IRAQI Academic Scientific Journals
العراقية المجلات الأكاديمية العلمية
ISSN:1813-1646 (Print); 2664-0597 (Online)
Tikrit Journal for Agricultural Sciences
Journal Homepage: http://tujas.tu.edu.iq
E-mail: tjas@tu.edu.iq
TJAS Tikrit Journal for Agricultural Sciences

Doaa Muthanna Shaban*

College of Education for Women / Tikrit University, Iraq

KEY WORDS:

Dietary knowledge, edge food diversity, consciousness, feed, elderly.

ARTICLE HISTORY:

Received: 06/02/2022

Accepted: 29/03/2022

Available online: 31/3/2022

Tikrit Journal for Agricultural Sciences (TJAS)
Tikrit Journal for Agricultural Sciences (TJAS)

A Survey of the Elderly Nutritional Awareness in Some Districts of Salah Al-Din Governorate / Iraq

ABSTRACT

The research dealt with the study of the level of awareness of the elderly in food and nutrition in some districts Salah al-Din Governorate / Iraq, because of this importance in that the elderly are directly responsible for their nutrition and the nutrition of their families in some cases. Feeding their family through malnutrition or improper nutrition which negatively affects their health and their infection with various diseases. The questionnaire was designed to collect personal research data by making an electronic questionnaire by using the Google form program.

The research included 160 elderly people from four districts chosen randomly from Salah al-Din Governorate / Iraq (Samarra, Tikrit, Al-Alam District, Al-Dour District). A set of statistical methods were used to analyze the study data, including frequencies, percentages, arithmetic means, and Spearman and Pearson correlation coefficients. The search showed the following: the general level of nutritional and nutritional awareness of the elderly was moderate, and their level of awareness is low in the following areas: (carbohydrates, fruits , and vege Chart s, light exercise), while it was moderate in (adult nutrition, milk and its products, and proteins .(It was found that there is a positive and significant correlation between the level of awareness of the elderly and their subjective factors represented by (their education level, economic status, children's education, cultural contact, husband or wife education), while the correlation was negative and significant with (age and number of children).

© 2021 TJAS. College of Agriculture, Tikrit University

INTRODUCTION

Food can be defined as all foodstuffs, whether of plant or animal origin, that a person can eat and provide him with the necessary nutritional components (Sobhi, 2004). Whether it is oral or parenteral nutrition (Owaida, 2015), these materials may differ within the same society. There are different eating habits according to different environments, and economic, social, and cultural levels. Each society has its eating habits that are consistent with its values, principles, and economic conditions (Al-Zahrani, 2006).

As people age, physiological changes occur, and many elderly people may be exposed to many health problems related to their nutritional status, which requires careful care and attention to their daily nutrition to avoid health problems or their development in their lives (WHO, 2010). The elderly are one of the important population groups in society, and their numbers have increased recently in the world (Ames, 2010), according to the latest statistics of the World Health Organization. Therefore, feeding and educating the elderly is one of the things to be taken into account. To avoid many diseases, including obesity, diabetes, pressure and others, and nutritional awareness is one of the things that have an essential role (von Arnim, 2017).

The nutritional needs of elderly people vary from one person to another depending on age, gender, physical activity, and others. A person may need to partially change his diet with his age, as

* *Corresponding author: E-mail*: Duaa.muthana@tu.edu.iq

well as reduce the intake of some foods and increase the intake of other foods, their food type should be concentrated, containing basic materials to meet their needs (Gorji *et al*., 2017). Proper nutrition plays a key role in maintaining of the health, the body and protects it from health problems, so obtaining proper nutrition is very important and the awareness of the elderly regarding nutrition and nutrients that must be taken is more important. The problem of this study, which stems from the reality of nutrition of the elderly, is represented by malnutrition resulting either from the lack of different basic food components or the ignorance of the elderly and their lack of nutritional culture.This study aimed mainly to determine the level of nutritional and nutritional awareness of the elderly in some districts of Salah al-Din Governorate. This goal can be achieved through:

1-Determining the general level of nutritional and nutritional awareness of the elderly through the following axes:

- Awareness of some nutrients (proteins, carbohydrates, dietary fiber and vitamins).
- Nutritional awareness of some food groups (milk and its products, fruits, and vege Chart s).

