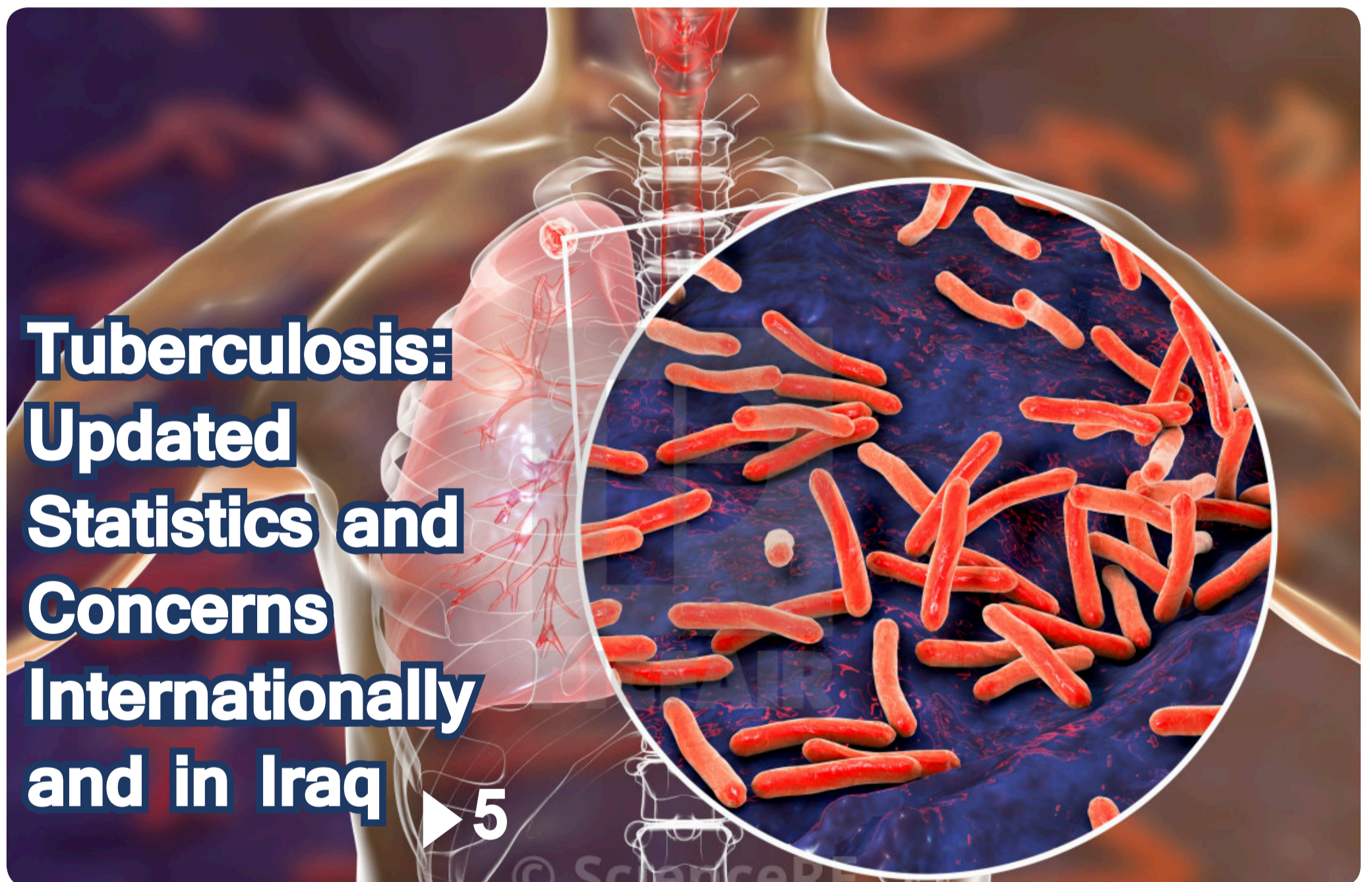


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## “A graduated by design” student quality



By  
Associated Professor:  
Nohad Al-Omari

The value of the students we are producing are highly relying on their efficacy to make the change our community needs and deserve by applying the international standards of studying and researching so they can comply with the International Pharmaceutical Federation (FIP) mottoes of “Serving Global Health” and “Future Medicines for One World”. In my meeting with the FIP president, Dr. Carmen Peña, (below photo), we agreed that the quality of pharmacy student that we are looking for globally, and in the college of pharmacy at Al-Kitab University is the kind that can surprise us with solutions to ongoing challenges, progress, and compatibility with all around the circumstance to produce the nine stars pharmacist.

Spreading these innovation values, our students in this issue of PharmaShout have given the real examples of FIP values by addressing cutting-edge topics, with a very high demand to the one world we belong to, and to our own community of Iraq. In almost every



article written in this issue, students passionately searched for findings about their topic on both the international and local levels, so that they can highlight on several health issues.

Surfing in this issue will be of a different taste with topics related to digital health and lack of information in such regard from our society, to Tuberculosis and the outstanding research that is undergoing in different research

institutes and hospitals in Iraq. Not to mention the recent first time diagnosis of a challenging disease like the Tourette’s syndrome in Iraq. It was a moment of proudness to witness our first and second years pharmacy students using their own minds to suggest ideas, and studies for future research to serve the health sector locally in more effective and updating ways.

As FIP member, college of pharmacy

at Al-Kitab university is highly going on with full focus on being a “A Friend of INN” University, through getting involved with our students and staff in the International Non-proprietary Names (INN) project including the INN school which is a cooperation between World Health Organization (WHO) and FIP. This is one of the long list skills that our pharmacy school students will own along with their academic degree.



## Video Games: To Play or not to Play that is the Question!



By: Omar Ali  
Hassan Al-Aragee  
(First year student)

Since decades ago, Albert Einstein said, «It has become appallingly obvious that our technology has exceeded our humanity.» and this looks like so true based on not only social observation but also on a study that was published only five months ago in the Indian Journal of Pediatrics.

There is no doubt that everyone become increasingly dependent on the virtual world of digital technology. Most of us live, eat, and sleep with our mobiles within arm’s distance, anticipating the next online notification. However, the excessive digital or video gaming is emerging as a mental health disorder because young people are losing both the control of their lives and their time where the players enjoy creating and building relationships with other online characters, which provides a virtual community feeling at the expense of one-to-one real social feelings and experiences. After a while of being involved with these games, the players are suffering from mood swings like irritability, restlessness, and aggressive behaviour when they are denied the



playing gadgets.

