



Original Research

Psycho- Social Aspects Among Elderly in Nineveh Governorate

Rain Mahmood Ibrahim¹ | Mahmoud Mohammed Ahmed² | Nasir Muwfaq Younis³

^{1,2,3}:College of Nursing/
University of Mosul/ IRAQ



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Abstract:

Background: psycho- social aspects are a relatively common problem among older adults, especially the (old elderly). The aim of the study is to assess psycho- social aspects among Elderly in Nineveh Governorate.

Material and method: The non-experimental approach and descriptive type are used in this study. The study is applied on three hospitals (Ibn-Sena Teaching Hospital, Al-Zahrawee Teaching Hospital and Al Salm Teaching Hospital), some primary health care centers, and public clinics in Mosul City.

Results: The finding shows that there is a significant statistical interrelationship in health-related psycho- social aspects.

Conclusions: The study concluded that the Elderly's psycho- social aspects were affected by their demographic characteristic (age, sex, marital status, level of education, and type of disease).

Keywords: Psycho- Social Aspects, Elderly, Nineveh Governorate

Introduction:

Social isolation is a relatively common problem among older adults, especially the (old elderly). Isolation may stem from a variety of circumstances mentioned earlier, including sensory deficits, communication difficulties and loss of mobility. Loss of family and friends is a significant contributor to social isolation in the elderly. As spouses and other family members or friends die, the social support system for the older person is reduced. In this instance, nurses can help older clients establish new social support systems by helping them get involved with other groups. Loss of family and friends also leads to the problem of grief. Grief may also be engendered by anticipation of the client's own death, particularly when the client has a terminal illness. The nurse can assist clients to deal with grief by exploring with them their feelings about death⁽¹⁾. Loss of social contacts

limits the available social support believed to be necessary for physiological and psychological well – being. Limited social support is associated with early cardiovascular death, higher 5-year mortality, early hospital admissions, restricted stroke recovery, cognitive decline, depression, and other psychiatric disorders⁽²⁾. The aim of the study is to assess psycho- social aspects among Elderly in Nineveh Governorate.

Methods and Materials:

non-experimental approach and descriptive type are used in this study. The study is applied on three hospitals (Ibn-Sena Teaching Hospital, Al-Zahrawee Teaching Hospital and Al Salm Teaching Hospital), some primary health care centers, and public clinics in Mosul City. Purposive sample consists of (833) clients, (490)

Male and (343) Femal who visited or admitted to the teaching hospitals, some primary health care centers, and public clinics in Mosul City. In older to collect the data of the study, a questionnaire was constructed depending on the previous studies and related literature review. The questionnaire consists of two Parts: Part one includes (7) items which focus on the elderly demographic characteristics such as (age, sex, marital status, occupation, level of education, duration and type of disease). Part two includes (4) main items that contain: (independency, daily physical activities, psycho-social aspects and life of adaptation). In

this study, the total questions include (73) items, in which three-scale options are used in the rating scale were: (2) for (Always), (1) for (Sometimes), and (0) for (Never). Content validity was determined by presenting the questionnaire to a panel of (12) experts. Internal consistency of the questionnaire is assessed by calculating Cronbach's Coefficient alpha. Analyzed data using SPSS, Version23 using both descriptive statistics, inferential statistics (Means, and SD, Number and percentage) and chi-square⁽³⁻⁷⁴⁾.

Results:

Table (1) Demographic characteristics of the study subjects (N=833)

Variables	No.	%
(A) Sex		
Male	490	58.82
Female	343	41.18
Total	833	100%
(B) Age		
65- 74 years	657	78.87
75-84 years	137	16.45
85 years or more	39	4.68
Total	833	100%
(C) Marital status		
Single	20	2.4
Married	593	71.19
Widowed	213	25.57
Divorced	7	0.84
Total	833	100%

The table shows that the majority of study participants were males and constituted of (58.82%), and most of them aged (65-74) years. In

relation to their marital status, most of the whole sample were married and constituted (71.19%).

