



Assessment of Sleep Habits among Nursing Students in Mosul City/Iraq

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Abstract:

Background: University students report significantly worse sleep quality than the general population. Sleep problems are related to increased health concerns, irritability, depression, fatigue, attention and concentration difficulties, along with poor academic performance. The study objectives to assess sleeping habit among nursing students.

Methodology: A cross-sectional study design was used to adopted current study. The study extended from (10/11/2023) to (15/4/2024). Convenience sample method was used to select (359) male and female students from all study stages morning and evening studies at college of nursing, university of Mosul. A questionnaire was developed based on the previous study related to the research problem. The data were collected through internet by google form designed by researchers. Descriptive statistics was used to achieved the study objectives by using SPSS version 26.

Results: the study found the majority of the study sample goes to bed after midnight on weekdays. Specifically: 30.9% of students (111) reported going to bed between 12:00 and 12:59 AM, and the majority of the study sample evaluated their sleep quality positively, with 38.7% rating it as "Good" and 35.7% as "Satisfactory".

Conclusion: the majority of the sample perceives their sleep quality positively, with "Good" and "Satisfactory" ratings being most common.

Keywords: Assessment, Sleep Habits, Nursing Students.

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Introduction:

University students report significantly worse sleep quality than the general population. Sleep problems are related to increased health concerns, irritability, depression, fatigue, attention and concentration difficulties, along with poor academic performance⁽¹⁾. Sleep plays a significant part in terms of health at every stage of life. Significant bodily functions and brain activities take place during sleep⁽²⁾. Adolescence can be considered the

phase in which sleeping routines are changed the most in human life⁽³⁾. Sleeping durations in adolescence and in adulthood are different. In adolescence, the intensity of academic life, increased social activities, and age-related traits may result in sleeping/waking up late and daytime sleepiness⁽⁴⁾. University students are also among the risk groups who suffer from sleeping disorders. They have an irregular sleep hygiene. Their time for going to bed and waking up, and sleeping

periods are different on weekdays and weekends. Various personal and environmental factors affect sleeping habits. Among such factors, anxiety and stress are known to cause sleeping problems⁽⁵⁾. It is very hard to avoid stress in academic life. Students may be under stress due to in-class presentations, midterm and final exams. As the academic level of students increases, the way they perceive stress and the intensity of the stress change as well. Having stress may ruin students' sleeping quality after a while⁽⁶⁾. The amount of sleep that people need might vary by age and person. Adults normally require around six to ten hours of sleep every 24 hours, with most people preferring around 8 hours of sleep each day, according to sleep specialists⁽⁷⁾. Sleepiness is described as the inability to perform or difficulty in keeping awake during the day's major waking phase, resulting in unintentional falls into sleepiness or sleep. Estimates of prevalence depend on the definition of insomnia used in the epidemiological research⁽⁸⁾. The most common symptoms of insomnia are difficulty initiating and maintaining sleep and waking up refreshed in the morning. Their sleeping patterns are characterized by short sleep intervals, slow sleep initiation, and recurrent daytime naps. Sleep has a significant impact on cognitive processes, which in turn affect efficiency of a human⁽⁹⁾. The study aims to describe the sleep habit among nursing students in university of Mosul.

Methods and Materials:

Results:

Table (1) Distribution of the study sample according to their demographic data.

Variables	No.	%	Mean	SD
Gender				
Male	200	55.7	1.441	0.497
Female	159	44.3		
Age	No.	%	Mean	SD
18 - 20 Years	56	56.5	1.685	0.953
21-30	272	27.9		
31-40 Years	22	6.1		
More than 40 years	9	9.5		
Class	No.	%	Mean	SD
First class	41	11.4	3.061	1.076
Second class	74	20.6		
Third class	66	18.4		
Forth class	178	49.6		

Prior to the actual collection of the data, formal administration approval was obtained from department of the clinical science/ college of nursing/ university of Mosul to conduct the study. A cross-sectional study design was used to adopted current study. The study extended from (10/11/2023) to (15/4/2024). Convenience sample method was used to select (359) male and female students from all study stages morning and evening studies at college of nursing, university of Mosul. The study was conducted at college of nursing/ university of Mosul in the left side in Mosul city. A questionnaire was developed based on the previous study related to the research problem. The instrument consists of two parts: part one includes the demographic variables for nursing students consist of (age, gender, educational level). The second part of the questionnaire includes 5 items. to assess the sleep habit for the nursing students. Validity tested by presenting it to a group of experts in the several fields includes nursing, medicine and medical statistics. The reliability was checked through pilot study was conducted in one 10 students and analyzed by person correlation in the data by SPSS program at value (0.76). After designing the questionnaire tool using Google Form for the purpose of collecting data by disseminating it to groups of students in the college of Nursing. The collected data was arranged analyzed and presented in tables by using frequency and percentage, mean, mean of score, and standard deviation by using SPSS version 26⁽¹⁰⁻⁶⁸⁾.