Thus, on the 18th of June 2018, the World Health Organization (WHO) and in the 11th revision of their International Classification of Diseases (ICD-11) has classified the continuous desire to play video games as a mental health disorder!

The main groups of people with the age range of age 12 to 25 years are insanely crazy about PUBG, World of War Craft, Dota 2, Candy Crush and Fortnite: Battle Royale. These games can be played continuously on handheld game devices, personal computers, iPads, smart phones, PlayStation 4, and

Xbox one. Both children and adults are hooked to these devices to avoid social interactions with persons by engaging with online known and unknown players, for the sake of virtual gifts and rewards. Interestingly, this gaming abuse is more common in boys compared to girls. It is a sad reality that many people are seen “phubbing” with their handheld digital devices during social gatherings (even at the dining table!). As a matter of fact, the word Phubbing itself has been introduced to the English language since May 2012 to describe the act of the habit of ignoring someone in favour of a mobile phone. This will look like

our real friends are being hijacked by their mobiles screen friends because the screen identity is far more exciting and engaging than the real ones.

As a solution, parents should use the existing control features that are available in each and every device to prevent the gaming disorder. Psychological and behavioural counseling should be offered to the most effective treatment for video games addiction. Scientists have conclude that when a game is used for 3 to 4 h or more in a day and is used as escape from the realities of school, work, outdoor and social activities, the person is in need of professional help. The available help on the international standard is to register the addicted person on a detox or specially designed treatment programs; this includes a combination of psychopharmacology and psychotherapy.

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# The Misuse of Antibiotics: Risks on the International and National Levels



By: Mohammed Qassim (Second year student)

Antibiotics is a type of antimicrobial substance that are used to treat some types of bacterial infection by killing the bacteria or inhibiting its growth. Unlike what is commonly known and used by the public, antibiotics are NOT effective against the common cold or influenza because such cases are classified as viral infections and are treated with different class of medicine.

Thus, one of our greatest challenges as pharmacists is to correct such wrong concepts among our community. Such antibiotic misuse sometimes is referred to as antibiotic abuse, antibiotic overuse or more commonly the antimicrobial resistance (AMR), which reflects the wrong use of antibiotics that could lead to serious effects on the health. This AMR increases the probability of the bacteria to establish a resistant against the antimicrobial agent. The common multidrug-resistant organisms are bacteria are wide and some of them are Vancomycin-Resistant Enterococci (VRE), Methicillin-Resistant Staphylococcus aureus (MRSA), and Extended-spectrum  $\beta$ -lactamase (ESBLs) producing Gram-negative bacteria.

As per the World Health Organization

(WHO), the common causes that contribute in establishing AMR are shown in figure 1.

According to figure 2, if antimicrobial resistance continues to increase from current levels, it is estimated that by 2050 ten million people would die every year due to lack of available treatment, this number is larger than the deaths caused by cancer and diabetes. If worldwide action is not taken to combat antibiotic misuse and the development of antimicrobial resistance, \$60 – 100 trillion of economic output would be lost. Some of the suggested solutions that could decrease the risk of antibiotics misusing including:

- 1- Prescribing antibiotics only by an infectious disease specialist.
- 2- Spread the knowledge regarding antibiotics on viral infections such as the common cold, influenza and Eczema.
- 3- Spread the knowledge regarding the antibiotic use in agricultural sciences.

References:

- 1) The National Health Service (NHS) of the United Kingdom, accessed online on 18 Dec. 2018 from : <https://www.nhs.uk/conditions/antibiotics/>
- 2) Kucers The Use of Antibiotics: A Clinical Review of Antibacterial, Antifungal, Anti-parasitic, and Antiviral Drugs, 7th Edition – 2017, P.12.
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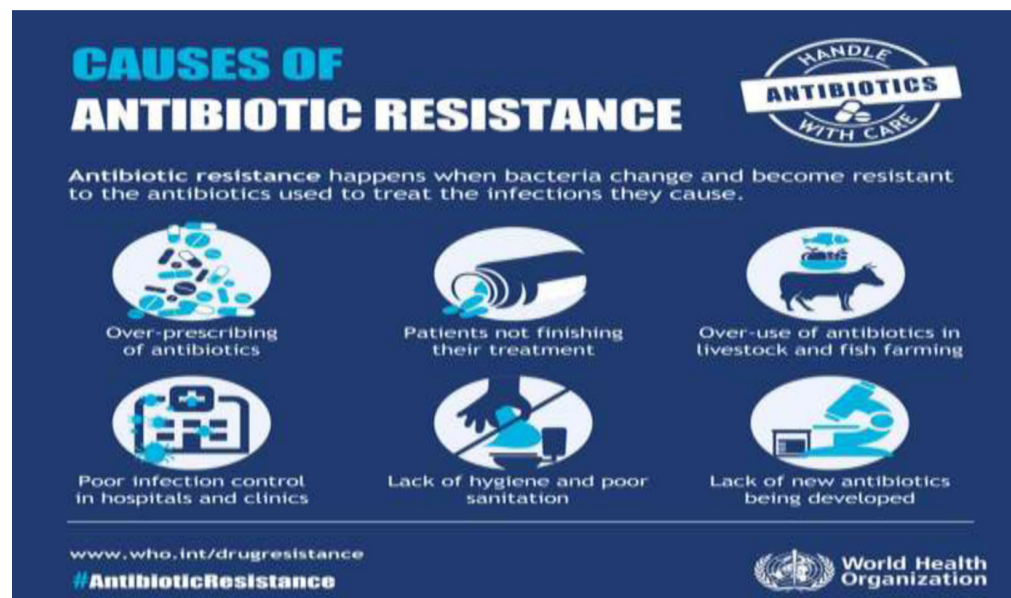


Figure (1): Antibiotics resistance causes as per WHO.

