Middle age knowledge regarding health screening

A.I. Alaa sabah Ghazal

Al-Farabi University College Republic of Iraq
Ministry of Higher Education and Scientific Research
Al-Farabi University College Department of Nursing
Email: Alaa.sabah@alfarabiuc.edu.iq

ABSTRACT

A descriptive analytical study was carried out to assess the middle age knowledge regarding health screening, who attending outpatient clinic for seeking treatment at Baghdad General Teaching Hospital.

Objectives: To assess the middle age knowledge regarding health screening, regularity performing the health screening and the obstacles that prevent perform it.

Methodology: non-probability sample (purposive sample) of one hundred and seventy four (174) middle age persons (87 women and 87 men) who attending outpatient clinic. A questionnaire was designed for the purpose of study after review of previous studies. The data were collected by using interview method and self-report techniques with study participants. Statistical descriptive and inferential methods were used in data analysis.

Result: The results indicated that the highest percentage study sample 22.9 % were in age group (55 - 59) years old. The highest percentage study sample 27.5 % they were suffered from Hypertension. 44.8 % know if the screening results are abnormal, should follow-up. 71.3% didn't know the health screening is done for people who look or feel well. The highest 31.7 % they have knowledge about the Screening test of Diabetes recommended for test , method of measurement , and screening frequency . 71.3% didn't have knowledge about the Screening test of High blood cholesterol recommended for test, Method of measurement, and Screening frequency. 96.5 % they did not perform a health screening on a regularly and finely regarding the obstacles that prevent perform a health screening the highest percentage of study sample 89.2 % agree that there are no facilities for health screening in hospitals and health centers. The results indicated that there was statistical significant relationship between level of knowledge and (level of education and occupational status), while there were no statistical significant relationship between level of knowledge and (age, Economic states).

Recommendation: The study recommended increase health awareness among citizens in the importance of health examination through the mass media and provide facilities for citizens, especially middle-aged, to conduct health checks in hospitals and health centers at the lowest cost.

Keywords: Middle age, knowledge, health screening

Introduction

Health screening was a rapidly growing and widely accepted practice in health care during the twentieth century. (1)

Is a strategy used in a population to identify the possible presence of an as-yet-undiagnosed disease in individuals without signs or symptoms. This can include individuals with

pre-symptomatic or unrecognized symptomatic disease. As such, screening tests are somewhat unusual in that they are performed on persons apparently in good health. (2)

Proponents of screening programs affirm that in addition to the potential of early disease detection, interventions are designed to identify disease in a community early, thus enabling earlier intervention and management in the hope to reduce mortality and suffering from a disease. Although screening may lead to an earlier diagnosis (secondary prevention), they also provide the opportunity for screening participants to change unhealthy lifestyles through the so-called lifestyle counseling (primary prevention). (3)

Health Screening is an important part of health promotion efforts. There is an emerging emphasis on health screening that screening for chronic diseases such as hypertension, diabetes, high cholesterol, obesity, breast cancer, cervical cancer and colorectal cancer, which is internationally recognized as a cost effective way to identify and treat health problems before they develop or worsen and help to prevent major complications of common diseases and chronic medical problems. The health Screening promotes healthy lifestyle as well as preventive quality health program.(4)

Developing a health screening program can facilitate the improved functioning of a health care system. It should, be undertaken in a manner that is integrated with existing services so as to improve health system functioning.

Objectives:

1- To assess the middle age knowledge regarding health screening.

2- To determine whether the health screening is conducted regularly and the obstacles that prevent it

3- To identify the association between level of knowledge of study sample and studied variables.