2- Identify the relationship between the level of nutritional awareness of the elderly and some personal factors for them.

MATERIALS AND METHODS

Information and data collection

The governorate of Salah al-Din / Iraq was taken as a region to conduct the research, and the total number of districts and districts participating in the questionnaire was eight, and a random sample of four districts was taken from them, which constituted 50% of the total districts, namely (Tikrit, Samarra, Al-Alam District, and Al- Dour District).

Research sample and community

The research included elderly women and men in the four districts. 40 people were randomly selected from each of them so that the research sample became 160 people.

Information and data collection

A questionnaire was prepared for collecting information using the Google form program. The form was distributed electronically on several social networking sites for the governorate. The first part included questions to measure the subjective and objective factors of the elderly, represented by (age, gender, place of residence, educational level, economic status, number of family members, the degree of cultural contact and the educational level of the spouses).

While the second part of the questionnaire included twenty -seven test items to measure the level of nutritional and nutritional awareness of the elderly, and the items are divided into six main axes as follows:

1. The first axis: its paragraphs revolve around the awareness of the elderly with the rules of nutrition in general, and include paragraphs from 1 to 5.
2. The second axis: This axis include paragraphs from 6 to 9 and it revolves around getting to know the information of the elderly about milk and its products and its nutritional importance in addition to the role of nutritional supplements and vitamins for humans.
3. The third axis: Its five paragraphs from 10 to 14 revolve around the elderly awareness of the importance of eating dietary fiber in their daily meals.
4. The fourth axis: its paragraphs revolve around identifying the knowledge of the elderly about a group of plant and animal proteins, and includes paragraphs from 15 to 18.
5. The fifth axis: includes paragraphs from19 to 23 and revolves around identifying the awareness of the elderly about carbohydrates.
6. The sixth axis: includes paragraphs that revolve around the elderly nutritional awareness of fruits and vege Chart s and includes paragraphs from 23 to 27.

To know the level of awareness of the elderly in the above-mentioned axes, the questionnaires were corrected. One score was given to the correct answers, while the wrong answer was given zero, and accordingly, the maximum score will be 27. The scores obtained by the respondents were translated into ratings so that those who obtained less than (13.5 or equivalent to 50%) are poor, and those who obtained (13.5-19.3 or the equivalent of 50-75%) are average, and more than 20.3, or the equivalent of 75%, got a good grade.

Measuring the validity and reliability of the questionnaire

To ensure the validity and reliability of the questionnaire, the following methods were used:

The questionnaire was presented to the nutritionist / affiliated to the Ministry of Health and a many faculty members of Tikrit University / College of Agriculture / Department of Food Sciences, to express their opinion on the phrases and the required amendments were made to some vague and unclear phrases according to what the research requires.

The form was initially pretested after being designed on a sample of twenty respondents from outside the districts of the study sample, where the method of paragraph analysis was used to determine the discriminatory strength and degree of difficulty, and some questions were modified and some of them reformulated accordingly.

The reliability coefficient was calculated statistically using the Spearman-Brown equation. The statistical analysis showed the value of the alpha coefficient of 0.841, which is a high value that confirms the stability of the scale used in the questionnaire to achieve its purposes.