Table (2): Distribution of the study sample about time of bed on weekday

When do you go to bed on weekdays	No.	%	Mean	SD
9:00- 10:00 PM	17	4.7	4.10	1.298
10:00 - 10:59 PM	15	4.2		
11:00 - 11:59 PM	61	17		
12:00 - 12:59 AM	111	30.9		
01:00 - 01:59 AM	71	19.8		
02:00 - 02:59 AM	52	14.5		

Table (3): Distribution of the study sample about How long does it usually take to fall asleep.

How long does it usually take to fall asleep?	No.	%	Mean	SD
5 minutes	50	13.9	2.766	1.172
5-10 minutes	110	30.6		
10-30 minutes	111	30.9		
30 minutes	50	13.9		
More than 1 hour	38	10.6		

Table (4): Distribution of the study sample about how many times do you wake up during the night

How many times do you wake up during the night?	No.	%	Mean	SD
0	140	39	1.701	0.627
1-2 times	186	51.8		
3-4 times	33	9.2		

Table (5): Distribution of the study sample regarding the duration of naps during the day

If you take daytime naps, how long are they	No.	%	Mean	SD
Never	164	45.7	2.874	1.922
5-10 minutes	17	4.7		
15-30 minutes	18	5		
30 minutes -1 hour	53	14.8		
More than 1hour	71	19.8		
More than 2 hours	35	9.7		

Table (6): Distribution of study sample members in relation to their opinions about the quality of their sleep

How do you evaluate your sleep quality?	No.	%	Mean	SD
Excellent	45	12.5	2.505	0.909
Good	139	38.7		
Satisfactory	128	35.7		
Poor	40	11.1		
Very poor	6	0.3		

Discussion:

Students face a number of stressors throughout their university life, some may favor professional development and growth and others may impair well-being, health and quality of life. During the learning process, nursing students face various situations, such as high academic demand and excessive responsibilities⁽⁶⁹⁾. Nursing students and other university students are exposed to similar stressors. However, different from other students, nursing students go through an intense and exhausting nursing education program. Such

programs provide theoretical and practical classes together. In clinical practices, one can be exposed to intense stressors which have a lot of physical and psychological effects^(70,71). Lack of confidence and fear of making a mistake during clinical practices, approaches of instructors and clinical nurses, attitudes of patients and reports that are issued after the clinical practice cause students to experience stress. Such intense and exhausting education process may also cause students to sleep less^(72,73). Table (1) indicated that the majority of the

sample were male (200), (55.7%) and most of them falls within the age range of 21 to 30 years, constituting (272) individuals (27.9%), while the majority of participants belong to the fourth class, comprising 178 individuals (49.6%). Table(2) revealed that the majority of the study sample goes to bed after midnight on weekdays. Specifically: 30.9% of students (111) reported going to bed between 12:00 and 12:59 AM. Table(3) indicated that the study sample exhibits variability in the time it takes students to fall asleep while the majority of them 30.9% of participants (111) reported taking 10-30 minutes to fall asleep. Table(4) indicated that the majority of the sample (51.8%) reported waking up 1-2 times during the night. A significant portion (39%) of the sample reported not waking up at all during the night. Only a small percentage (9.2%) reported waking up 3-4 times during the night. Table(5) showed that the mean duration of daytime naps among the entire sample is approximately 2.874 hours. The standard deviation (SD) of 1.922 indicates variability in nap durations within the sample. Table(6) revealed that the majority of the study sample evaluated their sleep quality positively, with 38.7% rating it as "Good" and 35.7% as "Satisfactory". A smaller portion of the sample rated their sleep quality as "Excellent", comprising 12.5%. A notable but smaller proportion rated their sleep quality negatively, with 11.1% rating it as "Poor" and only 0.3% as "Very poor".