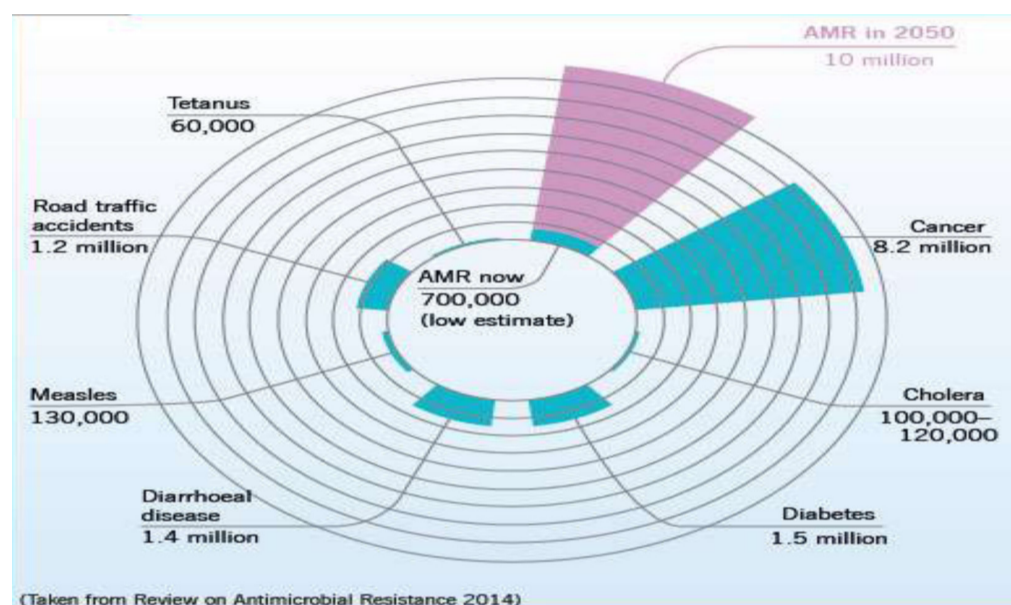
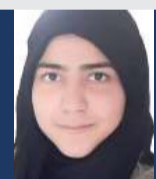


Figure (2): Estimated deaths caused by AMR by 2050. Adopted from Jim O'Neill, 2014.

# The Current Future of Pharmaceutical Evaluation: Studying Drug Stability in the Space



By: Aysha Alkhyat (First year student)

Over the life of NASA's human spaceflight program, the duration of missions has increased, resulting in an increase in demand for pharmaceutical evaluations during the flights. The use of pharmaceutical products during space shuttle missions is common with crews using different route of administrations but mostly the oral one. On Earth, the stability and shelf life of pharmaceutical preparations is ensured by designing protective packaging and dispensing practices where the pharmaceutical stability is a key determinant of therapeutic efficacy and toxicity of medications.

The objective of stability testing is to provide evidence as to how the quality of a drug product varies as a function of time and storage conditions such as temperature, humidity, and light.

The information obtained from stability studies can subsequently used to provide guidelines on handling and storage, and



Photo Credit: Shad.off/Depositphotos

provide information to guide formulation stabilization strategies.

Typically, the time limit or expiration date is set at 1–2 years from the manufacture date for medications stored in the original, unopened containers under recommended conditions.

Unique physical and environmental factors of space missions such as radiation, excessive vibration, microgravity, and

an enclosed and CO<sub>2</sub>-rich environment, in addition to humidity and temperature variations, may contribute to instability of pharmaceutical dosage forms.

Based on the research, it was concluded that it is better to check or replace (as needed) the medication lots contained in the International Space Station (ISS) operational formulary within 6 months of labeled expiration date, later this

became the United State food and drug administration (USFDA) guidelines. Such findings clearly point that such stability will not make the planned space exploration missions possible in the near future, which must warrants the need for research and development of space hardy formulations, as well as packaging and dispensing technologies.

However, the current facilitation of cost-effective development of novel pharmaceuticals using advanced technologies such as the nanotechnology-based delivery systems could have ability to protect drugs encapsulated within them from physiologic degradation, and target their delivery with sustained release.

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- 2) Putcha et al., Biopharmaceutical challenges of therapeutics in space: formulation and packaging considerations, Therapeutic Delivery (2011) 2(11), 1373–1376.



# Ebola the New Era Epidemic: How Far Are We in Control?



By: Yousif Abdulasma Abdulrahem  
(First year student)

The Ebola virus disease (EVD) first appeared in 1976 in two simultaneous outbreaks, one in Sudan, and the other in Democratic Republic of Congo where this infection occurred in a village near the Ebola River, from which the disease takes its name. The 2013–2016 Ebola virus disease epidemic was the largest ever recorded with over 28000 cases and 11000 deaths.

Guinea, Liberia and Sierra Leone experienced the most widespread transmission.

Ebola is introduced into the human population through close contact with the blood, secretions, organs or other bodily fluids of infected animals such as chimpanzees, gorillas, fruit bats, monkeys, forest antelope and porcupines found ill or dead or in the rainforest. A person infected with Ebola virus has well recognized signs and symptoms of fever, headache, joint and muscle pain, widespread bleeding, diarrhoea and other physical symptoms leading to high mortality.

An Ebola epidemic does not only affect physical health, but also has psychosocial



Ebola virus image and patient's blood sample preparation. Photos are courtesy of Shutterstock.

Level	Acute effects	Long-term effects
Individual	Fear and/or anxiety (e.g. of infection, death, separation from or loss of loved ones) Shame and/or guilt Frustration, anger or helplessness Stigma and/or isolation Grief and/or loss	Trauma (e.g. from course of infection, witnessing death of others) Grief and/or loss Mental health problems
Community	Fear and/or anxiety Stigma and/or isolation Grief and/or loss Disruption to community and cultural life	Loss of trust (e.g. in health services) Community fracturing Grief and/or loss Loss of support or coping resources
International	Fear and/or anxiety (e.g. of infection) Trauma (e.g. of international aid workers witnessing deaths caused by Ebola virus) Stigma and discrimination Loss of economic investment, business, travel and tourism	Trauma and long-term mental health problems (e.g. of international aid workers witnessing deaths caused by Ebola virus) Stigma and discrimination Loss of economic investment, business, travel and tourism

Table (1): Acute and long-term psychological effects of Ebola epidemic at individual community and international levels. Adopted from (Bortel, TV, et al., 2016).

implications at individual, community and international levels, both acutely and in

the long term as illustrated in table 1. Its diagnosis can be clinically difficult to distinguish from other infectious diseases such as malaria, typhoid fever and meningitis unless some specific tests are used such as antibody capture enzyme-linked immunosorbent assay (ELISA), and electron microscopy. While its treatment based on supportive care-rehydration with oral or intravenous fluids- and treatment of specific symptoms, improves survival. There is as yet no proven treatment available for EVD.