Table (2) client's responses on psycho-social aspects domains within 3- level scale by total frequencies, percentages and Chi-Square

Relations with family and friends	Never		Sometime		Always	
	F	%	F	%	F	%
Do you satisfied with support and aid of parents and friends	87	10.44	208	24.97	538	64.59
Do your family believe that your are sick or disabled	468	56.18	241	28.93	124	14.89
Do your aging affect you relation with parents	549	65.91	221	26.53	63	7.56
Do you get support or aid from other	185	22.21	458	54.98	190	22.81
Do your relation with your wife and parents is good	32	3.84	158	18.97	643	77.19
Do you participate in making decisions inside home	59	7.08	260	31.21	514	61.71
Do you need a help from your parent when you visit health caring centers	132	15.85	244	29.29	457	54.86
Obs.X ² = 2284.155 DF = 12 , P Value = 0.05 Crit. X ² = 21.03 $\bar{X}=1.17$						
Mood	F	%	F	%	F	%
Do you feel annoyed when you visit health centers	187	22.45	215	25.81	431	51.74
Do you feel annoyed of noise	29	3.48	171	20.53	633	75.99
Do you prefer not to mix with other	266	31.93	413	49.58	154	18.49
Obs.X ² = 590.932 DF = 4 , P Value = 0.05 Crit. X ² = 9.49 $\bar{X}=1.29$						
Emotion	F	%	F	%	F	%
Do you feel that you aging is behind the kindness of others	255	30.61	443	53.18	135	16.21
Does your passion increase with your aging	153	18.37	287	34.45	393	47.18
Do you feel loosing passion as aged	419	50.30	280	33.61	134	16.09
Obs.X ² = 382.992 DF = 4 , P Value = 0.05 Crit. X ² = 9.49 $\bar{X}=0.92$						
Concentration & Perception	No	%	No	%	No	%
Do you have ability to read and concentrate	544	65.31	193	23.17	96	11.52
Do you feel that your memory is affected due to aging	48	5.76	297	35.66	488	58.58
Do you feel that your can remember things happened in the past	74	8.88	195	23.41	564	67.71
Obs.X ² = 1062.747 DF = 4 , P Value = 0.05 Crit. X ² = 9.49 $\bar{X}=1.18$						
Self	F	%	F	%	F	%
Are you satisfied with your role in life	174	20.89	318	38.17	341	40.94

Are you satisfied with what you achieved in your life	110	13.20	353	42.38	370	44.42
Are you feel that you achieved what you want	96	11.52	223	26.77	514	61.71
Are you feel that your life is worthy	88	10.56	334	40.10	411	49.34
Obs.X ² = 113.780 DF = 6 , P Value = 0.05 Crit. X ² = 12.59 $\bar{X}=1.34$						
Symptoms of anxiety and fear	F	%	F	%	F	%
Do you anxiety and fearful due to aging	148	17.77	305	36.61	380	45.62
Do you feel sadness and depression due to aging	79	9.48	297	35.66	457	54.86
Do you feel frightened	91	10.92	387	46.46	355	42.62
Do fear and anxiety domain your life	39	4.68	484	58.10	310	37.22
Obs.X ² = 160.451 DF = 6 , P Value = 0.05 Crit. X ² = 12.59 $\bar{X}=1.33$						

Total $\bar{X}=1.205$

The table shows significant difference at (P Value = 0.05) of psycho-social aspects domains .

Discussion:

Analysis of the results of health problem of elderly clients demographic characteristics had indicated that the majority of them were males and constituted (58.82%) of the total sample, this result could be connected with the tendency of women to stay at home more than men .Data analysis shows that there is a significant statistical difference between elderly clients quality of life domains and their sex .The present study is in disagreement with the study of ⁽⁷⁵⁾ who found that (53.24 %) of elderly clients are females and (46.76 %) of them are males .The study finding revealed there is a significant statistical association of health related quality of life item which measure with psycho-social aspects assessment. This can be explained by elderly own home which can be described as a prison , in which they become de-conditioned and lose their ability to do their usual activity of daily life, together with the lack of family support, social activity and emotional enforcement, also suffering from negative life events . On the other hand, the elderly who are going to the health agencies and share in social activity, they maybe feel that their lives have a meaning and an aim . The health problems of the elderly are complicated by social , economic and psychological interactions to a greater degree than younger people . Moreover, the

health problems of the elderly are usually multiple and are often masked by sensory and cognitive impairments so that special skills are required to detect them ⁽⁷⁶⁻⁸²⁾. Both factors contribute to a worsening of morbidity and mortality .

Conclusion:

The study concluded that the Elderly's psycho-social aspects were affected by their demographic characteristic (age, sex, marital status, level of education, and type of disease).

Reference:

1. Dziechciaz M, Filip R. Biological psychological and social determinants of old age: Bio-psycho-social aspects of human aging. *Annals of Agricultural and Environmental Medicine*. 2014;21(4).
2. El-Zeftawy AM, Mohamed NM. Physical and Psycho-Social Health Problems among Elderly People in Rural Area and Its Effects on Their Quality of Life. *people*.;17:18.
3. Singh S, Afroz N. Psycho-social challenges of elderly. *Indian Journal of Positive Psychology*. 2018 Jan 1;9(1).
4. Natan MB, Lowenstein A, Eisikovits Z. Psycho-social factors affecting elders' maltreatment in long-term care facilities. *International nursing review*. 2010 Mar;57(1):113-20.