Conclusion:

This study concluded that the demographic distribution indicates that the majority of the sample comprises young adults, with the highest proportion falling within the age range of 21 to 30 years, importantly, despite the higher prevalence of younger individuals, there's a significant representation across different age groups, suggesting a diverse sample population, the data on bedtime indicates that the majority of the sample tends to go to bed after midnight on weekdays, with a significant portion reporting bedtime between 12:00 and 2:59 AM. This delayed bedtime may have implications for sleep quality and duration, as late bedtimes can affect sleep onset latency and overall sleep efficiency and the majority of the

sample perceives their sleep quality positively, with "Good" and "Satisfactory" ratings being most common. However, a notable proportion rates their sleep quality as "Poor" or "Very poor", indicating a subset of individuals experiencing sleep-related issues or dissatisfaction despite the majority reporting favorable sleep quality.

Reference:

1. Angelone AM, Mattei A, Sbarbati M, Di Orio F. Prevalence and correlates for self-reported sleep problems among nursing students. *J Prev Med Hyg.* 2011 Dec 4;52(4):201-8.
2. Chang VC, Chaput JP, Roberts KC, Jayaraman G, Do MT. Factors associated with sleep duration across life stages: results from the Canadian Health Measures Survey. *Promotion de la Santé et Prévention des Maladies Chroniques au Canada.* 2018 Nov 1;38(11).
3. Cynthia Subhaprada S, Vijayakumari S, Rajasekhar & Venkateswarlu U.: A Study on Insomnia among Undergraduate Medical Students. *International Journal of current Medical and Applied sciences.* 2017;15(2):79-82.
4. Demir G. Daytime sleepiness and related factors in nursing students. *Nurse education today.* 2017 Dec 1;59:21-5.
5. Gallego-Gómez JI, González-Moro MT, González-Moro JM, Vera-Catalán T, Balanza S, Simonelli-Muñoz AJ, Rivera-Caravaca JM. Relationship between sleep habits and academic performance in university Nursing students. *BMC nursing.* 2021 Jun 17;20(1):100.
6. Güneş Z, Arslantaş H. Insomnia in nursing students and related factors: A cross-sectional study. *International journal of nursing practice.* 2017 Oct;23(5):e12578.
7. Kesavan R, Mary AV, Vidhyarekha U, Lakshmi RD, Keerthika T, Aarthi K. Assessment of Sleeping Patterns among Health Care Students in Chennai—A Cross Sectional Study. *Int J Comm Dent.* 2023;11(2):99-106.
8. Kesgin MT, Çağlar S. Evaluation of sleep quality and perceived stress of nursing students who are engaged in clinical practice based on their sleeping habits. *The European Research Journal.*

2020;6(5):429-37.

9. Salvi CP, Mendes SS, Martino MM. Profile of nursing students: quality of life, sleep and eating habits. *Revista Brasileira de Enfermagem*. 2020 Jul 10;73:e20190365.

10. Ye Y, Hu R, Ni Z, Jiang N, Jiang X. Effects of perceived stress and professional values on clinical performance in practice nursing students: A structural equation modeling approach. *Nurse Education Today*. 2018 Dec 1;71:157-62.

11. Yılmaz M, Yaman Z, Erdoğan S. Öğrenci hemşirelerde stres yaratan durumlar ve baş etme yöntemleri. *Mersin Üniversitesi Sağlık Bilimleri Dergisi*. 2017 Aug 8;10(2):88-99.

12. Ahmed AS, Younis NM. Assessment of Nurses Knowledge Regarding Blood Exchange Transfusion at Mosul Neonatal Care Units. *Journal of Current Medical Research and Opinion*. 2024 Apr 12;7(04):2285-8.

13. Ahmed MM, Younis NM, Hussein AA. Association between Internet Addiction and Sleep disturbance Among Nursing Students. *International Journal of Psychosocial Rehabilitation*. 2020;24(09).

14. Ahmed MM, Naji AB. Efficacy of the health belief model in improving weight control beliefs among employees in University of Mosul: A randomized controlled trial. *Teikyo Medical Journal*. 2022;45(1):4659-64.

15. Younis NM, Ahmed MM, Dhahir NM. Prevalence of coronavirus among healthcare workers. *International Journal of Medical Toxicology & Legal Medicine*. 2021;24(1and2):267-70.

16. Ahmed MM, Younis NM, Hussein AA. Violence towards nurses staff at teaching hospitals in Mosul City. *Indian Journal of Forensic Medicine & Toxicology*. 2020 Jul 30;14(3):2598-603.