RESULTS AND DISCUSSION

The characteristics of the sample

It is noted from figure (1) that the ages of the respondents ranged between 50 years and older than 65, and the vast majority of them, are average and their percentage reached 65% of the total sample. From the figure, we notice that a large percentage of the elderly (45%) of them have obtained a share of education at all levels, and the majority of the educated have obtained the primary and intermediate qualifications, while the largest percentage (55%) has a low level of education, and we also find that 68% of the sample, they are from weak or medium families economically, and this reflects the low reality of living and life. This percentage agreed with the study of Al -Ani (2018). As for the matter, it was found that the largest proportion of the respondents, which is 40%, of them have more than five children or live in a large family, In reality, this will lead to a decrease in nutritional awareness, as agreed with (Donini *et al*., 2013), as countries with low economic status suffer from lack of nutritional awareness and eat meals of great nutritional value. And the degree of cultural contact in half of the sample was approximately 48% average, and lastly, the education level of spouses was low, most of them read and write or have a primary school. This, in fact, will reflect negatively on their nutritional awareness (Troesch *et al.*, 2015). As the level of education decreases, nutritional awareness decreases, especially since spouses have a greater role in nutrition.

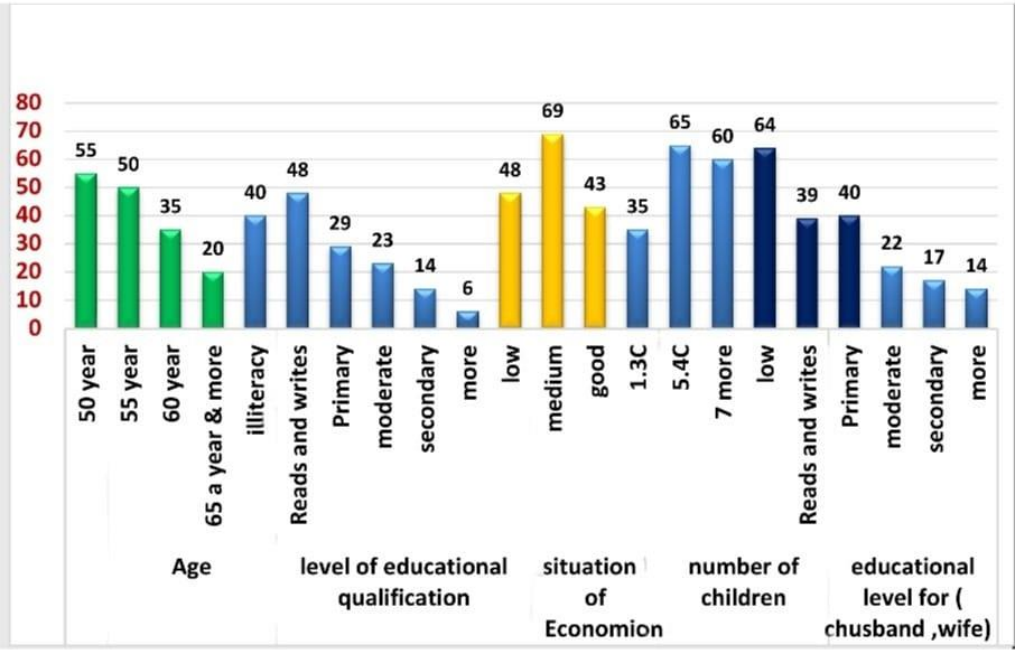

Figure (1): Characteristics of the elderly included in the study

The general level of nutritional and nutritional awareness

The degrees of the general nutritional awareness level for the elderly reached (from 12.5 to 31) and the arithmetic average of 19.4 degrees, or the equivalent of 55%, and this means that the level of public awareness of them was average. The result agreed with the study of Rayan and Bower (1989) that the living and economic situation has a role in reducing nutritional awareness and adopting a proper feeding method. The respondents were distributed according to the degree of their nutritional awareness into three categories, as shown in Figure (2)

