

MedEdu Tabuk

Since 2016

Official newsletter of the Faculty of Medicine, University of Tabuk



2021
APRIL
THE ENVIRONMENT & BIODIVERSITY OF THE RED SEA
CONFERENCE
نعود بحذر
كلنا مسؤول
مُعْتَمَد
ACCREDITED
جامعة تبوك
University of Tabuk

برعاية كريمة من صاحب السمو الملكي
الأمير فهد بن سلطان بن عبد العزيز (أمير منطقة تبوك)
مؤتمر بيئة البحر الأحمر وتنوعها الأحيائي

المنظم: جامعة تبوك - كلية العلوم بالتعاون مع الجمعية السعودية لعلوم الحياة
١٨-١٩ شعبان ١٤٤٢هـ / ٣١ مارس - ١ أبريل ٢٠٢١م
فندق جراند ميلينيوم تبوك، جامعة تبوك، تبوك، المملكة العربية السعودية



**SMJS Upgrades
Submission
Management with
Own Resources**



Volume 5 Issue 11
February 11th, 2021

Cover page by : Sarah Alquayr,
Faculty of medicine, 4th year



DR. TANVEER RAZA

Editor-in-Chief, Saudi Medical Journal
for Students (SMJS) & MedEdu Tabuk
Faculty of Medicine



+966537251324



traza@ut.edu.sa

The Saudi Medical Journal for Students (SMJS) is the first peer-reviewed Student Medical Journal in the Gulf region. Established in 2019, SMJS has published three issues in the past one and half year. The main objective of the Journal is to facilitate student publication.

The Editors of the Journal is composed of students who work voluntarily. They are responsible for the management of the publication process. Peer review is done by faculty who are experts in their respected fields.

SMJS takes pride in developing its own process using the resources provided by the Faculty of Medicine, University of Tabuk. Recently we have upgraded our "Submission Management" through a "**home grown**" electronic manuscript submission system. Through this system, submission at SMJS will be much easier and faster for authors. Most of the major publishing houses use similar programs.



Editors of MedEdu Tabuk

Dr. Md. Tanveer Raza, Editor-in-Chief, MedEdu Tabuk (MET)

Rawan D Alzahrani, Manager MedEdu Tabuk

Faculty of Medicine: Ishtiyag A Abu Zayied, Khaled A Alasmari, Sarah M AlQuayr, Lena D Alzahrani, Maram A Albalawi, Raghad T Asiri, Raghad S Alamri

Faculty of Pharmacy: Mariam M Al-Balawi, Tala T Alkindy, Abdulelah T Al Ahmare, Hameed M Alahmadi

Faculty of Science: Razan H Alasiri, Ahmed N Albalawi, Shahad S Alriqabi

Faculty of Art and Design: Hayat G. Alshawesh

This disclaimer informs readers that the views, thoughts, and opinions expressed in MedEdu Tabuk belong solely to the author, and not necessarily to MedEdu Tabuk or the Faculty of Medicine, University of Tabuk.

© 2020. MedEdu Tabuk is the official newsletter of the Faculty of Medicine, University of Tabuk. All rights reserved



RazaSmjs



www.ut.edu.sa



mededutabuk@ut.edu.sa



+996 53 725 1324






2021
2021
CONFERENCE
ON
THE ENVIRONMENT & BIODIVERSITY OF THE RED SEA







**UNDER THE PATRONAGE OF HRH
PRINCE FAHAD BIN SULTAN GOVERNOR OF TABUK
CONFERENCE ON
THE ENVIRONMENT AND BIODIVERSITY OF THE RED SEA**

Organised by: Faculty of Science - University of Tabuk in cooperation with Saudi Biological Society

March 31 – April 1, 2021 / 1819- Shaban, 1442 Hijri | Grand Millennium Tabuk, University of Tabuk, Tabuk, Saudi Arabia



Dr. Othman Alzahrani

Vice Dean,
Post graduate and scientific research
Faculty of Science
Email: O-alzahrani@ut.edu.sa

CONFERENCE ON THE ENVIRONMENT AND BIODIVERSITY OF THE RED SEA

Date
March 31 – April 1, 2021 /
18-19 Shaban, 1442 Hijri

Venue
Grand Millennium Tabuk,
University of Tabuk,
Tabuk, Saudi Arabia

Registration



Submission Deadline
The deadline for abstract submission is Rajab 13, 1442 H
(February 25, 2021).