Methodology

A descriptive analytic study was carried out to assess the middle age knowledge regarding health screening, who attending outpatient clinic for seeking treatment at Baghdad General Teaching Hospital. Non-probability sample (purposive sample) of one hundred and seventy four (174) middle age persons (87 women and 87 men) who attending outpatient clinic for seeking treatment at Baghdad General Teaching Hospital. The instrument was designed and constructed by the investigator after reviewing related literatures, clinical background and previous studies. The questionnaire form was consisted of (3) main parts: Demographic characteristics, knowledge regarding health screening, and regularity performing the health screening and the obstacles that prevent perform it. The data were collected by using interview method and self-report techniques with study participants after obtaining permission from each of them according to the inclusion criteria. Statistical procedures include: Descriptive Statistics: frequency, percentage and Mean of score. Inferential methods were used in data analysis: Contingency Coefficients test. Participant's knowledge were rated and scored for each item as two (2) for yes and and one (1) for no Assessment with Scoring Scales. Low (1-1.49), Moderate (1.5 – 1.75), and High (1.76 –2].

Result

Table (1): Distribution of the study sample according to socio - demographic characteristics

Variables	Groups	No.	%
Age	40 – 44	30	17.2
	45 – 49	26	14.9
	50 – 54	30	17.2
	55 – 59	40	22.9
	60 – 64	25	14.3

	≥ 65	23	13.2
Level of education	Illiterate	7	4
	Read and write	15	8.6
	Primary	25	14.3
	Intermediate	35	20.1
	Secondary	47	27
	Institute	20	11.4
	College & H.E.	25	14.3
Occupation	House wife & Unemployed	47	27
	Employed	72	41.3
	Non-governmental employee	28	16
	Retired	27	15.5
Economic status	High	42	24.1
	Middle	72	41.3
	Low	60	34.4

This table demonstrates that the highest percentage study sample 22.9 % were in age group (55 - 59) years old , the highest percentage of their educational level 27 % were Secondary school graduated, the highest percentage study sample 41.3% were governmental employee and the highest percentage 41.3% of study sample at Middle level of economic status.

Table (2): Distribution of the study sample according to their knowledge regarding health screening

Variables	Items	I know		I don't know		Ms	Asses.
		No.	%	No.	%		
What is health screening	1- Its physical examinations or other procedures to detect disease early	70	40.2	104	59.8	1.40	Low
	2- Its important actions to everyone you	65	37.3	109	62.7	1.37	Low
	3- prevent or delay serious complications	76	43.6	98	56.4	1.43	Low
	4- It is done for people who look or	50	28.7	124	71.3	1.28	Low

	feel well						
	5- It is different from diagnostic tests	54	31	120	69	1.31	Low
	6- If the screening results are normal, should continue to go for regular screening	60	34.4	114	65.6	1.34	Low
	7- If the screening results are abnormal, should follow-up	78	44.8	96	55.2	1.44	Low

This table demonstrates that the highest percentage study sample 44.8 % know if the screening results are abnormal, should follow-up, while the highest percentage of them 71.3% didn't know the health screening is done for people who look or feel well.

Table (3): Distribution of the study sample according to knowledge regarding General Screening Tests

To screen for	Recommended for	Method of measurement	Screening frequency	I know		I don't know		Ms	Asses.
				No.	%	No.	%		
Hypertension (High blood pressure)	Individuals aged 18 yrs. and above	Blood pressure measurement	Once every two years or more frequently as advised by your doctor	53	30	121	70	1.32	Low
Diabetes mellitus	Individuals aged 40 yrs. and above	Fasting blood glucose	Once every three years or more frequently as advised by your doctor	55	31.7	119	68.3	1.32	Low
Hyperlipidaemia (High blood cholesterol)	Individuals aged 40 yrs. and above. smoker, heart disease, have	Fasting lipids	Once every three years or more frequently as advised by your		28.7		71.3	1.3	

	diabetes, and family history start cholesterol checked at age 20		doctor	50		124		2	Low
Osteoporosis	Individuals aged 65 yrs. and above	dual energy X-ray absorptiometry (DEXA)	Get at least once at age 65	53	30	121	70	1.31	Low

This table demonstrates that the highest percentage of study sample 31.7 % they have knowledge about the Screening test of Diabetes recommended for test , Method of measurement , and Screening frequency while the highest percentage of them 71.3% didn't have knowledge about the Screening test of High blood cholesterol recommended for test , Method of measurement , and Screening frequency.