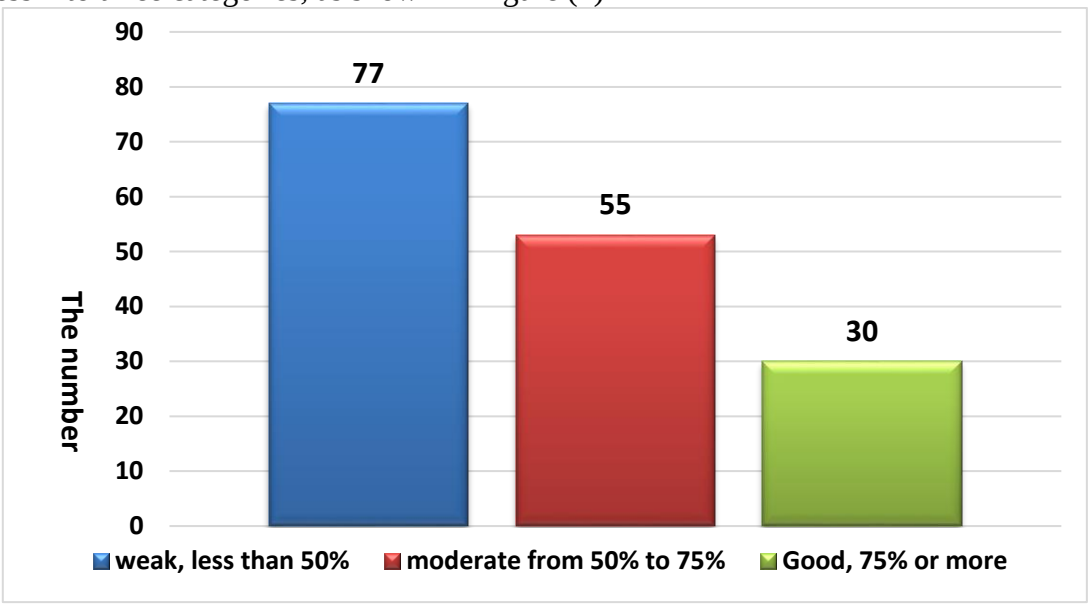

Figure (2): Numbers and percentages of the elderly according to their level of nutritional and nutritional awareness

We note from figure (2) that the highest percentage of the elderly was at the level of weak awareness, This percentage includes the elderly, both females and males followed by the medium level, and then the level of good awareness, and this shows the low level of awareness of the elderly for all aspects of food, which means that all respondents need guidance and awareness to raise their awareness and nutritional knowledge and develop their practices. This result confirms the need for the spread of many means of knowledge by the government and specialized researchers interested in nutrition to increase knowledge awareness, especially for the elderly group with low incomes (Barrett *et al*., 2006).

The level of nutritional and nutritional awareness of the elderly according to different fields