Outbreak containment measures, including prompt and safe burial of the dead, identifying people who may have been in contact with someone infected with Ebola and monitoring their health for 21 days, the importance of separating the healthy from the sick to prevent further spread, and the importance of good hygiene and maintaining a clean environment.

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2) WHO, Ebola virus disease, released 12th Feb. 2018, accessed online 18th Dec. 2018 from: <https://www.who.int/news-room/fact-sheets/detail/ebola-virus-disease>

# Clinical Report: What is Social Media's impact on our Children, and Adolescents?



By: Karam Amer Ibraheem  
(Second year student)

A research published by the American Academy of Paediatrics has studied the impact of engaging in various forms of social media as a routine activity on children and adolescents by observing its influence on enhancing communication, social connection, and even technical skills.

Scientists found that social media sites such as Facebook and Instagram offer multiple daily opportunities for connecting with friends, classmates, and people with shared interests. These

tools have also enhanced learning opportunities where middle and high school students are using social media to connect with one another on homework and group projects. Adolescents are finding that they can access online information about their health concerns easily and anonymously where excellent health resources are increasingly available to youth on a variety of topics of interest to this population, such as various kinds of transmitted infections, stress reduction, and signs of depression. Data showed that 22% of teenagers log on to their favourite social media site more



Photo credit to: <https://goo.gl/8JDuiw>

than 10 times a day, and more than half of adolescents log on to a social media site more than once a day. While seventy-five percent of teenagers now own cell phones, and 25% use them for social media, 54% use them for texting, and 24% use them for instant messaging. Thus, a large part of this generation's social and emotional development is occurring while on the Internet and on cell phones.

Both children and adolescents are at some risk as they lack the capacity for self-regulation when they navigate social media. For children, the minimum age to sign in to the social media is 13 according to the American congress laws, however the message they receive from their

parents in confusing when they allow them to use the social media under that age. For the children and adults scientist found that most risks fall into the following categories: peer-to-peer; inappropriate content; and lack of understanding of online privacy issues. In addition to cyberbullying which is deliberately using digital media to communicate false, embarrassing, or hostile information about another person.

Unfortunately, there is no such study on Iraqi children, and adolescents, where such data are highly helping in rising awareness and creating the required programs to avoid or treat the misuse and its related traumas. However, it is

believed that healthcare practitioner in our Iraqi community including pharmacists and paediatricians can follow the international suggestions through investing in their unique position to educate families about both the complexities of the digital world and the challenging social and health issues that online youth experience. This could done by encouraging families to face the core online issues of bullying, popularity and status, depression and social anxiety, and risk-taking.

Since most of mental health disorders have onset before 24 years old, thus all healthcare providers must spread the message about the psychological risks that such category are going to face if they do not fully understand what is really happening online. While their parents can be most helpful if they understand the core issues and have strategies for dealing with them whether they take place online, offline, or, increasingly, both!

Reference:

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2) Kessler, R., C., et al., Lifetime Prevalence and Age-of-Onset Distributions of DSM-IV Disorders in the National Comorbidity Survey Replication, Arch Gen Psychiatry. 2005; 62:593602-



# Tuberculosis: Updated Statistics and Concerns Internationally and in Iraq



By:  
Sabreen Rahman Ali  
(Second year student)

Like so many patient suffering from the complicated disease of our era (such as cancer), patients infected with tuberculosis (TB) in the 1800s were receiving the same general and sometimes useless advice of "Just sleep and eat nutritious foods". The TB name is Latinoriginated that describes the rod shape of the bacillus bacteria, and it was better understood in 1882 when the German microbiologist Robert Koch who announced that Mycobacterium tuberculosis caused TB (shown in figure 1). This revolutionary finding, along with the later discoveries of tuberculin in 1890 and anti-tuberculosis drugs starting in 1943, offered hope for patients.

Mortality rates significantly declined from the early to mid-20th century; however, funding for research declined between 1970 and 1990, while drug and vaccine developments slowed. With the onset of the AIDS pandemic and resistant strains, TB rates rose once again, and with that, interest in TB research and prevention. Although current research has provided valuable insight into TB transmission, diagnosis, and treatment, much remains to be discovered to effectively decrease the incidence of TB and eventually eradicate it.

The disease still puts a strain on public health, being only second to HIV/AIDS in causing high mortality rates. While TB can be present in any society in any country, yet eight countries are accounted for two thirds of those cases according to the world health organization (WHO) report in 2017, namely: India, China, Indonesia, Philippines, Pakistan, Nigeria, Bangladesh and South Africa. On the other hand, countries like Egypt, Indonesia, Iraq, the Netherlands, the United Kingdom and Yemen are accounted for 9% of the estimated global number of incident cases in 2017. In the WHO global tuberculosis report 2018, it was clarified that the main problem with TB is the treatment success, which remains low, at 55% globally. Examples of high burden countries in which better treatment success rates are being achieved include Bangladesh, Ethiopia, Kazakhstan, Myanmar and Viet Nam (all of which have rates above 70%). Precisely in Iraq, out of the 38 million population it is estimated that 16,000 ones are infected with TB with a mortality rate

