RESEARCH UNIT

College of Nursing - Jeddah

Newsletter AY 2021 - 2022

02-100322

RESEARCH UNIT CHAIRPERSON
Welcome Message

Dear Readers,

Welcome to the second release of the Research Unit Newsletter at the College of Nursing-Jeddah (CONJ). This release will include information on the upcoming events and activities organized by the Research Unit.

In addition, this release introduces one of the hot research topics related to "*Headache Associated with Online Learning.*" We hope that you find this issue exciting and informative.

Chairperson:
Dr. Ghada Kurban

g.kurban

For more information, kindly visit The research unit website below:
https://conj.ksauhs.edu.sa/index.php?option=com_content&view=article&id=414&Itemid=571

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Research Unit Events

Major Events

Webinar
Research Projects Funding & Budgets
March 30, 2022
12:00 -2:00 PM

For Registration:
https://forms.office.com/r/ns5eLHcyG5

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Upcoming Events

- **Student/Faculty Workshop**

SPSS Workshop
By Dr. Neama Hantira
Apr 6, 2022 12:00 -2:00 pm

- **Grand Round**

Qualitative Research
By Dr. Neama Hantira & Dr. Amal Khalil
Apr 14th, 2022 1:00pm -3:00 pm

- **Journal Club**

By Dr. Ghada Kurban & Dr. Nesreen Abdulmanan
Apr 20th, 2022 12:00 – 2:00 pm

- **Student/Faculty Workshop**

RCT Research Design Workshop
By Dr. Amal Khalil
Apr 21, 2022 12:00 -2:00 pm

For more students/faculty workshops visit research unit activities calendar on the research unit website
shorturl.at/jCGJO

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Research Unit Activities

Faculty Research RoundTable

This event bring faculty research ideas, interests, and latest publications to be discussed. The aim of this activity is to facilitate discussion among academic staff and enrich their knowledge with the recent research in the College of Nursing.

Will be held on **Wednesday 25th of May.** Time & Location will be announced later on.

Hot Research Topics

Online Learning and Reported Headaches Associated with Screen Exposure Time

Written by: **Dr. Ebtsam Abou Hashish**

Online learning is an interactive learning experience and education delivered over the internet via electronic devices (Stern, 2020). To obtain this learning experience, students must use online technologies such as Cloud Meetings, Blackboard, and Microsoft Teams (Amir et al., 2020). Online learning typically involves electronic media with screens as the interface, including Smartphones, computers, and tablets (Montagni et al., 2016), which may not be the best option for people who suffer from headaches (Alexander, 2020).

Headache is one of the most common conditions affecting the nervous system, identified as pain in the head that is felt above the eyes or ears, behind the head (occipital), or in the upper back of the neck (Shiel, 2020). Migraines, tension-type headaches, cluster headaches, and medication-overuse headaches are painful and incapacitating symptoms of a small number of primary headache disorders.

Due to the increased use of computers for academic work, university students have reported high screen time exposure and the prevalence of headaches. Excessive screen time is identified as a possible leading cause of eyestrain and headaches. Evidence has linked excessive screen time to adverse outcomes such as irritability, depression, and poor cognitive and socioemotional development, all of which led to poor educational performance (Domingues-Montanari, 2017). DiSabella (2020) hypothesized that headaches could be exacerbated by online learning and compared the prevalence of headaches before and after the COVID-19 pandemic.

The results showed that since online learning started, the prevalence of headaches increased from 18% before the pandemic to 42% after the pandemic. Likewise, in Saudi Arabia, Altalhi et al. (2020) discovered that computer vision syndrome (CVS) is commonly reported among Saudi health sciences students who use various electronic devices, with 68% experiencing headaches due to these devices. Recently, Abou Hashish et al. (2022) found a high prevalence of headaches (65.72%) and a high screen exposure time (52.69%) among Saudi health sciences students. Increased screen time exposure was linked to increased reported headaches and migraines among the students. Students who did not experience headaches had a higher overall perception and satisfaction of online learning. Previous research has suggested two possible scenarios for how screen time may interact with headache and migraine pathophysiology.

References

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First, the brightness or frequency of screen band light may directly cause a migraine attack; second, increasing screen time exposure may lower the migraine cascade threshold. In addition, Ranasinghe et al. (2016) stated that the constant shifting and accommodating that the eye and extraocular muscles endure for an extended time causes stress on the muscles and fatigues the eyes, leading to headaches.

Tips and Implications:

It was also discovered that most students do not use ergonomic practices. As a result, more efforts should be directed towards educating students on the proper use of electronic devices (Gu & Xie, 2018). To mitigate and prevent headaches and migraines, the National Headache Foundation (NHF, 2020) has recommended a list of tips and precautions that may help avoid headaches associated with screen exposure due to online learning. Frequent breaks from screens are advised to allow the eyes to rest and prevent eye strain; ergonomic chairs should be purchased as uncomfortable seating can cause neck and back pain, and meal and sleep schedules should be adjusted. Relaxation and biofeedback techniques should help relieve the stress and anxiety that comes with college life.

Moreover, the American Optometric Association recommended angling the computer screen so that it is below eye level and placing one's feet flat on the floor when using a computer. Another simple way to reduce the effects of computer vision syndrome in online classes is to avoid looking at the screen unnecessarily.

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