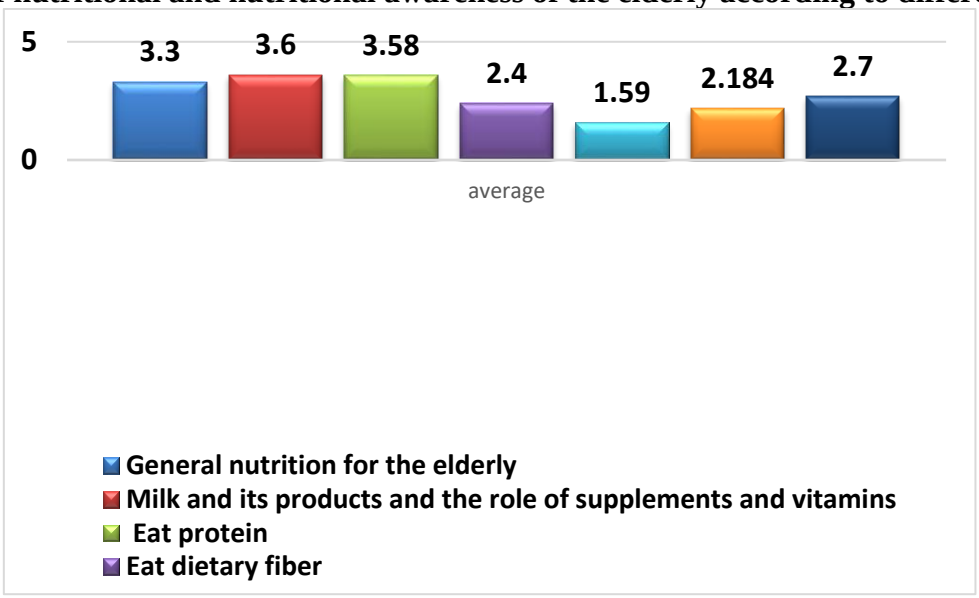

Figure (3) Awareness level of the elderly according to nutritional areas

It is clear from figure (3) that the arithmetic averages of the awareness level of the elderly according to the seven areas specified in the research and shown in the figure , as we note that the highest of these averages is in the field of awareness of milk and its products and the role of nutritional supplements, and it reached 3.6 and is equivalent to 72%, and the lowest of them was the level of awareness of carbohydrates With an average of 1.59, or 31%, in general, there are four medium areas (adult nutrition, milk and its products, proteins, and exercise), and the remaining three areas were weak, namely (eating dietary fiber, fruits and vege Chart s, and carbohydrates). This percentage agreed with a study he Conducted by Nieman *et al*. (1998).that the awareness of the elderly about the importance of eating fruits, vegetables and fiber in general is low, and this percentage varies between vegetarians who love to eat meat, as vegetarians prefer eating fruits and vegetables more and they have sufficient awareness of their importance. It is worth noting here that the low level of awareness of the elderly in the field of carbohydrate nutrition and its damages It is worth noting here that the low level of awareness of the elderly in the field of carbohydrate nutrition and its damage is one of the causes of obesity for the elderly, as well as the lack of consumption of fruits and vege Chart s, is one of the causes of malnutrition, especially among females, which was shown by studies of the Central Bureau of Statistics and Information Technology (CSO, 2008) .

The relationship between the level of nutritional and nutritional awareness of the elderly and some related independent variables

A- Fig (4) show the relationship between the level of nutritional awareness and the age of the elderly, where it was found that there is a negative correlation between the level of nutritional awareness and age of (-0.161) and it was significant at the level of (0.01) because elderly people are characterized by lack of movement and effectiveness and have a low educational level In addition to the increase and their adherence to their old knowledge and skills and their non-acceptance of the dietary changes that occur in their (traditional) society, and this is the opposite of young people who are more aware. Where this result agreed with the study of Abd (2021). There are statistically significant differences between age and level of nutritional awareness.

B- The relationship between the level of nutritional awareness and the educational level of the respondents. It was found that there is a positive correlation between the level of nutritional awareness and education of (0.468), and it was significant at the level of (0.01). The higher educational level of the elderly leads to increased openness and knowledge and acceptance of advice and instructions for food and nutrition. This contributes to improving the performance of their nutritional role in the family and on a personal level. The results were similar to those reported in the study of Sadiq (2011).

C- The relationship between the level of nutritional awareness and the economic situation of elderly families. It was found that there is a positive correlation between the level of nutritional awareness and their economic status and it was significant at the level (0.01) and the value of the correlation coefficient was (0.595) because the economic situation of the family reflects the extent of the ability to buy various foodstuffs and diversification, whatever the price.

D - The relationship between the level of nutritional awareness and the level of children's education. It was found that there is a positive correlation between the level of nutritional awareness and the level of education of children, especially girls, and it was significant at the level (0.01) and the value of the correlation coefficient reached (0.525), as the diversity and difference of nutritional awareness may increase with it. They work to educate their elderly parents and guide them to the correct nutritional information. The results were similar to those reported in the study Guttormsen *et al. (*2009).

E- The relationship between the level of nutritional awareness and the number of children It was found that there is a negative correlation between the level of nutritional awareness and the number of children and it was significant at the level (0.01) and the value of the correlation coefficient was (-0.210), as the increase in the number of family members may increase with the diversity and difference of their preferences As well as the increase in their food needs, which affects the elderly parents and pushes them to provide the food needs at the lowest expenses, especially in poor or economically weak families.