5. Ibrahim RM, Ahmed MM, Younis NM. Correlation Between HBM and Weight Control among Employee University. Journal of Current Medical Research and Opinion. 2024 Jun 17;7(06):2870-8.
1. 6.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).
6. Ahmed MM, Younis NM, Hussein AA. Violence Towards Nurses Staff at Teaching Hospitals in Mosul City. Indian Journal of Forensic Medicine & Toxicology. 2020 Jul 1;14(3).
7. 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.
8. Younis NM, Ahmed MM, Dhahir NM. Prevalence of coronavirus among healthcare workers. International Journal of Medical Toxicology & Legal Medicine. 2021;24(1and2):267-70.
9. 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.
10. Younis NM, Mahmoud M, Ahmed A. University Students' Attitude Towards E-Learning. Bahrain Medical Bulletin. 2021;43(2):460-2.
11. 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.
12. 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 Med J. 2022 Dec 11;47(4):892.
13. Taher AK, Younis NM. Effect of a trans theoretical model in improving behaviors of health care workers related to electronic hookah in Mosul, Iraq. Rawal Medical Journal. 2023 Mar 3;48(1):228-.
14. Ibrahim RM, Idrees NH, Younis NM. Epidemiology of leukemia among children in Nineveh Province, Iraq. Rawal Med J. 2023 Mar 3;48(1):137.
15. Ali HA, Abbas FF, Younis NM. Mothers' knowledge and attitudes towards breastfeeding in Thi-Qar City, Iraq. Rawal Med J. 2023 May 27;48(2):514.
16. Nasir MY, Rian MI, Nada HI. Prevalence of snake bite among children in Nineveh Governorate/Iraq: A retrospective study. International Journal of Medical Toxicology & Legal Medicine. 2022;25(3and4):166-9.
17. Bura'a LN, Younis NM. Nurses knowledge regarding to phototherapy at neonatal care units in Mosul City, Iraq. Rawal Med J. 2023 May 27;48(2):379.
18. Ibrahim RM, Ahmed MM, Younis NM. Nursing Students' Information Toward Distraction Techniques for Children Undergoing Procedures. Journal of Current Medical Research and Opinion. 2024 May 23;7(05):2597-605.
19. 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.
20. Mohammad FH, Noori LK, Younis NM. Assessment of Nutritional habits among Mosul University Students regarding breakfast. Rawal Med J. 2023 Mar 3;48(1):96.
21. Bura'a LN, Younis NM. An Interventional Program on Nurses Knowledge and Practice towards Phototherapy in Neonatal Care Units. Int

- J Membrane Sci Technol. 2023 Jul 2;10(2):1428-32.
22. 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.
23. Younis NM. Prevalence of Electronic Hookah and Risk Factors among University Students in Mosul City/Iraq. Int J Membrane Sci Tech. 2023 Jul 2;10(2):1422-7.
24. Ahmed MM, Naji AB, Younis NM. 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.
25. Younis NM, Ahmed MM, Dhahir NM. Knowledge and Attitude toward older adults among Nursing Students. Signal. 2012;84:70.
26. 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. Int J Membrane Sci Tech. 2023 Jul 2;10(2):1433-9.
27. Younis NM. Epidemiology of Hepatitis B-virus in Nineveh province: Retrospective Study. Int J Membrane Sci Technol. 2023 Jul 2;10(2):1440-4.
28. 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-.
29. Aayed 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.
30. Younis N. Assessment of healthy lifestyle habits among Mosul university students. Int J Adv Nurs Stud. 2014 Jul 1;3(2):69-73.
31. Hussein AA, Younis NM, Ahmed MM. Health Promoting Lifestyle profile Among Nursing Students in Mosul University. International Journal of Psychosocial Rehabilitation. 2020;24(09).
32. 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.
33. 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.
34. 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-.
35. 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.
36. 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.
37. Younis NM. Assessment for Mortality Rate Children Under Five Years in Mosul City. Journal of Kufa for Nursing Science Vol. 2014;4(1).
38. 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).
39. 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.
40. 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.
41. Ahmed MM, Younis NM, Hussein AA. Association between Internet Addiction and Sleep disturbance Among Nursing Students. International Journal of Psychosocial Rehabilitation. 2020;24(09).
42. 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.
43. 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.
44. 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-.
45. 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.
46. 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.
47. 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.
48. 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.
49. Younis NM, Ahmed MM, Hussein AA. Epidemiology Of Deaths From Injuries In Nineveh Governorate (2008_2012). kufa Journal for Nursing sciences. 2014;4(2).
50. 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.
51. 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.
52. Ibrahim RM, Younis NM, Ahmed MM. Knowledge and Attitude of University Students Regarding Rhinoplasty. Journal of Current Medical Research and Opinion. 2024 May 1;7(05):2411-9.
53. 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 May 1;7(05):2402-10.
54. Ahmed MM, Ibrahim RM, Younis NM. Nursing Students' Attitudes about Organ Donation in University of Mosul/Iraq. Journal of Current Medical Research and Opinion. 2024 May 1;7(05):2430-7.
55. Ahmed MM, Ibrahim RM, Younis NM. Assessment of Sleep Habits among