17. Younis NM, Ahmed MM, Hussein AA. Nurses' knowledge, attitude and practice towards preparedness of disaster management in

emergency of mosul teaching hospitals. *Medico-Legal Update*. 2020 Jul;20(3):775-9.

18. Naji AB, Ahmed MM, Younis NM. Adherence the preventive measure against for covid-19 among teachers at university of mosul. *International Journal of Medical Toxicology & Legal Medicine*. 2021;24(3and4):273-7.

19. Younis NM, Taher AK. Efficacy of Trans Theoretical Model Intervention for Improving Behaviors related to Electronic Hookah Smoking among Healthcare Workers in Mosul Hospital: A Randomized Control Trail. *International Journal of Membrane Science and Technology*. 2023 Jul 2;10(2):1433-9.

20. Ahmed MM, Younis NM, Hussein AA. Prevalence of tobacco use among health care workers at primary health care centers in Mosul City. *Pakistan Journal of Medical and Health Sciences*. 2021;15(1):421-4.

21. Younis NM, Mahmoud M, Ahmed A. University Students' Attitude Towards E-Learning. *Bahrain Medical Bulletin*. 2021;43(2):460-2.

22. Muwfaq YN, Ahmed MM, Abdulsalam RR. Assessing Quality of Life in Palliative Care. *Bahrain Medical Bulletin* 2021;43(3):594-6.

23. Ahmed MM, Younis NM, Dhahir NM, Hussain KN. Acceptance of Covid-19 vaccine among nursing students of Mosul University, Iraq. *Rawal Medical Journal*. 2022 Apr;47(2):254-.

24. Muwfaq Younis N. Efficacy of Health Beliefs Model-Based Intervention in Changing Substance Use Beliefs among Mosul University Students: A Randomized Controlled Trial. *Revis Bionatura* 2022; 7 (2) 35.

25. Al-Ghurairi SA, Younis NM, Ahmed MM. Prevalence of weight gain among students of Mosul University, Iraq during quarantine 2020. *Rawal Medical Journal*. 2022 Jul;47(3).

26. Abbas AS, Younis NM. Efficacy of Pender's Health Promotion-based Model on Intervention for Enhancing University of Mosul Hypertensive Employees' Eating Behaviors: A randomized Controlled Trial. *Revis Bionatura*. 2022;7(3):35.
27. Ahmed MM, Younis NM, Abdulsalam RR. Assessment of changes in sleep habits in elementary students during covid_19 lockdown. *International Journal of Medical Toxicology & Legal Medicine*. 2022;25(1and2):76-80.
28. Adea MK, Lefta RM, Younis NM. Impact of psychosocial aspect parameters on psoriasis patients' quality of life at outpatient clinic in Al-Dewania City, Iraq. *Rawal Medical Journal*. 2022 Dec 11;47(4):892-.
29. Ibrahim RM, Idrees NH, Younis NM. Epidemiology of leukemia among children in Nineveh Province, Iraq. *Rawal Medical Journal*: 2023 Jan. Vol. 48, (1):137-.
30. Taher AK, Younis NM. Assessment the Effect of a Trans theoretical Model in Improving Behaviors Health Care workers related Electronic Hookah in Mosul City /Iraq. *Rawal Medical Journal*: 2023 Jan. Vol. 48, (1):228-.
31. Mohammad FH, Noori LK, Younis NM. Assessment of Nutritional habits among Mosul University Students regarding breakfast. 2023 Jan. Vol. 48, (1):96-.
32. Younis NM, Ibrahim RM, Idrees NH. Prevalence of snake bite among children in Nineveh Governorate/Iraq: A retrospective study. *International Journal of Medical Toxicology & Legal Medicine*. 2022;25(3and4):169-172.
33. Ali HA, Abbas FF, Younis NM. Mothers' knowledge and attitudes towards breastfeeding in Thi-Qar City, Iraq. *Rawal Medical Journal*. 2023 May 27;48(2):514-.
34. Younis NM, Ahmed MM, Abdulsalam RR. Assessing quality of life in palliative care. *International Journal of Medical Toxicology & Legal Medicine*. 2021;24(3and4):115-8.
35. Bura'a LN, Younis NM. Nurses knowledge regarding to phototherapy at neonatal care units in Mosul City, Iraq. *Rawal Medical Journal*. 2023 May 27;48(2):379-.
36. Ahmed M M, Naji A B, Younis N M. Efficacy of an educational program based on health belief model to enhancing weight control behaviors among employees in the University of Mosul: a randomized controlled trial. *Revis Bionatura* 2023;8 (3) 28. <http://dx.doi.org/10.21931/RB/2023.08.03.28>
37. Younis NM. Evaluation the health lifestyle of kindergarten students at Mosul city/Iraq. *International Journal of Medical Toxicology & Legal Medicine*. 2023;26(1and2):148-52.
38. Bura'a LN, Younis NM. An Interventional Program on Nurses Knowledge and Practice towards Phototherapy in Neonatal Care Units. *International Journal of Membrane Science and Technology*. 2023 Jul 2;10(2):1428-32.
39. Younis NM. Epidemiology of Hepatitis B-virus in Nineveh province: Retrospective Study. *International Journal of Membrane Science and Technology*. 2023 Jul 2;10(2):1440-4.
40. Ayed AY, Younis NM, Ahmed MM. Comparison of infection severity of vaccinated and unvaccinated health workers with Corona Virus: A cohort study. *Journal of Education and Health Promotion*. 2023 Sep 1(1):336.
41. Younis N. M., Ahmed M. M., Ayed A. Y. HIV knowledge and preventive Standards Precautions Among Healthcare Workers in Blood Transfusion Centers. *Revis Bionatura* 2024; 9 (1) 44. <http://dx.doi.org/10.21931/RB/2024.09.01.44>
42. Abbas AS, Younis NM. Assessing the effect Pender's Model in changing employees' Eating Behaviors suffer hypertension at Mosul University