F- The relationship between the level of nutritional awareness and the degree of communication for the elderly: it was found that there is a positive correlation between the level of nutritional awareness and the degree of cultural communication for the elderly, and it was significant at the level (0.01) and the value of the correlation coefficient was (0.621), as the increase in knowledge and exposure to sources of information related to with food and nutrition, it helps to enlighten the elderly and contributes to their nutritional development (Beelen *et al.*, 2017)

G - The relationship between the level of nutritional awareness and the educational level of the husband or wife: it was found that there is a positive correlation between the level of nutritional awareness and the educational level of the husband or wife was significant at the level (0.01) and the value of the correlation coefficient reached (0.575) where the educated husband or wife is more accommodating and open to modern information and can influence his wife by his role and position in the family.

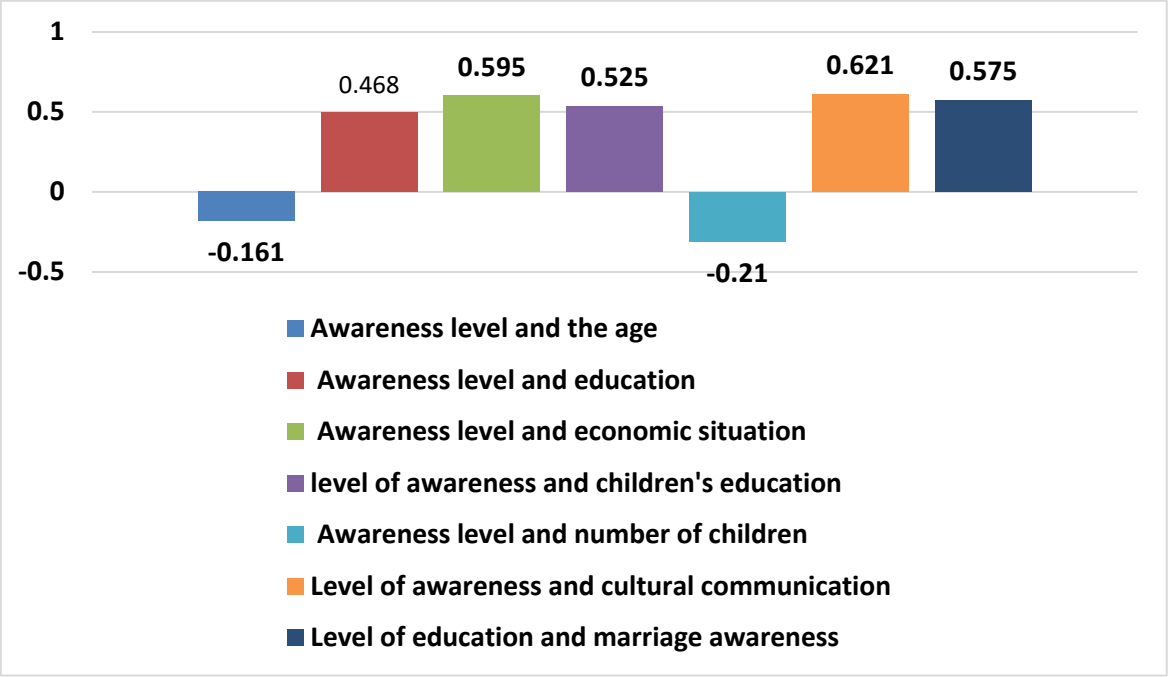

Figure (4): the relationship between the level of nutritional and nutritional awareness of the elderly and the above subjective variables

CONCLUSIONS AND RECOMMENDATIONS

1. Conclusions

From the foregoing, the following can be concluded:

A. The general nutritional awareness level for the elderly was average, with an average of 19.3, or 55%, which reflects the need to guide and educate them to increase their nutritional and nutritional awareness.