Table (4): Distribution of the study sample according to doing health screening regularly and obstacles if not

Variables	Items	Yes		No		Ms	Asses.
		No.	%	No.	%		
	Is the health screening conducted regularly?	6	3.5	168	96.5	1.03	Low
	If no what are the obstacles						
	1- I'm in a good health and I do not need a health screening	148	88	20	12	1.81	High
	2- I do not have time to do a health screening	100	59.5	68	40.5	1.63	Moderate
	3- I am afraid of the results of the health screening	98	58.4	70	41.6	1.63	Moderate
	4- I do not trust the credibility of the examination in the laboratories	118	70.2	50	29.3	1.64	Moderate

	of government hospitals and health centers						
	5- Due to examination costs	70	41.7	98	58.3	1.40	Low
	6- I am afraid of the screening procedure	50	29.3	118	70.2	1.28	Low
	7- There are no facilities for health screening in hospitals and health centers	150	89.2	18	10.8	1.82	High
	8- I do not know the importance of health screening	87	51.7	81	42.3	1.47	Low

This table demonstrates that the highest percentage study sample 96.5 % they did not perform a health screening on a regularly, and regarding the obstacles that prevent perform a health screening the highest percentage of them 89.2 % agree that there are no facilities for health screening in hospitals and health centers.

Table (5) shows the association between Level of Knowledge of Study Sample and Studied variables

Studied variables		Knowledge level		χ^2	d.f	P-value	Sig.
		unacceptable	acceptable				
		No	No				
Age	40-49	30	26	12.617	2	.027	NS
	50-59	49	21				
	60and more	37	11				
Level of education	Illiterate -Read and write- Primary	29	18	29.609	2	.000	S
	Intermediate & secondary	49	33				
	Institute & college	38	7				
Occupational status	Work	89	38	17.521	1	.001	S
	Not work	27	20				
Economic	High	27	15	1.476	2	.478	NS

states	**middle**	**53**	**21**			**.**	
	low	**36**	**22**				

This table demonstrates that there was statistical significant relationship between level of knowledge and (level of education and occupational status), while there were no statistical significant relationship between level of knowledge and (age, Economic states).

Discussion

The present study revealed that the highest percentage of study sample 22.9 % were in age group (55 - 59) years old , the highest percentage of their educational level 27 % were Secondary school graduated, the highest percentage of study sample 41.3% were governmental employee and the highest percentage 41.3% of study sample at Middle level of economic status. Middle age is between 45 and 65."The period between early adulthood and old age, usually considered as the years from about 40 to 65. [6]

Educational level of the target population is thus a basic measure that will contribute to early diagnosis of the disease, and upon which screening must be based. [7]

People who do not have health insurance or a usual source of health care, those with lower incomes and those living in rural areas. [8]

Table (2) show that the highest percentage of study sample 44.8 % know if the screening results are abnormal, should follow-up, while the highest percentage of them 71.3% didn't know the health screening is done for people who look or feel well. A variety of developing countries, having limited access to health screening activities. Typically, these have low population coverage of screening, predominance of clinical services for patients presenting with symptoms, absence of pre-established calls for screening to patients in pre-defined age groups, insufficient quality control of chronic medical problems and limited follow-up of patients with positive tests. In many countries this is associated with limited access to treatment. Health screening Program in developing countries tends to be decentralized and only partially funded, and organized to meet immediate needs rather than long-term follow-up and management. [9]

Table (3) demonstrates that the highest percentage of study sample 31.7 % they have knowledge about the Screening test of Diabetes recommended for test , Method of measurement , and Screening frequency while the highest percentage of them 71.3% didn't have knowledge about the Screening test of High blood cholesterol recommended for test , Method of measurement , and Screening frequency. Where hypertension has been recognized as a major local public health problem only recently. Intermediate rates of hypertension awareness and control are not unexpected findings because hypertension has become a major health concern only lately, possibly a consequence of the rapid epidemiological transition over the last two or three decades. Although a nationwide program of prevention and control of cardiac vascular disease was initiated in 1991. [10]