Iraq. Pakistan Journal of Medical & Health Sciences. 2022 Jul 29;16(06):476-.

43. Younis NM, Ahmed MM, Dhahir NM. Knowledge and Attitude toward older adults among Nursing Students. 2021. P J M H S Vol. 15, NO. 3, pp:683_685.

44. Hussein AA, Younis NM, Ahmed MM. Health Promoting Lifestyle profile Among Nursing Students in Mosul University. International Journal of Psychosocial Rehabilitation. 2020;24(09).

45. Younis NM, Naji AB. Assessing the effect of an educational intervention based on health belief model on preventive behaviors of addiction. Pakistan J Med Health Sci. 2021;15(3):813-7.

46. Ahmed MM, Younis NM, Hussein AA. Association between Internet Addiction and Sleep disturbance Among Nursing Students. International Journal of Psychosocial Rehabilitation. 2020;24(09).

47. Younis NM, Naji AB. Evaluation of preventive behaviors of addiction among students: Application of health belief model. Indian J Forensic Med Toxicol. 2021 May 17;15(4):1273-8.

48. Bura'a LN, Younis NM. Educational Program of Nurses Practices Towards to Phototherapy at Neonatal Care Units. Pakistan Journal of Medical & Health Sciences. 2023 Jun 9;17(04):530-.

49. Younis NM, Naji A. Efficacy of Health Belief Model-Based Training in Changing the Beliefs about Substance use. Kufa Journal for Nursing Sciences. 2021 Jun 25;11(1):221-9.

50. Suleiman AA, Abed SM, Ahmed SS. Assessment the Levels of Depression among Patients with Hemodialysis at the Dialysis Centers in Mosul City. Pakistan Journal of Medical & Health Sciences. 2023;17(08):67-.

51. Younis NM, Naji AB. The effect of health education based on the health belief model about changing the belief related to substance use among

university students in Mosul city-Iraq. Annals of the Romanian Society for Cell Biology. 2021 May 4:14687-98.

52. Abed SM, Suleiman AA, Ahmed SS, Younis NM, Ahmed MM. Road Traffic Accident Characteristics And Injury Outcomes Among Victims In Mosul City. Journal of Pharmaceutical Negative Results. 2023 Sep 15:4102-8.

53. Younis NM, Hussein AA, Ahmed MM, Younis NM. Quality of life and occupational hazards among cement factory workers in Mosul city. QoL and Occupational Hazards among Cement Factory Workers. 2021;24(2):1-8.

54. Saad WI, Kumait AS, Younis NM. Workplace challenges and violence against nurses: subject review. Pakistan Journal of Medical & Health Sciences. 2023 Mar 2;17(01):509-.

55. Younis NM. Assessment for Mortality Rate Children Under Five Years in Mosul City. Journal of Kufa for Nursing Science Vol. 2014;4(1).

56. Younis NM, Ahmed MM, Hussein AA. Epidemiology Of Deaths From Injuries In Nineveh Governorate (2008_2012). kufa Journal for Nursing sciences. 2014;4(2).