Contact us: cebrs@ut.edu.sa | <https://www.ut.edu.sa/ar/web/cebrs/home>

 ٣. د. إبراهيم بن عبد الواحد عارف رئيس الجمعية السعودية لعلموم الحياة	 ١. د. اسامه بن إبراهيم فقيرها وكيل وزارة البيئة والمياه والزراعة لشؤون البيئة.
 ٤. د. راستي بيرنارد مدير الاستدامة البيئية بشركة البحر الأحمر للتطوير	 ٢. د. محمد بن علي بشاء الدين قربان الرئيس التنفيذي للمركز الوطني لتنمية الحياة الفطرية
 ٥. بروفيسور مايكل بروميرين مدير مركز بحاث البحر الأحمر في كاوست	 ٢. د. محمد بن علي بشاء الدين قربان الرئيس التنفيذي للمركز الوطني لتنمية الحياة الفطرية

التاريخ: ١٨-١٩ شعبان ١٤٤٢هـ، ٣١/٣ - ١/٤ ٢٠٢١م	الوقت: ١. أعضاء هيئة التدريس ٢. باحثات ٣. طلاب الدراسات العليا ٤. الباحثين في مراكز الأبحاث ٥. العاملين في مجال البحث والتطوير
المكان: فلتح جلالد ميلينيوم توك، جامعة توك، توك المملكة العربية السعودية	الوقت المستهدفة: ١. جائزة أفضل بحث في المؤتمر في عدد خاص في المجلة السعودية في علموم الحياة (IF: 2.802) بحث ٢. جائزة أفضل ورقة علمية

التسجيل:
١. جائزة أفضل بحث في المؤتمر في عدد خاص في المجلة السعودية في علموم الحياة (IF: 2.802) بحث
٢. جائزة أفضل ورقة علمية

تقديم الأبحاث: آخر موعد لاستلام ملخصات المشاركين حتى يوم ١٣ رجب ١٤٤٢هـ الموافق ٢٥ فبراير ٢٠٢١م.

المستهدف: جامعة توك - كلية العلوم بالتعاون مع الجمعية السعودية لعلموم الحياة
التواصل: <https://www.ut.edu.sa/ar/web/cebrs/home> | cebrs@ut.edu.sa

- Theme**
- 1- The Red Sea environment.
 - 2- The Red Sea biodiversity
 - 3- Applications of Marine Biotechnology
 - 4- Ecotourism in Tabuk Region

Keynote Speakers

- 1- **Dr. Osama Ibrahim Faqeeha**
Deputy Minister of Environment, Water and Agriculture for Environmental affairs
- 2- **Dr. Muhammad Ali Qurban,**
Chairman of the National Centre for Wildlife Development

- 3- **Prof. Ibrahim A. Aref**
President of the Saudi Society for Life Sciences
- 4- **Dr. Rusty E. Brainard.**
Chief Environmental Sustainability Officer at The Red Sea Project
- 5- **Dr. Michael Berumen**
Director of KAUST Marine Environmental Research Centre

- Target audience**
- Academic staff
 - Postgraduate students
 - Researchers at research institutes and centres
 - Research and Development experts
 - environmental sector experts
 - Tourism sector experts
 - All interested in the field of environmental development and tourism

- Conference Key Features**
- 1- The top 25 papers presented will be published in a Special Issue of the Saudi Journal of Life Sciences (IF: 2.802)
 - 2- KSA Best scientific paper award
 - 3- Best Poster Award
 - 4- No registration fees