B. The level of awareness of the respondents according to the seven fields identified in the research was weak in three of them, namely: (Carbohydrates, fruits, and vege figure, fiber intake), while it was average in the remaining four (adult nutrition, milk and its products, proteins, and light exercise).

C. It was found that there is a positive and significant correlation between the level of nutritional and nutritional awareness of the elderly and some of their characteristics, represented by (the educational level of the elderly, the economic status, the children's education level, and the degree of cultural contact, the educational level of the husband or wife).

D. There is a negative and significant correlation between the level of nutrition and nutritional awareness of the elderly with age and the number of children.

2- Recommendations

To develop the elderly's nutritional and nutritional awareness and benefit from their family role to improve the nutritional level of their families, we recommend the following:

1. Work to improve the self-characteristics of the elderly, especially concerning education, economic status, and cultural openness, as this has a great impact on the elderly's awareness of all areas, especially about food and nutrition.
2. Encouraging the illiterate elderly to enroll in literacy programs to overcome the most important factor that hinders their participation in development and awareness.
3. Make training courses in the field of food guidance, especially to raise awareness about food and nutrition.
4. Establishing instructions campaigns to raise awareness of the importance of food and the basic principles of nutrition are participated by all relevant authorities, such as (the Ministry of Agriculture, the Ministry of Education, the Ministry of Higher Education, the Ministry of Health, civil society organizations).
5. Spreading food awareness in all audio and visual media, which is the backbone of human life due to its wide reach and power of influence, by providing awareness and education programs in the field of food and nutrition.

REFERENCES

Abd, M. S. (2021). Nutritional Awareness and its Effect on Weight Gain For a Sample of Tikrit City Community. Tikrit Journal for Agricultural Sciences, 21(3):20-28.

Al-Ani, E. A. A. (2018). Nutrition and health awareness among middle school students and its relationship to some variables. Master's thesis, Department of Economics, College of Education for Woman, University of Baghdad .

Al-Zahrani, M. T. (2006). The dietary habits and pattern of fish consumption for a sample of Saudis and residents. A survey study, Journal of the Saudi Society for Food and Nutrition, 1(2):30-38.

Ames, B. N. (2010). Optimal micronutrients delay mitochondrial decay and age-associated diseases..Mech. AgeDev,131:473-9.doi:10:1016/j.mad.2012.04.005

Barrett, P.; Twitchin, S. and Kletchko, S. (2006). The living environments of community-dwelling older people who become frail: another book at the Living Standards of Older New Zealanders Survey. Social Policy Journal of New Zealand, 28: 133-157.

Beelen, J.; Vasse, E.; Ziylan, C.; Janssen, N.; de Roos, N. M. and de Groot, L. C. (2017). Undernutrition: Who cares? Perspectives of dietitians and older adults on under nutrition. BMC Nutrition, 3(1): 24 .

CSO (2008). Comprehensive Analysis of Food Security and Vulnerable Groups-Iraq-p-70.

Donini, L. M.; Scardella, P.; Piombo, L.; Neri, B.; Asprino, R.; Proietti, A. et al. (2013). Malnutrition in elderly: social and economic determinants. The journal of nutrition, health & aging, 17(1): 9–15.

Gorji, H. A.; Alikhani. M.; Mohseni, M.; Moradi-Joo, M.; Ziaiifar, H. and Moosavi, A. (2017). The prevalence of malnutrition in Iranian elderly: a review article. Iranian J Public Health, 46(12):1603–1610.

Guttormsen, A. B.; Hensrud, A.; Irtun, Ø.; Mowè, M.; Sørbye, L. W.; Thoresen, L. and Smedshaug, G. B. (2009). National guidelines for prevention and treatment of malnutrition (Nasjonale faglige retningslinjer for forebygging og behandling av underernæring). Oslo, Norway: The Norwegian Directorate of Health.