- Nursing Students in Mosul City/Iraq. Journal of Current Medical Research and Opinion. 2024 May 1;7(05):2420-9.
56. Ahmed MM, Ali Hussein A, Youns NM. Knowledge, attitude, and practice (KAP) of voluntary blood donation among nurses in Mosul Teaching Hospital. Mosul Journal of Nursing (Print ISSN: 2311-8784 Online ISSN: 2663-0311). 2017 Jul 1;5(1):24-32.
57. Ahmed MM, Ibrahim RM, Younis NM. Assessment of Nursing Students' Attitudes Toward Obese Individuals. Journal of Current Medical Research and Opinion. 2024 May 4;7(05):2468-76.
58. Younis NM, Ibrahim RM, Ahmed MM. Apply Health Beliefs Model Towards of Substance Abuse. Journal of Current Medical Research and Opinion. 2024 May 4;7(05):2460-7.
59. Ibrahim RM, Ahmed MM, Younis NM. Prevalence of COVID-19 among Students in Mosul University. Journal of Current Medical Research and Opinion. 2024 May 4;7(05):2477-88.
60. Younis NM, Ahmed MM, Dhahir NM. Knowledge and Attitude toward older adults among Nursing Students. 2021. PJM HS.;15(3).
61. Ahmed MM, Ibrahim RM, Younis NM, Ahmed SS. Nurses Knowledge and Practice about adverse Effects Following Immunization at Primary Health Care Centers in Mosul City. Journal of Current Medical Research and Opinion. 2024 May 15;7(05):2536-42.
62. Hussein AA, Ahmed MM, Younis NM, Ibrahim RM. Apply Pender's Health Promotion Towards Hypertension of Employees in Mosul City/Iraq. Journal of Current Medical Research and Opinion. 2024 May 15;7(05):2529-35.
63. Ibrahim RM, Ahmed MM, Younis NM. Benefits and Challenges of Healthy Dieting among Nursing Students. Journal of Current Medical Research and Opinion. 2024 May 15;7(05):2521-8.
64. 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).
65. 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-.
66. 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.
67. 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.
68. 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.
69. 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.
70. Muwfaq YN, Ahmed MM, Abdulsalam RR. Assessing Quality of Life in Palliative Care. Bahrain Medical Bulletin 2021;43(3):594-6.
71. 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.
72. Yunis 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 1;20(3):775-9.
73. 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.
74. Ibrahim RM, Ahmed MM, Younis NM. Correlations Between Health Beliefs Model and substance use among University students. Journal of Current Medical Research and Opinion. 2024 Jun 12;7(06):2810-8.
75. Ahmed MM, Ibrahim RM, Younis NM. Enhancing Weight Control Behaviors among University Employees: Health Beliefs Model. Journal of Current Medical Research and Opinion. 2024 Jun 12;7(06):2801-9.
76. Younis NM, Ahmed MM, Ayed AY. HIV knowledge and preventive Standards Precautions Among Healthcare Workers in Blood Transfusion Centers.
77. Younis NM, Ibrahim RM, Ahmed MM. Health Problems Related to Quality of Life among Aging in Iraq. Journal of Current Medical Research and Opinion. 2024 Jun 24;7(06):3015-24.
78. Younis NM, Ibrahim RM, Ahmed MM. Independency Domains Among Old Age in Mosul City/IRAQ. Journal of Current Medical Research and Opinion. 2024 Jun 24;7(06):3025-33.
79. Ayed AY, Younis NM, Ahmed MM. Teachers' knowledge about communicable disease control at primary schools in Mosul City: A cross-sectional study. International Journal of Academic Medicine. 2024 Apr 1;10(2):75-9.
80. Younis NM, Ibrahim RM, Ahmed MM. Life of adaption among Old Adults in Nineveh Governorate. Journal of Current Medical Research and Opinion. 2024 Jul 1;7(07):3099-106.
81. Younis NM, Ibrahim RM, Ahmed MM. Personal Hygiene Towards Old Age. Journal of Current Medical Research and Opinion. 2024 Jul 1;7(07):3107-113.