SMJS Submission Goes Electronic

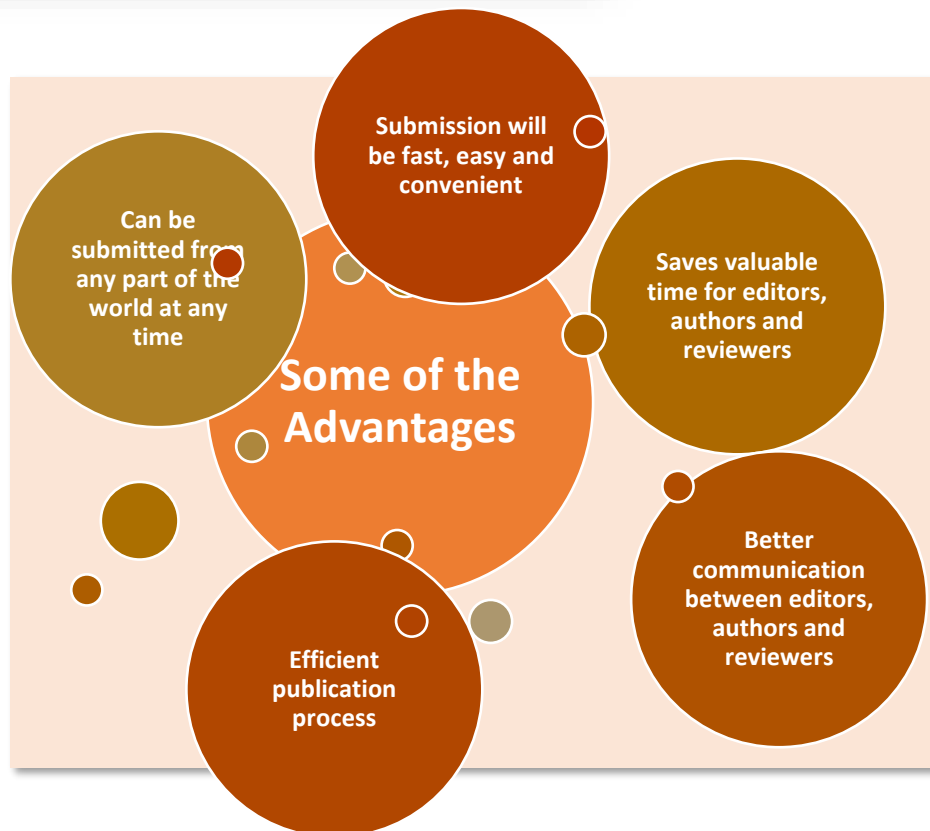
Dr. Tanveer Raza

Editor-in-Chief

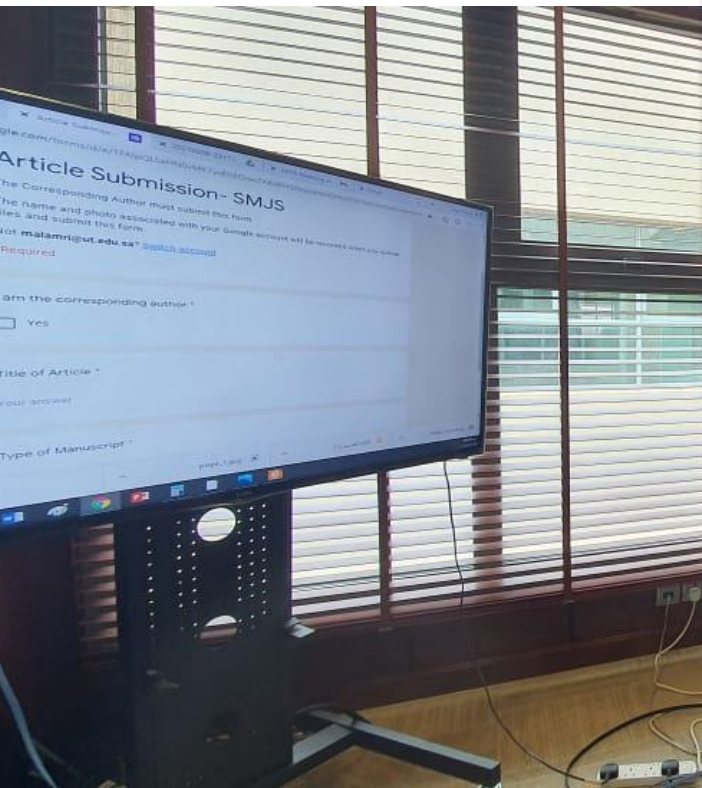
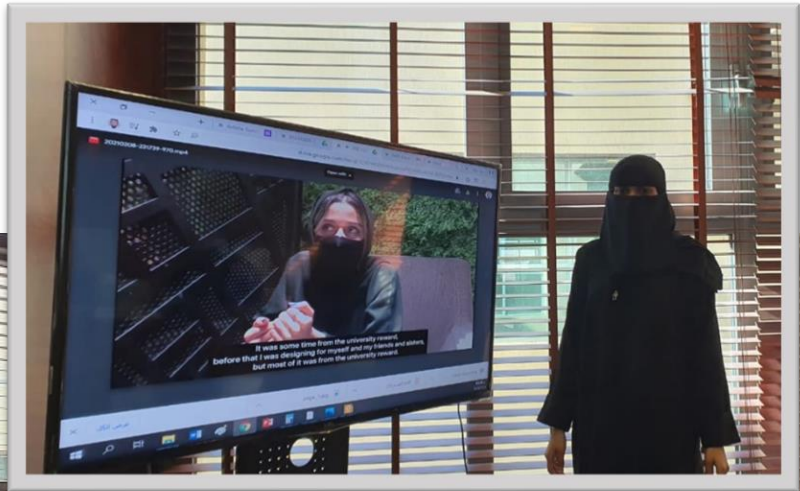
Saudi Medical Journal for Students (SMJS) &
MedEdu Tabuk (MET)



The Dean of Medicine, Dr. Marai M. Alamri inaugurating the new submission system in the presence of Editors of SMJS and MET



استضاف سعادة عميد كلية الطب في جامعة تبوك الدكتور مرعي العمري يوم الأربعاء الموافق ١٠ فبراير ٢٠٢١ / ٢٨ جمادى الثاني ١٤٤٢ هـ وبحضور سعادة الدكتور تنفير رازا مجموعة من أعضاء مجلة (MET) MedEdu Tabuk وكوكبة من المحررين في المجلة، نوقش في جلسته آية سير العمل في المجلة مركزاً بحفظه الله على أن جودة عمل الفريق هي السمة التي تميز مجلة MET عن المجلات والدوريات الجامعية الأخرى، و قام بعض الأعضاء بعرض أعمال قد تم إعدادها خصيصاً لأجل عرضها في MET. تم عرض و مناقشة الاقتراحات المطروحة من قبل الفريق ووضع خطة عمل مختصرة للفترة المقبلة ستجعل من MET بيئة خصبة من الطلاب إلى الطلاب تحمل في صفحاتها إنجازاتهم ومهاراتهم .. راجين من الله التوفيق والسداد .
مدلة عبدالحافظ عبدالرحمن الغنام



DR. HYDER MIRGHANI DISTINGUISHED RESEARCHER FACULTY OF MEDICINE, UNIVERSITY OF TABUK



Dr. Md. Tanveer Raza

Editor-in-Chief
Saudi Medical Journal for Students and
MedEdu Tabuk
Email: traza@ut.edu.sa

DR. HYDER MIRGHANI MD, M.Sc.
Associate Professor of Internal Medicine,
Faculty of Medicine, University of Tabuk

Dr.. Hyder received a distinguished researcher award from Dr. Marai M. Alamri, Dean, Faculty of Medicine for his extensive research work. He is an author of 160 research items under the umbrella of University of Tabuk. Dr. Hyder is a Faculty Editor of Saudi Medical Journal for Students (SMJS).