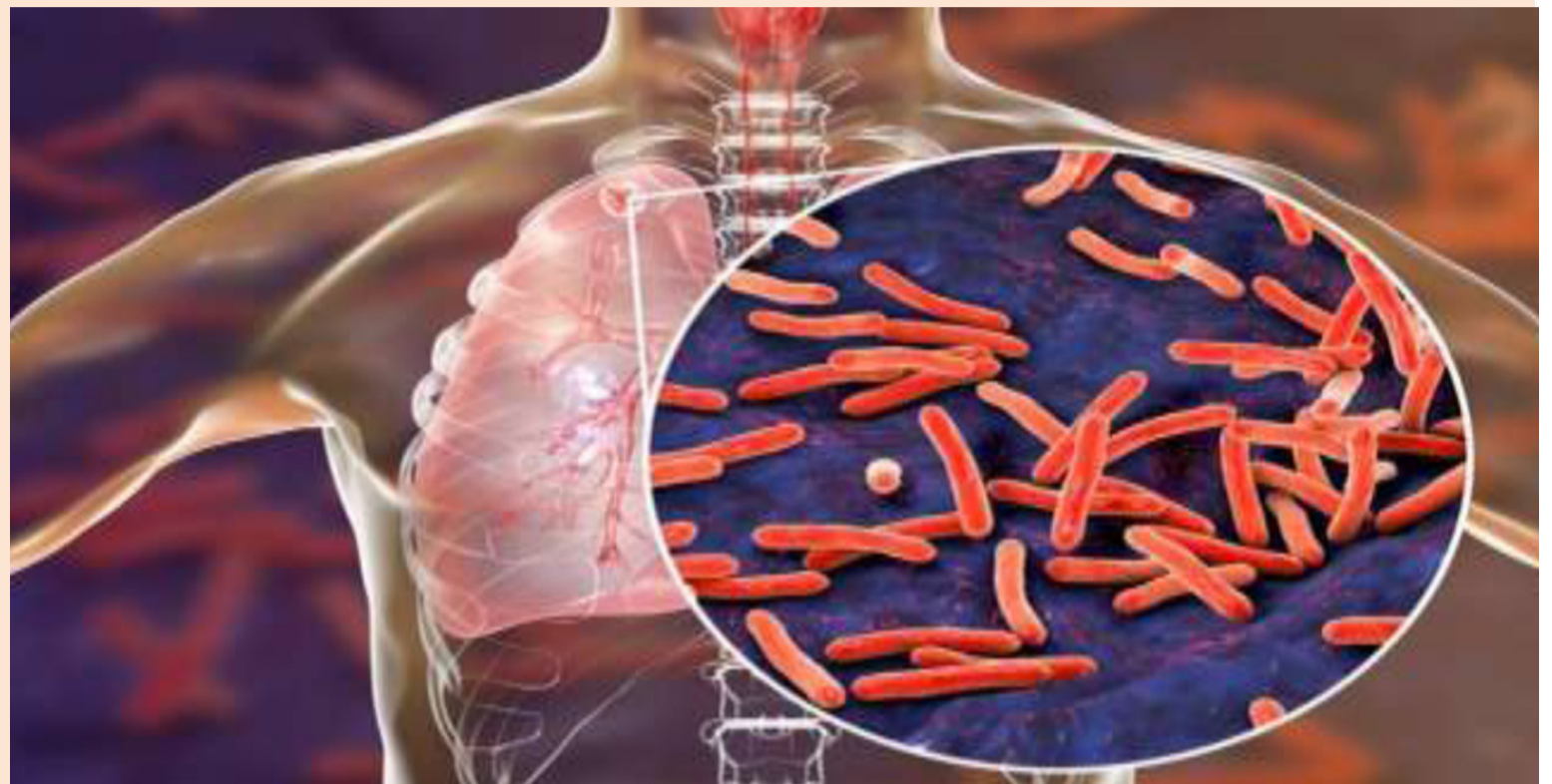


Figure (1): Secondary tuberculosis in lungs and close-up view of Mycobacterium tuberculosis bacteria, 3D illustration. Image Credit: Kateryna Kon / Shutterstock.

of 2.9 per 100,000 population. In figure (2), future researchers can realize where is their next target for conducting a contributive survey in suc regard.

There are certain risk groups that are more susceptible to getting infected including: young adults (more commonly males), those in developing countries, health care workers who are around the disease frequently, and those whose immune systems are weak, as in those who have HIV or smoke.

On 2015, a study published in the International Journal of Infectious Diseases found that emotional stress is associated with

immunological responsiveness and reactivation of bacillus in the Iraqi patients. Moreover, their psychiatric complications as adverse effects of anti-TB medications are also a matter of concern. These factors are viewed as a major barrier to treatment adherence, thus, it is suggested that better management of emotional stress could improve treatment outcomes of Iraqi TB patients.

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- 2) Dujaili, J. A., Health-related quality of

life as a predictor of tuberculosis treatment outcomes in Iraq, International Journal of Infectious Diseases 31 (2015) 4–8.

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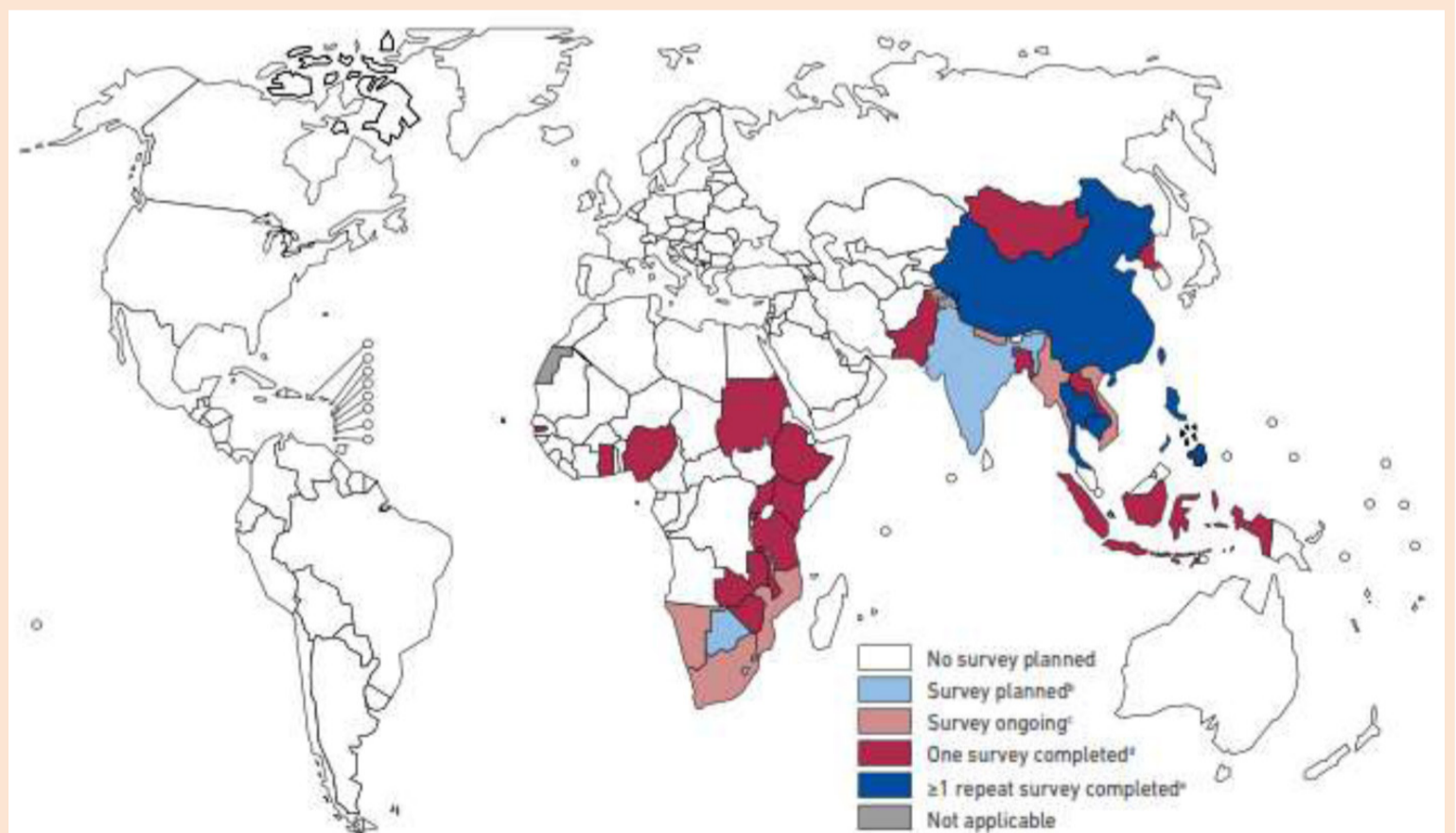


