical students in Madinah
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Psychological well-being (PWB) and its relation to suicidal behaviour among medical students are growing concerns in Saudi Arabia. Medical students experience high psychological distress. And they are more prone to develop suicidal ideation. Objectives: This research aims to measure the PWB of medical students in Madinah and assess its impact on the development of suicidal behaviour. It also examines whether preclinical or clinical years are more likely to develop suicidal behaviour. It evaluates other factors contribution. The study was conducted using a cross-sectional method involving 308 medical students from Madinah in Saudi Arabia. Ryff's Scale measured PWB, while Questionnaire-Revised (SBQ-R) assessed suicidal behaviours. SPSS, ANOVA tests and descriptive statistics analysed the data. Results In a total of student responses and showed no correlation between PWB and suicidal behaviour. Female risk group percentage is higher than male in addition, same as high GPAs students. Clinical year students also had higher suicidal thoughts. Conclusion: Our findings show that suicidal behaviour was higher among females, clinical years and higher GPAs students. Therefore, we suggest offering mental health consultations to them.

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**Assessment of knowledge of Alzheimer's disease among medical students at Umm Al-Qura University, Saudi Arabia**

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*Background:* Alzheimer’s disease (AD) is a rising health problem with an estimated 6.4% in Saudi Arabia. 80% of dementia cases are caused by AD and usually patients diagnosed at late stages. This study intends to measure the knowledge of Umm Al-Qura University (UQU) undergraduate medical students regarding AD. *Methods:* Cross-sectional study carried out using an online questionnaire disrupted among medical students. The questionnaire included two sections the first is about demographic data, the second assesses the knowledge related to AD and consisted of 30 true and false items. *Results:* The total sample number in this study was 332 (54.8% male, while 45.2% were female). The total mean score for this study was 14.12 and most of them (59%) had poor knowledge level regarding AD. *Conclusion:* This study shows the level of knowledge toward Alzheimer's disease is insufficient amongst medical students at UQU. Meanwhile, a higher academic year is linked to a better level of knowledge. Therefore, focused directed teaching is important to benefit students to develop their knowledge that allows them to do appropriate clinical evaluation by history and physical examination to reach the diagnosis.

**Medical Science, 2022, 26, ms495e2545**

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**The prevalence of irritable bowel syndrome among medical students and interns at Tabuk University**

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*Objectives:* This study was conducted among medical students and interns at Tabuk University, Saudi Arabia to estimate irritable bowel syndrome (IBS) prevalence and explores its risk factors. *Methods:* Using a questionnaire this cross-sectional study collected data regarding the participants’ characteristics, red flag signs of colorectal cancer, Rome III criteria, HADS-A questionnaire and lifestyle habits. *Results:* Out of 215 participants, 22.8% had IBS. Univariate analysis showed significant association between IBS and female gender (p=0.007), family history of IBS (p<0.001) and celiac disease (p=0.002), sleep duration>6 hours/day (p<0.001) and anxiety disorder (p<0.001). Multivariate analysis showed significantly increased likelihood of IBS with family history of IBS (OR: 3.583, 95% CI: 1.518–8.460, p=0.004) and celiac disease (OR: 3.896, 95% CI: 1.124–13.507, p=0.032), sleeping>6 hours/day (OR: 11.288, 95% CI: 2.956–43.106, p<0.001) and having higher HADS-A score (for each increase by one point: OR: 1.194, 95% CI: 1.068–1.336, p=0.002). *Conclusions:* Prevalence of IBS was 22.8% and the detected independent preventable risk factors were sleeping>6 hours/day and having an anxiety disorder. Future studies should assess IBS impact on academic achievements and clinical performance of students and healthcare workers.

**Medical Science, 2022, 26, ms496e2568**

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**Assessment of oral hygiene practice during active orthodontic treatment in Saudi Arabia**

Hussain YA Marghalani, Hassan Alkhalaif, Ibrahim Alsultan, Hussain Alkhalaif, Ahmed Alkhalaif, Ziyad Aldoghan, Khames T Alzahrani

*Background:* Good oral hygiene is a critical factor to ensure good orthodontic treatment. Maintaining good oral hygiene in orthodontics is one of the essential factors related to compliance. Assessment of oral hygiene practices is crucial for adequate understanding of the patients’ oral healthcare need, which may influence the quality and timing of the therapy. *Methods:* This is an epidemiological study based on electronic survey questionnaire. This research was performed among active orthodontic patients in Saudi Arabia. The study group included at least 384 aged above 18 years. The outcomes of this study will be analysed using the SPSS program using a pre tested questionnaire. *Results:* 505 individuals in total, with a mean age of 24.6 ± 11.8 years and ages
ranging from less than 14 to 60. 448 (88.7%) of the participants or 274 women (54.3%), go to private clinics. Participants in the study practice cleaning their teeth. A total of 418 participants (82.8%) brushed their teeth. Brush and electric were both typical for 58.1% and 12.2% of individuals who complied with TB, respectively. Regarding frequency, 42.6% of subjects had TB once, while 37.6% had it twice. Conclusion: More than half of the participants in the study had poor self-reported oral hygiene, particularly when it came to how frequently they used mouthwash and other oral hygiene techniques like brushing. The majority of patients reported using subpar procedures and just a small percentage of participants performed dental care in accordance with best practices.