The Cross-talk Relationship between Metformin and Gut Microbiota

Background: Metformin is the first-line oral therapy for type 2 diabetes mellitus. However, its mode of action is poorly defined. There is an increasing awareness regarding the cross talk of gut microbiota and metformin. The current review aimed to assess the bidirectional relationship between metformin and gut microbiota. Methods: Electronic search was conducted in Pub Med and the first 100 articles in Google Scholar published until November 2019. However, only randomized controlled trials on humans published in the English language were included. The terms "gut microbiota," "gut flora" and "metformin" were as keywords to perform the search. Although 124 articles were retrieved, only six met the inclusion criteria of the study. Results: Of the six full texts of randomized controlled trials included in the study, two-thirds were published in Europe, one in the USA, and one in China. Six hundred-thirty five patients were included and the duration of the studies ranged from seven days to six months. The studies concluded that microbiota modulates some metformin actions on plasma glucose; while metformin enhances the abundance of microbiota that positively affect insulin resistance and plasma glucose. Conclusion: The current review showed that microbiota dysbiosis may mediate metformin antidiabetic effects. Whereas metformin shifted the gut microbiota toward the beneficial species ameliorating insulin resistance. The present study might provide insights into a novel therapeutic approach to treat type 2 diabetes mellitus.

Hyder O. Mirghani. MD, M.Sc. (2020) "The Cross-talk Relationship between Metformin and Gut Microbiota," Sudan Journal of Medical Sciences, vol. 15, issue no. 4, pages 425-430. DOI 10.18502/sjms.v15i4.8165
Available from: https://www.researchgate.net/publication/348061720_The_Cross-talk_Relationship_between_Metformin_and_Gut_Microbiota [accessed Feb 02 2021]



Restless Legs Syndrome Among Sudanese Patients With Type 2 Diabetes Mellitus: A Case-Control Study

Background: There is increasing awareness about the association of restless legs syndrome (RLS) with type 2 diabetes. This study assessed RLS and its associations among patients with diabetes. **Material and methods:** This case-control study was conducted among 160 subjects (82 patients with diabetes and 78 controls) attending a diabetic clinic in Omdurman, Sudan, during the period from June 2018 to September 2019. A structured questionnaire was used to collect demographic factors, diabetic neuropathy, nephropathy, retinopathy, and macrovascular complications. The neck circumference was measured to assess adiposity, and a blood sample was taken for the glycated hemoglobin (HbA1c) estimation. The local ethical committee approved the research, and the Statistical Package for Social Sciences (SPSS; IBM Corp., Armonk, NY) was used for data analysis. A P-value of <0.05 was considered significant. **Results:** There were 82 patients with type 2 diabetes and 78 controls matched for age and sex. Restless legs syndrome was higher among patients with diabetes (31.7% vs. 10.3%) with a significant statistical difference, $P < 0.05$. A direct positive relationship was found between restless legs syndrome and diabetic neuropathy (Wald=5.48, P -value=0.019, 95%CI 1.70-410.76), no relationship was found between RLS, diabetic retinopathy, glycated hemoglobin, sex, and neck circumference, P -values (0.757, 0.804, 0.317, and 0.361 respectively). **Conclusion:** Restless legs syndrome was prevalent among patients with type 2 diabetes and was more common among patients with diabetic neuropathy, no relationship was found between restless legs syndrome, age, sex, neck circumference, HbA1c, and retinopathy.

Mirghani H (August 09, 2020) Restless Legs Syndrome Among Sudanese Patients With Type 2 Diabetes Mellitus: A Case-Control Study. *Cureus* 12(8): e9635. DOI 10.7759/cureus.9635

Available from:

https://www.researchgate.net/publication/343547295_Restless_leg_syndrome_among_patients_with_diabetes#fullTextFileContent [accessed Feb 02 2021].