Figure (2): Countries in which national population-based surveys of the prevalence of TB disease have been implemented using currently recommended screening and diagnostic methods a since 2000 or are planned in the future (status by WHO in August 2018).



# You Deserve to Know: What If You Are Allergic to Paracetamol



By:  
Abdullah Yasir  
(First year student)

Almost everyone have heard about or know someone who suffered from food allergy including milk, eggs, cheese, fish and peanuts, even few might know that medicines can cause allergy to specific patients, however, very few have heard of paracetamol allergy!

Paracetamol is a common painkiller used to treat aches and pain. It can also be used to reduce fever. The usual dose of paracetamol is one or two 500mg tablets at a time. Even that paracetamol is safe to take in pregnancy and while breastfeeding, at recommended doses, and a component of many prescription and over the counter preparations, yet paracetamol hypersensitivity reactions appear to be increasing, with less data available about this phenomena and poor understanding of the mechanism. In a study published by the international archives of allergy and immunology, at the allergy department, Cambridge



Photo credit to: <https://goo.gl/xFZDG6>

University Hospitals NHS Foundation Trust, UK, scientists clinically studied the paracetamol hypersensitivity according to the European Society of Contact Dermatitis and the European Academy of Allergy and Clinical Immunology standards. A total number of 32 patients with suspected paracetamol allergy have been observed for their clinical history, skin allergy tests and an oral challenge were performed in all the patients. The 32 patients presented various

allergic symptoms including with urticaria (62%), angiooedema (53%) or both (44%); 22% presented with isolated pruritus and 16% with erythema. Only 2 patients had no skin features. Rhinitis affected 9% of the patients, while dyspnoea, laryngeal oedema and 'throat tightness' was seen in 47%. Four patients developed hypotension. Abdominal pain occurred in 9% of patients. Two patients had a positive skin test and unequivocal

history of acute urticaria/facial angio-oedema/conjunctivitis/cough after paracetamol with no other triggers. Oral challenge was positive in 15 of 31 patients, triggering rhinitis, conjunctivitis, pruritus, erythema, urticaria, angio-oedema, dyspnoea and abdominal pain. In conclusion, scientist suggested that a detailed clinical history supported by graded oral paracetamol challenge is the current gold standard for the diagnosis of paracetamol hypersensitivity. They propose that skin tests should be performed before oral challenge, and further studies are required to interpret the increased paracetamol hypersensitivity and its mechanism.

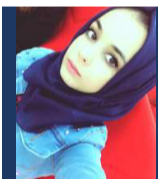
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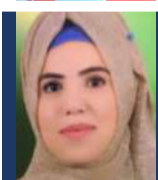
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2) Rutkowski. K., et al., Paracetamol Hypersensitivity: Clinical Features, Mechanism and Role of Specific IgE, *Int Arch Allergy Immunol* 2012;159:60-64.

# Have you heard of Tourette's syndrome?



By:  
Afnan Sahib  
(First year student)



Zubaidah Ahmed  
(First year student)

Tourette syndrome (TS) is classified as a neurogenic neurodegenerative disorder that leads to irregular impulse, and sudden movements. The disorder is named after Dr. Georges Gilles de la Tourette, the pioneering French neurologist who in 1885 first described the condition in an 86-year-old French noblewoman.

The disease symptoms are characterized with involuntary movements in either the face or the eyes and are usually seen in the form of a wink in the eyes, or may be rapid movements of the shoulder, trunk, upper limbs or lower extremities. Physical movements in the face or eyes.

The cause of TS is still unknown, current research points to abnormalities in certain brain regions as illustrated in figure 1, the circuits that interconnect these regions, and the neurotransmitters (dopamine, serotonin, and norepinephrine) responsible for communication among nerve cells. Given the often complex presentation of TS, the cause of the disorder is

## Basal Ganglia and Related Structures of the Brain

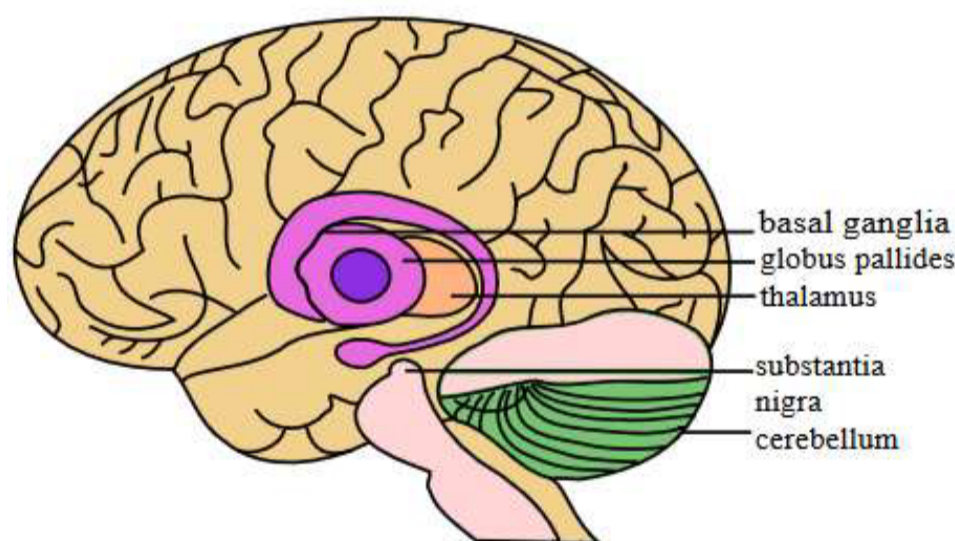


Figure (1): Abnormalities in certain brain regions that probably cause the TS. Adopted from Henkel, John, 1998.

likely to be equally complex.