57. Taher AK, Younis NM. Evaluation Of Processes Of Change Related To Trans Theoretical Model Of Enhancing Behaviors Of Healthcare Workers User Electronic Hookah. Journal of Pharmaceutical Negative Results. 2023 Mar 16:3190-3.

58. Younis NM, Ali MT, Hasan MK, Khalaf MS, Abdullah MN, Ahmed YL, Abdulkadir MN. Knowledge and attitude of collegians at university in Mosul towards the prevention and control of COVID-19. Turkish Journal of Physiotherapy and Rehabilitation. 2021:7975-8.

59. Alkaisy MS, Ahmed SS, Alsudan MS, Suleiman AA, Younis NM, Ahmed MM. Post-Traumatic Stress Disorder Following Wars and Repression at Mosul City-Iraq. Indian Journal of Forensic

Medicine & Toxicology. 2021 May 17;15(3):1240-5.

60. Younis NM. Nursing students' attitudes towards older adult people. *Zagazig Nursing Journal*. 2015 Jul 1;11(2):151-9.

61. Allawi RH, Ahmed MM. Assessment of Nurse's Knowledge Towards Diabetic Ketoacidosis among children in Mosul City/Iraq. *Rawal Medical Journal*. 2023 Apr;48(2).

62. Younis NM, Ahmed MM. Knowledge and Compliance with Standard Precautions among Nursing Students in Mosul University. *Assiut Scientific Nursing Journal*. 2014 Jun 1;2(3):152-9.

63. Allawi RH, Ahmed MM. Assessment of Nurses' Practices Towards Children with Diabetic ketoacidosis. *Pakistan Journal of Medical & Health Sciences*. 2023 Jun 2;17(04):444-.

64. Younis NM. Prevalence of Electronic Hookah and Risk Factors among University Students in Mosul City/Iraq. *International Journal of Membrane Science and Technology*. 2023 Jul 2;10(2):1422-7.

65. Ahmed MM, Naji AB. Assessment of Health Beliefs Regarding Weight Control among Overweight and Obese Employees in University of Mosul: Applying Health Belief Model. *Kufa Journal for Nursing Sciences*. 2021 Dec 25;11(2):38-43.

66. Ahmed MM, Naji AB. Assessment Of Weight Control Behaviors Among Employees In University Of Mosul. *NVEO-NATURAL VOLATILES & ESSENTIAL OILS Journal| NVEO*. 2021 Nov 29:8996-9002.

67. Kaleel MI, Mahmoud MA. Assessment of Mothers' Knowledge about Breastfeeding Premature Infants in Mosul city. *Journal of Current Medical Research and Opinion*. 2024 Apr 19;7(04):2328-33.

68. Mahmoud MM, Ahmed MM. Assessment of Self-Management Behavioral Skill among Patients with Diabetic type II in Mosul City. *Journal of Current Medical Research and Opinion*. 2024 Apr 19;7(04):2334-9.

69. Younis NM, Ahmed MM. knowledge and Attitude of Nursing Students' towards Palliative Care. *Journal of Current Medical Research and Opinion*. 2024 Apr 20;7(04):2345-53.

70. Ibrahim RM, Al Hafidh NM. Acute Diarrhea in Exclusively Breast Fed Infants in relation to Zinc Level. *Pak J Med Health Sci*. 2021;15:1431-5.

71. Younis NM, Ahmed MM. Road Traffic accidents in Nineveh Province (2017_2021): A retrospective study. *Journal of Current Medical Research and Opinion*. 2024 Apr 20;7(04):2354-62.

72. Younis NM, Salih YH. Nursing Students' Knowledge about Caring for the Elderly. *Journal of Current Medical Research and Opinion*. 2024 Apr 15;7(04):2320-7.

73. Jasem WM, Younis NM. Assessment of Nurses' Performance Regarding Nursing Documentation in Pediatric Wards at Mosul Hospitals. *Journal of Current Medical Research and Opinion*. 2024 Apr 12;7(04).

74. Ibrahim RM, Younis NM, Ahmed MM. Knowledge and Attitude of University Students Regarding Rhinoplasty. *Journal of Current Medical Research and Opinion*. 2024 Apr 26;7(04):2380-8.

75. Hussein AA, Younis NM, Ahmed MM. Assessment of Diabetic Self-Management among Patients with Diabetic Type II. *Journal of Current Medical Research and Opinion*. 2024 Apr 26;7(04):2371-9.