The association between hypoglycemia and hospital use, food insufficiency, and unstable housing conditions: A cross-sectional study among patients with type 2 diabetes in Sudan

Objectives: Hypoglycemia is associated with mortality and healthcare utilization. We aimed to assess hypoglycemia risk and Hospital use among Sudanese patients with type 2 diabetes. **Results:** One hundred and fifty-nine patients with type 2 diabetes attending a diabetes center in Omdurman, Sudan during the period from June to September 2018 were approached. A structured questionnaire based on hypoglycemia risk and Hospital use, Fasting plasma glucose (FPG) and the glycated hemoglobin (HbA1c) was used to interview the patients. Participants (age 58.13 ± 9.96 years), 4.4%, 14.5%, and 81.1% were at high, moderate, and low hypoglycemia respectively, 66% reported food insufficiency, while 15.1% had unstable housing conditions. No relationship was evident between the hypoglycemia risk, gender, unstable housing conditions, food insufficiency, fasting plasma glucose, HbA1c, and the duration since the diagnosis of diabetes. A considerable number (18.9%) of Sudanese patients with diabetes were at moderate/high risk of hypoglycemia and Hospital use, including hypoglycemia risk and hospital use assessment in the holistic care of diabetes are recommended.

Hyder Osman Mirghani. The association between hypoglycemia and hospital use, food insufficiency, and unstable housing conditions: A cross-sectional study among patients with type 2 diabetes in Sudan. *BMC Res Notes* (2019) 12:108 <https://doi.org/10.1186/s13104-019-4145-z>



Dr. Abdullah Aldhafri

**Vice Dean
Deanship of Scientific
Research
University of Tabuk
Email: a.aldhafri@ut.edu.sa**

**For further information please do
not hesitate to contact Dr. Abdullah
Aldhafri**

The 5th International Saudi Society of Transfusion Medicine Conference
Challenges & Updates in Transfusion Medicine
By/ Distinguished International & National Speakers

Intercontinental Hotel, Jeddah, Saudi Arabia
Hybrid meeting

6 - 8 March, 2021

For Registration
www.sstmconf.sa
+966 548266334

CME 24
ACCREDITED
إجازة



Weekly Academic Activity
Continued Medical Education Unit

Faculty of Medicine
دعوة

**" World Class Chronic Neck Pain Management -
My Experience in Singapore "**

Dr. Hassan Moria
Consultant in KFSH Tabuk &
Assistant Professor, Faculty of Medicine, University of Tabuk
Anesthesiology & Critical Care Medicine
Subspecialty in Chronic Pain Management, Headache & Cancer Pain Medicine

[Click Here](#) | 1 PM – 2 PM | 10th of Feb- Wed

For inquiries: Dr. Md. Tanveer Raza, Head, Continued Medical Education Committee,
Faculty of Medicine, University of Tabuk - Tel: 0537251324, Email: traza@ut.edu.sa

Designed by: Khaled Alasmari-Editor, MedEdu Tabuk



Saudi Medical Journal for Students (SMJS)
 Official Journal of Faculty of Medicine University of Tabuk
 ISSN: 1658-8274 (Print version); 1658-8282 (Electronic version)
<https://www.ut.edu.sa/web/mededu-tabuk>

Editor Development Workshop 3

WORKSHOP ON PROFESSIONAL COMMUNICATION

Dr. Badr Alsayed
 Faculty Editor, SMJS
 Consultant Pulmonologist
 Assistant Professor of Internal Medicine
 Faculty of Medicine, University of Tabuk