It is interesting to know that many individuals with TS experience additional neurobehavioral problems that often cause more impairment including very common disorders such as inattention, hyperactivity and impulsivity, as well as problems with reading, writing, in addition to arithmetic and obsessive-compulsive symptoms such as intrusive thoughts/worries and repetitive behaviors. On a gender bases, the proportion of TS females injury is less than the proportion of males. The TS symptoms are illustrated in figure 2. It was only until May 2018, Dr. Aamir Jalal Al Mosawi from Children Teaching Hospital, Baghdad Medical

research-gate profile. Thus, we look forward to a wider screening and better understanding, characterizing, and identifying of misinterpreted neurogenic cases in such regards.

According to the United State National Institute of Neurological Disorders and Stroke, there is no one medication that is helpful to all people with TS, nor does any medication completely eliminate the symptoms. In addition, all the suggested medications to reduce the symptoms have side effects. The most common side effects of neuroleptics include sedation, weight gain, and cognitive dulling. However, neurological side effects such as tremor, twisting movements or postures, parkinsonian-like symptoms, and other involuntary movements are less common.

In my opinion, researchers and specialists should be deeply involved in this disease and conduct many experiments and operations in order to find the precise cause and the appropriate treatment on the physiological, pharmacological, and genetical levels.

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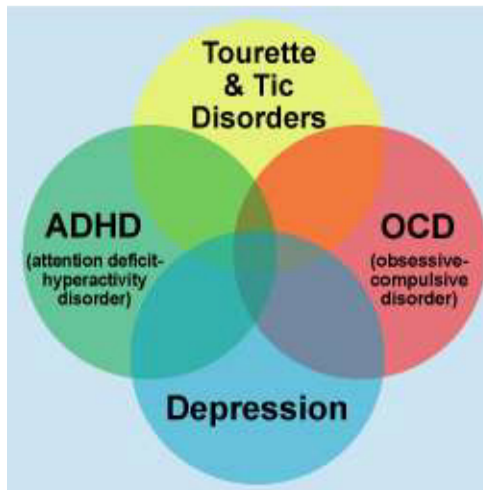


Figure (2): TS known symptoms.

City has successfully reported the first case of TS in Iraq as stated on his



# Goiter: Frequent Answers for Everyone



By: Samya Saman  
Mohammed  
(First year student)

Referring to the American Thyroid Association, the term “goiter” simply is the abnormal enlargement of the thyroid gland. A goiter can occur in a gland that is producing too much hormone (hyperthyroidism), too little hormone (hypothyroidism), or the correct amount of hormone (euthyroidism). In other words, a goiter indicates there is a condition present which is causing the thyroid to grow abnormally (figure 1).

As shown in figure 1, the thyroid gland is a butterfly-shaped endocrine gland that is normally located in the lower front of the neck making thyroid hormones that help the body in using energy, staying warm and keeping the brain, heart, muscles, and other organs working as they should.

One of the most common causes of goiter formation worldwide is iodine deficiency. While this was a very frequent cause of goiter in the United States many years ago, it is no longer commonly observed. Hashimoto's thyroiditis is a more common cause of goiter formation in the US. This is an autoimmune condition in which there

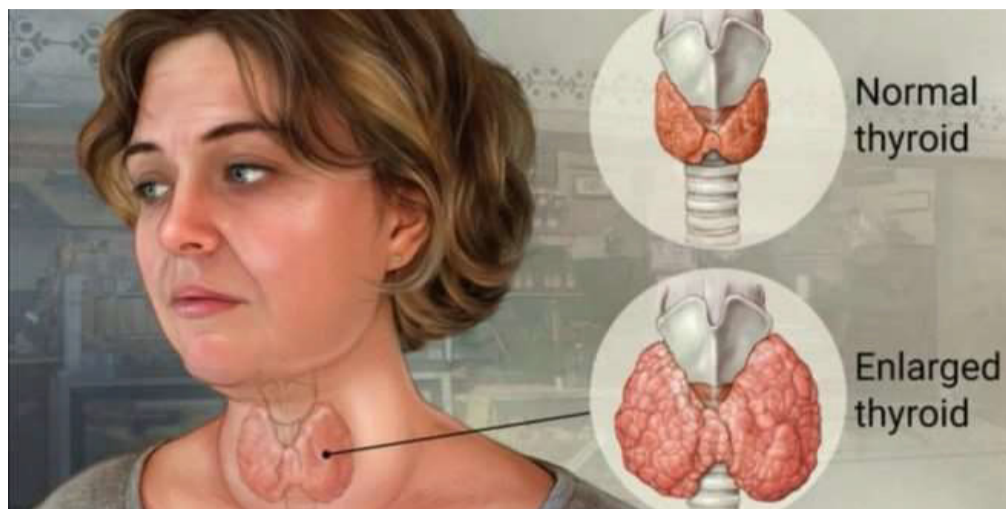


Figure (1): Difference between normal and enlarged thyroid. Adopted from

is destruction of the thyroid gland by one's own immune system. Another common cause of goiter is Graves' disease. In this case, one's immune system produces a protein, called thyroid stimulating immunoglobulin (TSI). In addition to the common causes of goiter, there are many other less common causes. Some of these are due to genetic defects, others are related to injury or infections in the thyroid, and some are due to tumors (both cancerous and benign tumors). On our national level, and as stated in his published article, Dr. Ahmed Mehdi Al-Hashimi from Department of Surgery, Al-Imam Ali Hospital,

Baghdad, described the goiter in Iraq as epidemic, while the prevalence of thyroid nodule increases with age. In his 79 patients study, with thyroid nodule, 64.6% had multinodular goiter, 22% were with diffuse goiter and 12.6% were solitary nodules. Thyrotoxicosis was noticed in 21.5%. On the other hand, when we searched about the prevalence and etiology of goiter in Iraq, most of the rich data content was based on high quality research, in journals such as the Lancet and the American journal of clinical Nutrition, but were un-updated since the sixties, thus, a high demand is there to update this section through research. However

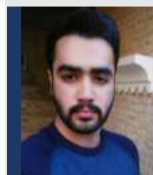
it is worth mentioning that many cutting edge research is undergoing in the field of Thyroid Malignancy at Al-Hilla Teaching Hospital, and on the molecular and genetic levels at Genetic Engineering and Biotechnology Institute, as well as Al-Razi Centre for Medical Diagnostic kits Production, Baghdad.