Table (4)demonstrates that the highest percentage study sample 96.5 % they did not perform a health screening on a regularly, and regarding the obstacles that prevent perform a health screening the highest percentage of them 89.2 % agree that there are no facilities for health screening in hospitals and health centers. Health screening programs do not exist in most developing countries. Their existing health-service infrastructure, human resources, and health-service investments often preclude the possibility of introducing and sustaining effective screening programs. Substantial investments in improving health care infrastructure, human resources, and improvisation systems will be required to improve early detection and treatment of chronic medical problems in many countries. [11]

Table (5) shows that there was statistical significant relationship between participant's knowledge and (level of education and occupational status), while there were no statistical significant relationship between level of knowledge and (age group, Economic

states). Evidence suggests that those who achieve a higher level of educational attainment are more likely to engage in healthy behaviors and less likely to adopt unhealthy habits. (12)

Conclusion

Depend on analysis and interpretation of the results, the following conclusions:

- The highest percentage study sample 22.9 % were in age group (55 - 59) years old the highest percentage 27 % were Secondary school graduated.
- the highest percentage study sample 44.8 % know if the screening results are abnormal, should follow-up, while the highest percentage of them 71.3% didn't know the health screening is done for people who look or feel well.
- The study samples have low level of knowledge regarding general Screening Tests.
- The highest percentage study sample 96.5 % they did not perform a health screening on a regularly, and regarding the obstacles that prevent perform a health screening the highest percentage of them 89.2 % agree that there are no facilities for health screening in hospitals and health centers.
- There was statistical significant relationship between participant's knowledge and (level of education and occupational status), while there were no statistical significant relationship between participant's knowledge and (age group, Economic states).

Recommendations:

1- Increase health awareness among citizens about importance of health examination through the mass media.

2- Provide facilities for citizens, especially middle-aged, to conduct health checks in hospitals and health centers at the lowest cost.

References

1- Wilson, JMG; Jungner, G. "Principles and practice of screening for disease". WHO Chronicle. Geneva: World Health Organization. (2008)22 (11): 473Public Health Papers

2- Anne Andermann, Ingeborg Blancquaert, Sylvie Beauchamp, Véronique Déry Revisiting Wilson and Jungner in the genomic age: a review of screening criteria over the past 40 years: Bulletin of the World Health Organization; 2008 Volume 86, Number 4, April 2008, 241-320

3- Wald, N J; Hackshaw, A K; Frost, C D ."When can a risk factor be used as a worthwhile screening test?". BMJ. (2009). 319 (7224): 1562–1565.

4- Raffle, Angela E.; Muir Gray, J. A.. Screening: Evidence and practice. (2007) Oxford University Press.

5- Cole, S.R., Young, G., Byrne, D., Guy, J., Morcom, J.,. Participation in screening. Journal of Medical Screening .2002 ,9(4), pp. 147–152.

6- Holland, W.W., Stewart, S.,. Screening in Disease Prevention. 2002 4(14).

7- Alpert, J., Greiner, A., and Hall, S. "Health Fair Screening: The Clinical Utility of the Comprehensive Metabolic Profile."Family Medicine. 36.7 (2004): 514-519.

8- Wardle J, Steptoe A. Socioeconomic differences in attitudes and beliefs about healthy lifestyles. J Epidemiol Community Health 2003;57:440-3.

9- 9 - Dalstra JA, Kunst AE, Borrell C, Breeze E, Cambois E, Costa G, et al. Socioeconomic differences in the prevalence of common chronic diseases: an overview of eight European countries. Int J Epidemiol 2005;34:316-26.

10- Wee LE, Koh GC, Toh ZJ. Multi-disease health screening in an urban low-income setting: a community-based study. Ann Acad Med Singapore 2010;39:750-7.

11- Islam FMA, Chakrabarti R, Dirani M, et al. Knowledge, attitudes and practice of health screening in rural Bangladesh: the Bangladesh population. 2014;9(10):e110368.

12- Mohan D, Raj D, Shanthirani CS, et al. Awareness and knowledge of health screening in Chennai–the Chennai urban rural epidemiology study [CURES-9]. J Assoc Physicians India. 2005;53:283–7