Nieman, D. C.; Underwood, B. C.; Sherman, K. M.; Arabatzis, K.; Barbosa, J. C. and Johnson, M. (1998). Shultz TD. Dietary status of Seventh - day Adventist vegetarian and non-vegetarian elderly women. J Am Diet Assoc., 89(12):1763–1769.

Owaida, E. H. (2015). Therapeutic Nutrition. Obeikan Publishing Library, first edition, Riyadh, Saudi Arabia, pp. 5.

Ryan, V. C. and Bower, M. E. (1989). Relationship of socioeconomic status and living arrangements to nutritional intake of the older person. J Am Diet Assoc., 89(12):1805–1807 .

Sadiq, M. A. (2011). Human Nutrition. Dar Al-Maysara for Publishing and Distribution, first edition, Amman, Jordan, pp: 107.

Sobhi, A. H. (2004). Food and Health Education. Arab Nile Group, first edition, Cairo, Egypt, pp.: 14.

Troesch, B.; Biesalski, H. K.; Bos, R.; Buskens, E.; Calder, P. C.; Saris, W. H.; et al. (2015). Increased intake of foods with high nutrient density can help to break the intergenerational cycle of malnutrition and obesity. Nutrients, 7:6016–37.

Von Arnim, C. A. (2017). Nutrition security in older adults: status quo and future development. In: Biesalski HK, Drewnowski A, Dwyer JT, Strain JJ, Weber P, Eggersdorfer M editors. Sustainable Nutrition in a Changing World. Basel: Springer. p. 61–73 .

WHO, (2010). World Health Statistics, p. 9.

دراسة استبيانيه لمعرفة الوعي التغذوي للمسنين في بعض اقضية محافظة صلاح الدين / العراق

دعاء مثنى شعبان عبداللطيف التكريتي

جامعة تكريت / كلية التربية للبنات – تكريت - العراق

الخلاصة

تناول البحث دراسة مستوى وعي كبار السن بالغذاء والتغذية في بعض اقضية محافظه صلاح الدين / العراق، لما لذلك من اهمية في كون كبار السن المسؤولين بشكل مباشر عن تغذيتهم الشخصية وتغذية اسرهم في بعض الحالات من خلال سوء التغذية او التغذية غير السليمة مما يؤثر سلبا على صحتهم واصابتهم بالامراض المختلفة ، واكد البحث ان مستوى وعيهم ومعرفتهم بالأمور المتعلقة بالغذاء والتغذية السليمة سيتأثر المستوى الصحي للمسنين. تم تصميم الاستبيان لغرض جمع بيانات البحث الشخصية عن طريق عمل استبيان الكتروني باستخدام برنامج كوكل فورم .

شمل البحث 160 شخص مسن من اربع اقضية اختيرت عشوائيا من محافظه صلاح الدين / العراق (سامراء ،تكريت ، قضاء العلم ،قضاء الدور). واستخدمت مجموعة من الاساليب الاحصائية لتحليل بيانات الدراسة وشملت التكرارات والنسب المئوية الاوساط الحسابية و معامل الارتباط سبيرمان وبيرسن .كان كل كبار السن مستوى وعيهم متدنيا في المجالات التالية (الكربوهيدرات , الفواكه , الخضار , التمارين الخفيفة). بينما كان وعيهم معتدلا في (الحليب ومنتجاته , البروتينات).وتبين ان هناك علاقة ارتباط موجبة ومعنوية بين مستوى وعي كبار السن ومستوى وعيهم في العوامل المتمثلة في (المستوى التعليمي , الوضع الاقتصادي , تعليم الاطفال , الاتصال الثقافي , تعليم الزوج او الزوجة) بينما كان الارتباط سلبيا معنويا مع (العمر وعدد الأطفال).

الكلمات المفتاحية:
المعرفة الغذائية , تقويم الوعي بالتنوع الغذائي , تغذية , مسنين