The diagnosis of the goiter is usually made at the time of a physical examination when an enlargement of the thyroid is found, yet it is important to determine the cause of the goiter through thyroid function tests to determine if the thyroid is underactive or overactive.

#### Reference:

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# The Five Facts to Overcome the Stress Challenge



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This article is written to all my fellow students who are suffering from stress at any level due to studying and researching, especially that we are currently passing through the annual period of mid and final exams. I have found that the release of the United State National Institute of Mental health (USNIMH) is very helpful and easy tool to make everyone under stress re-realize and re-assist the challenges he/she is facing correctly. It all simply starts with the fact that we have to remember five facts upon dealing with the stress:

1) Stress affect everyone: There is no shame to feel stressed, as everyone feels stressed from time to time. Some people may cope with or recover from stress more effectively

and frequently of than others do. Examples of stress include:

- a) Routine and daily responsibilities stress: which is related to the pressures of work, school, family, etc.
  - b) Sudden stress: which is usually brought by a sudden negative change, such as losing a job, and illness, and in student case receiving an unexpected low grade.
  - c) Traumatic stress: Which is experienced in a major events like accidents, war, assault, or a natural.
- 2) Not all stress is bad: Yes, it is true that some stress can motivate students to study and people to perform; it can even be a life-saving feeling in some

situation such as the response to danger.

- 3) Long-term stress can harm your health: it is good to remember that Long-term stress can affect our health through suppressing immune, digestive, sleep, and reproductive systems, which may cause them to stop performing normally. Thus, anyone under chronic stress are more frequent to viral infections, such as the flu or common cold, as well as heart disease, high blood pressure, and diabetes, so why to risk our health?
- 4) Remember that there are ways to manage stress including:
  - a) Recognize the signs of your

body's response to stress, such as difficulty of sleeping, eating disorder, being easily angered, and having low energy.

- b) Get regular exercise, just 30 minutes per day of walking can help reduce stress.
  - c) Be active and productive, and find your interest in life.
  - d) Set goals and priorities in your life daily and on the long term. Focus on your achievement instead of on what you can't do.
  - e) Stay connected with colleagues and people who can provide real emotional and other support.
- 5) If you are overwhelmed by stress: Always ask for help from a health professional.

In Iraq, we look forward to establish centres, and conduct surveys related to stress management and its impact on citizens life in all life aspects, and under the supervision of the Iraqi Ministry of Health so that such service be available to whom they need it.

#### Reference:

- 1) United State National Institute of Mental health (USNIMH), accessed online on 18th Dec. 2018 from: <https://www.nimh.nih.gov/health/publications/stress/index.shtml>

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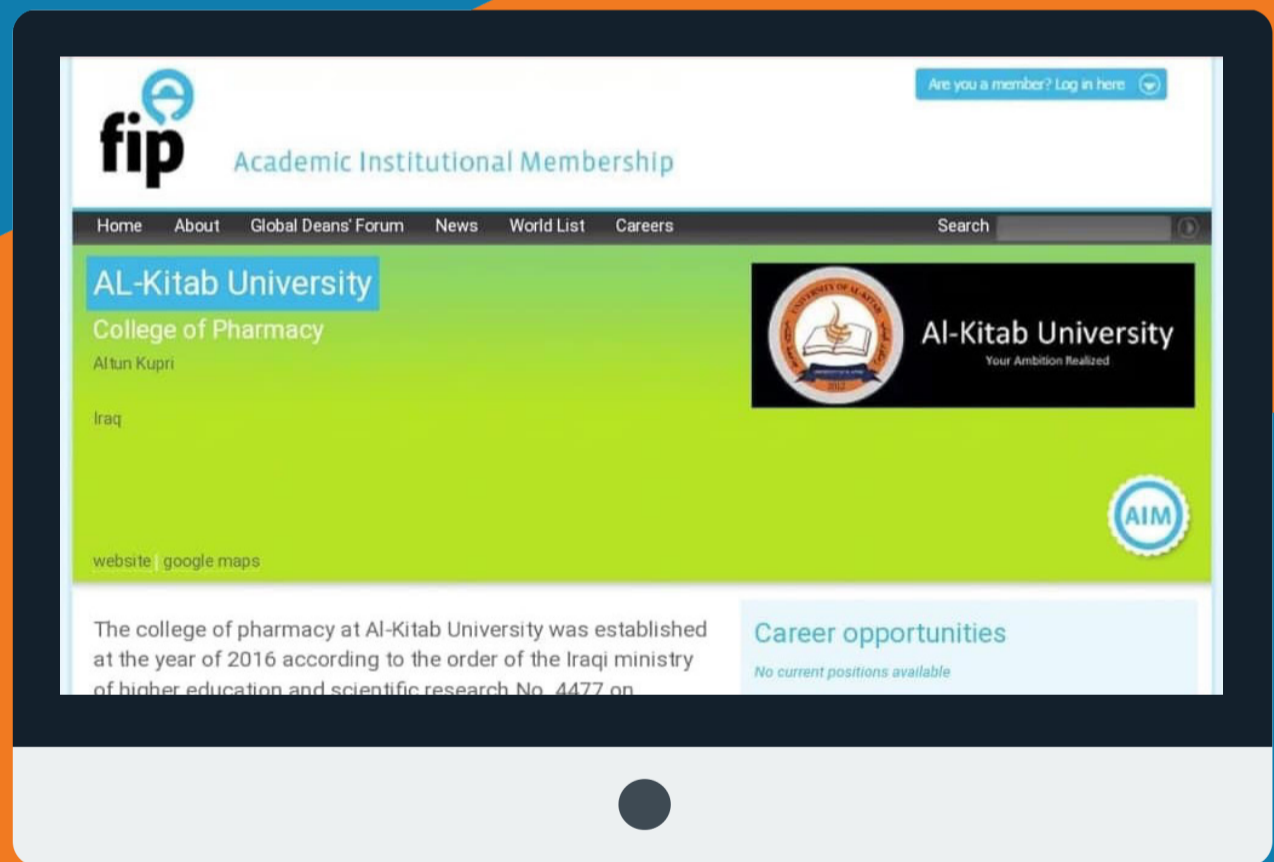


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