February 27th, 2021, Saturday
Time: 7.30pm

Exclusive for Editors

For Registration:
 Yousef Alaenzi
 Tel: 0530041979

Contact:
 Dr. Tanveer Raza
 Editor-in-Chief, SMJS & MET
 Tel: 0537251324



Distinguished Alumni

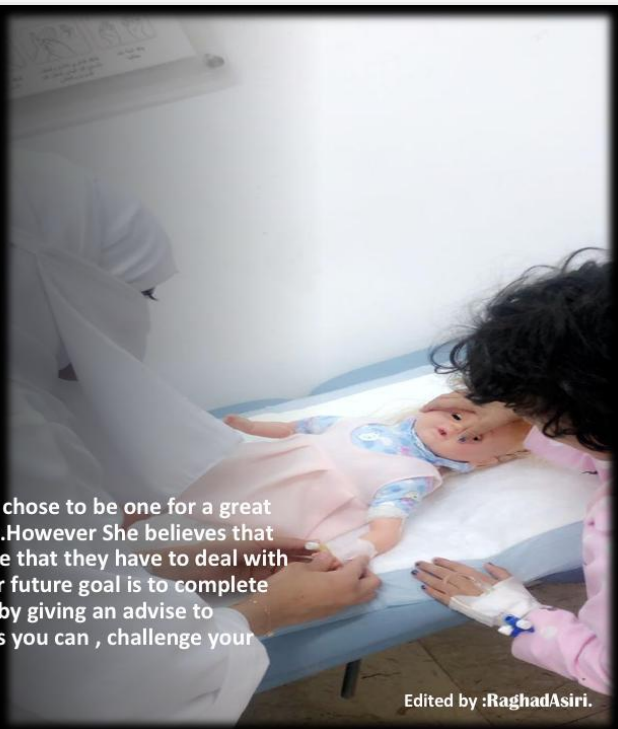
Our remarkable alumni for this week is Amjad Mohammed Altwaley.

She holds a Bachelor Degree in Nursing from Tabuk university. She currently works as a nursing supervisor at the Children's Maternity Hospital in Tabuk.

Name: Amjad Mohammed Altwaley.

Email: ammjad1415@hotmail.com

Amjad said that being a nurse is not an easy work to do, but she chose to be one for a great reason which is her desire to help her patients and their families. However She believes that her job needs a significant physical and psychological effort, since that they have to deal with patients with different moods on a daily basis for long shifts. Her future goal is to complete her master's degree in health education. Amjad ends her words by giving an advise to students in all educational fields, she said "work hard as much as you can , challenge your self,so that you can provide your future family a better life".



Edited by :RaghadAsiri.

Implementing A Modified Online Team Based Learning (TBL), Using Google Forms And Blackboard Platform In The Department Of Surgery, Faculty Of Medicine, University Of Tabuk.

Mohammed Elnibras, MBBS, MD

Assistant Professor of General Surgery
Department of Surgery
Faculty of Medicine, University of Tabuk, Saudi Arabia



Introduction:

TBL is a structured form of small group learning that emphasizes student preparation out of the class and application of knowledge in the class. Originally developed by Dr. Larry Michaelsen, in the early 1990s. (Implemented in Medical education, 2001)¹.

TBL allows a single instructor to manage multiple small groups simultaneously in one classroom. It ranged in scope from single-session applications to entire courses. Class time is shifted away from learning facts towards application and integration of information. TBL assist the students in building teamwork related skills. In TBL student can learn from their peers.^{2/3}.

Due to the COVID-19 pandemic and the stop of face-to-face teaching, most medical educators become more interested in shifting the TBL sessions to online active teaching. Multiple modifications and different platforms had been created by educators according to their facilities.

Methods:

- ✓ Nine sessions in the course of surgery for the 6-year students (39 females and 27 males' students) were shifted to a modified online team-based learning.
- ✓ The students have consented verbally for changing the traditional lecture to team-based learning.
- ✓ We provided our students with the names of references (mainly Bailey & Love's Short Practice of Surgery, 27th Edition and Current Diagnosis and Treatment Surgery, 14th Edition) to prepare themselves for the sessions.
- ✓ Individual readiness assurance test (IRAT) consists of multiple-choice questions covering the main objective of the lecture, was created in a google form with auto marking and one response chance.