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Awareness and perception of Al-Baha population for eye health and its common disorders


Introduction: The research is directed to assess the knowledge and perception of the Al-Baha population regarding eye health and its common disorders and risk factors such as high altitude, contact lenses, pregnancy, drugs and ultraviolet. Methods: Cross-sectional study was implemented in the high-altitude region of Al-Baha. The data collection of the present research was based on the Google Survey forms for gathering the responses. The predesigned survey questionnaire (Google form) was shared with the general population. For data analysis, the data were transformed into codes and with the help of software named SPSS, the data were analyzed. It was assured that the data was valid and reliable with the help of the reliability and validity test (a Cronbach = 0.949 and Validity = 0.974). Results: The results showed that the awareness level of the participants about the contact lens and UV rays was relatively higher, as 64.2% of participants were aware of the contact lens as a risk factor. However, the awareness regarding altitude and pregnancy is low, which accounted 19.9 % and 10% of the total respondents. Conclusion: The participants show different levels of knowledge regarding eye health concerning the effect of contact lenses and UV and high altitude and pregnancy.

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Incidence and risk factors of acute kidney injury in pediatric diabetic ketoacidosis: A retrospective study

Abdullah Aldamigh, Abdullah Alhojailan, Husam Alahmadi, Fatimah Almeathem, Ibrahim Algosair, Ghdah Alharbi, Mohammad Alkhattaf, Emad Alfadhel, Abdullah Alsamani

One of the typical complications of diabetic ketoacidosis (DKA) is acute kidney injury (AKI) in pediatric patients. However, the incidence and AKI's risk factors in pediatric patients with DKA remain elusive in Saudi Arabia. We investigated the occurrence rate and associated risk factors of AKI among pediatric DKA patients in Saudi Arabia. A single-center observational retrospective cohort study was conducted at the Maternity and Children Hospital in Buraydah, Saudi Arabia between August 2019 and August 2021. There were 207 DKA patients, including 74 (35.7%) patients with AKI. Among AKI patients, 65 (87.8%) patients presented with stage 1 and 9 (12.1%) patients presented with stage 2 AKI. In patients with DKA, aging, hyperglycemia, increased heart rate, elevated WBC count and serum creatinine, decreased pH and HbA1c were risk factors for AKI. Altogether, the severity of AKI is influenced by several risk factors in DKA patients. Hence, there is an urgent need for conducting prospective long-term research to better comprehend the risk factors and longstanding complications of AKI.

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Validating CT characteristics of the thymus in healthy Indian adult population

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Aim: The research aimed to appraise the properties of healthy thymus in Indian adult population on computed tomography. Background: On cross sectional imaging assessments of the chest, the thymus is frequently spotted in a variety of appearances aging in a dynamic way. Although the structure and composition of the healthy thymus on CT varies from person to person, with absence of systematic documentation defining properties of the healthy thymus in the Indian adult population in the event of diseases, knowing the imaging properties of the normal thymus will aid precise radio graphic diagnosis. When in doubt, this will prevent unneeded imaging and action. Material & Methods: Review of Computed tomography of 154 adults aged 20–60 years was carried out. For 46 individuals with some solid tissue intact, the density, volume, form and preferred aspect of the thymus were measured and statistically analyzed based on the patient's age and gender. Results: The density and volume of the thymus diminished as the patient grew older. In our selection of sample group of individuals above the age of 54, there was absence of any solid element in thymus. The thymus in the proportion of patients had an arrowhead form with a midway location. However, there was a lot of variation in thymic form and boundary. The link between density and age of the patient was significantly substantial (p 0.0001). Conclusion: Strong association between age and thymic density was seen along with age and capacity. No relation was observed between volume and density with gender.

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Quality of life for caregivers of patients with mental illness in Qassim region: Cross-sectional study

Background: Mental illness is a term used to prescribe a variety of diseases that characterized by abnormal thoughts or behavior or mood of the affected individual. This survey based study aimed to determine the influence of mental illness and poor psychiatric monitoring programs on mind of medical students attending Umm Al-Qura University. Methods: This is a survey based study conducted in June 2022 that utilized an online questionnaire designed in Google Form. The study included all medical students in their second to sixth year at Umm-Al-Qura University. Results: There were 410 total students who participated in this study. About three quarters of the students were males (73.7%) and most of them were Saudis (97.3%). More than half of students were aged <22 years (59.6%). In general, 11.7% of students had been diagnosed with a mental health condition and 8.3% of students had received medications for mental health conditions. Additionally, 11.2% of students were following-up with a mental health specialist (psychiatrist or psychologist) and 8.3% of students were receiving medications for mental health conditions at the time. Conclusion: Our data shows that having a mental illness can have a negative effect on students’ academic performance. Importantly, competent psychiatric monitoring programs can minimize the influence of mental illness.

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Attitude and practice of physicians in King Khalid University Hospital, regarding placebo 2021-2022

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Background: In the developing world of medicine, placebo treatment has been viewed as a subject of controversy. Some physicians support its’ use and advocate its effectiveness while others are against it for various reasons. This study provides identification of the practice of placebo and debates its validity. Methods: A cross-sectional study was conducted in King Khalid University Hospital in Riyadh-Saudi Arabia, targeting doctors from both genders different ages and experiences. 190 physicians were chosen by quota sampling technique. The data was collected by a printed survey and distributed manually. SPSS software was used for analyzing. Results: The results showed that age, years of experience and the specialty of the physician doesn’t influence their frequency of placebo use or the attitude. However, positive attitude prevailed more among male physicians (p=0.0204). 78% of the physicians in this study had positive attitude towards placebo prescription while none showed a negative attitude. 80% of residents used placebo used it to calm the patient and 35% as a treatment for nonspecific symptoms. Conclusion: Despite of the ethical controversy of prescribing placebo, a fair number of doctors prescribe it to their patients. This study revealed that there is no significant difference in age, gender, experience, or specialty between doctors who support placebo as a medical treatment compared to those who do not. Our study provides valuable data about the attitudes of physicians towards such a controversial methodology of treatment.

Medical Science, 2022, 26, ms503e2543

Perception and practice of college students regarding seasonal influenza vaccine in central area of Saudi Arabia


Background: Influenza is a very prevalent infection all around the world. This study aimed to determine the knowledge, attitudes, beliefs, barriers and factors influencing influenza (Flu) vaccination uptake among college students in Saudi Arabia’s central region. Methods: A descriptive cross sectional questionnaire survey was utilized to collect the data from the study participants. Results: There were a total of 1,869 valid surveys collected. The younger age group (less than 30 years) dominated the study by a significant margin (61 %). Saudi Arabians comprised more than half of the participants (69 %). Most respondents (62%) worked in healthcare, while 35% did not. Only 35% of the study participants received the vaccine. In comparison, 44% did not get 46 % recognized that the influenza vaccine is safe and effective and over half of the participants knew that the seasonal influenza vaccine is freely available at every primary health care. Nearly two-thirds of respondents (n = 592) agreed that the flu-vaccine could cause influenza and around a quarter (n = 490) thought the seasonal influenza vaccine weakens the immune system and makes people more susceptible to disease. Conclusion: Vulnerable people who have high risk of getting the influenza flue should be targeted more in regards of health education about the influenza vaccine, multi approach models should be implemented at socio economic factors to increase the tendency for getting the influenza vaccine.

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The knowledge of Schizophrenia among health-related students in Umm Al-Qura University: A cross sectional survey

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Background: Schizophrenia is a mental psychotic disorder where the patient may experience hallucinations or disorganized speech with the likely correlation with negative symptoms. This study aimed to estimate the knowledge, awareness and attitude of schizophrenia among health-related students at Umm Al-Qura University in Saudi Arabia. Methods: A cross sectional study was conducted among interns and undergraduate students from different health related specialties at Umm Al-Qura University. Data is collected by an online questionnaire distributed via various social media platforms. Result: Out of 830 students, the overall response about previous hearing of schizophrenia was very positive, 85.1%. Unexpectedly, only a minority of students reported a good level of knowledge, 4.46%. In opposition, most students documented a poor level of understanding and knowledge, 53.98%. Students of
college of medicine significantly correspond with the level of knowledge (P-value, 0.008). Further, students from the second academic year showed significant difference with a moderate level of knowledge (P-value, 0.013). In contrast students from the third year showed a significant association with a poor level of knowledge (P-value, 0.013). Conclusion: This study finds out that most students have an insufficient understanding of schizophrenia, a demand for further investigation among Saudi Universities. Additionally, this study found an incidental high level of students with a history of schizophrenia, which recommended screening of schizophrenia among students for early detection.

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