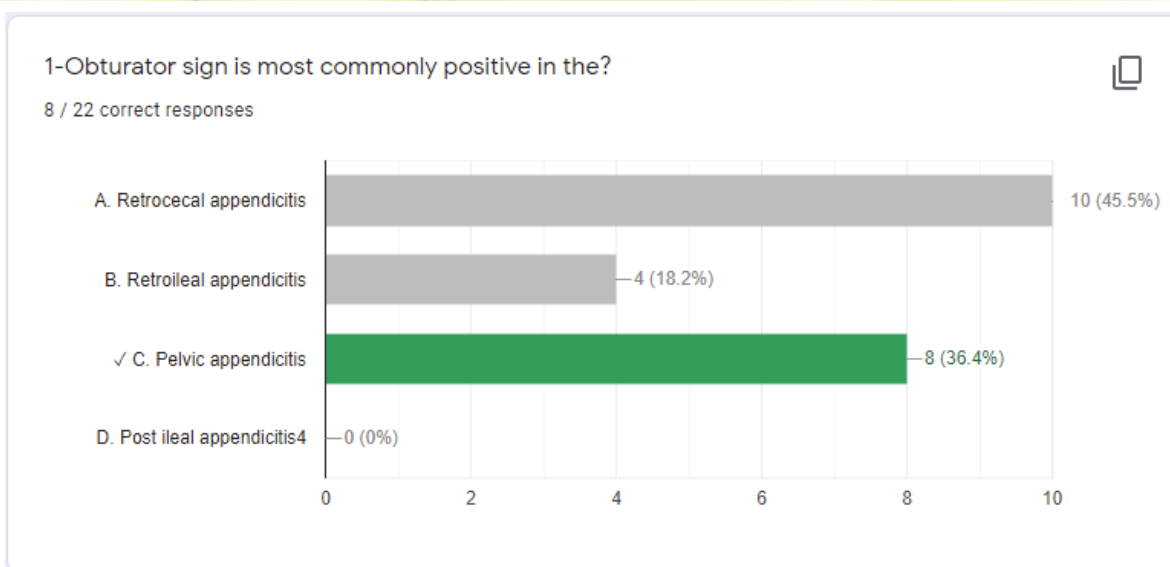


Figure 1: An example showing how IRAT analysis by google form can help to find the misunderstand points for the students to be discussed during the short clarifying lecture.

- ✓ The google form gives immediate feedback to the student regarding his performance. And at the same time the instructor will receive the summary and individuals performance, which will help to discover the misunderstand points in the topic to be clarified by the instructor during the short clarifying lecture.
- ✓ The same IRAT was taken by student groups as a Group readiness assurance test (GRAT) for group discussion.
- ✓ A short clarifying online lecture through the blackboard platform was conducted by the instructor discussing the miss understanding points in the topic.
- ✓ The TBL session ended by solving some surgical problems covering the main objectives of the topics.

Limitations:

- ✓ Failure of the instructor to attend the GRAT, because of inabilities to form separate online rooms for the group's discussion due to technical problems. (We plan to solve the problem with the technical information unit)
- ✓ Reluctantness of some students to participate actively in the group discussion.
- ✓ Until now, no study conducted to assess our results.

References:

- 1- Dean Parmelee, Larry K. Michaelsen, Sandy Cook & Patricia D. Hudes (2012). Team-based learning: A practical guide: AMEE Guide No. 65, Medical Teacher, 34:5, e275-e287, DOI: 10.3109/0142159X.2012.651179
To link to this article: <http://dx.doi.org/10.3109/0142159X.2012.651179>
- 2- Mainul Haque and Md Anwarul Azim Majumder (2017) Team Based Learning in Medical Education, International Journal of Pharmaceutical Sciences Review and Research 43(2):59-63
- 3- Team-based learning collaborative website. Available from: www.teambasedlearning.org.