

المعرفة و المواقف و الممارسات تجاه لقاح الانفلونزا لمراجعي المراكز الرعاية الصحية الأولية في

بغداد/ العراق / ٢٠١٩

د.اسيل عبد الجبار البغدادي

وزارة الصحة العراقية، دائرة الصحة العامة

د.نادية عزيز ناصر

جامعة بغداد، كلية الطب، قسم طب المجتمع وطب الأشعة



ملخص

الخلفية: الانفلونزا (الانفلونزا الموسمية) هي احد العوامل المسببة للأمراض البشري الرئيسية المرتبطة بارتفاع معدلات الاعتلال و الوفيات، وهي السبب الأكثر شيوعا للوفاة من الأمراض التي يمكن الوقاية منها باللقاحات.

تتسبب اوبئة الانفلونزا الموسمية كل عام في حدوث حوالي ٣-٥ مليون حالة مرض شديد و ٢٥٠,٠٠٠-٥٠٠,٠٠٠ حالة وفاة في جميع انحاء العالم. هناك ثلاثة أنواع من الفيروسات التي تسبب الانفلونزا الموسمية: اي، بي، سي.

نجاح استراتيجيات إدارة الانفلونزا تتشكل من خلال اجراء تغييرات في السلوك الصحي.

الأهداف: كان الهدف من هذه الدراسة هو تقييم معرفة، مواقف و ممارسات المراجعين للمراكز الرعاية الصحية الأولية تجاه الانفلونزا الموسمية و التطعيم ضدها.

الطرائق: دراسة مقطعية أجريت في مراكز الرعاية الصحية الأولية في بغداد شملت ٢٠٠ مراجع للمراكز، خلال الفترة من اول فيبرابر الى نهاية ابريل ٢٠١٩، من خلال مقابلة مباشرة للمراجعين و باستخدام استبيان منظم تم اختياره مسبقا.

النتائج: من ٢٠٠ مشارك بلغ متوسط العمر لهم ٣٤.٥٧ +/- ١٥.٢٥٨ سنة، نسبة الاناث ٥٨.٥٪ و نسبة الذكور ٤١.٥٪ كان معدل التلقيح ضد الانفلونزا منخفض ٢٤.٥٪، و اكثر من نصف المشاركين ٥٧.٥٪ كانوا في مستوى منخفض من المعرفة و المواقف و الممارسات تجاه لقاح الانفلونزا. هناك ارتباطات ذات دلالة إحصائية بين حالة التلقيح و مستوى المعرفة (بي=٠,٠٠٠) و مستوى المواقف (بي=٠,٠٠٠) و الممارسات (بي>٠,٠٠٠) تجاه الانفلونزا و لقاحها. كما لوحظت ارتباطات ذات دلالة إحصائية بين المعرفة و المستوى التعليمي (بي=٠,٠٣٠)، و مستوى المعرفة و الممارسات (بي>٠,٠٣٠)، و الموقف و الممارسات (بي>٠,٠١٥) في هذه الدراسة.

الاستنتاجات و التوصيات: صياغة استراتيجيات جديدة لتحسين مستوى المعرفة بلقاح الانفلونزا للجمهور و طمانتهم بشأن سلامة و فعالية اللقاح، ادراج لقاح الانفلونزا في برنامج التحصين الوطني تعد من العوامل الأساسية لتعزيز تغطية تلقيح الانفلونزا.

الكلمات الرئيسية: المعرفة، الموقف، الممارسة، لقاح الإنفلونزا و الانفلونزا.

toward Influenza Vaccine among Knowledge, Attitudes and Practices
Attendants of Primary Health Care Centers in Baghdad/Iraq 2019

Dr.Aseel Abdul Jabbar Albaghdadi

Iraqi Ministry of Health, Department of Public Health

Dr.Nadia Aziz Nasir

Community Medicine Department, College of Medicine, University of
Baghdad

ABSTRACT

BACKGROUND:

The seasonal flu, or influenza, is a serious human infection that is linked to high rates of morbidity and mortality. It is also the most common reason for preventable disease cases. Seasonal influenza epidemics cause -fatal vaccine sodes of serious disease and between 250,000 and million epi 5-between 3

fatalities worldwide each year. Seasonal influenza is caused by 500,000 viruses of three different types: A, B, and C. Successful influenza management plans are shaped by modifying one's lifestyle

OBJECTIVE

The purpose of this study was to evaluate patients' knowledge, attitudes, and practices about seasonal influenza and vaccination

METHODS

was performed involving 200 patients who sectional research-Cross attending to the centers for primary healthcare in Baghdad city, from 1st February to the end of April 2019, through direct interview using a tested questionnaire-structured pre

RESULTS

From 200 participants; the mean age respondents was $34.57 \pm SD 15.258$ and males were 83 years, with females predominant were 117 (58.5%) and a low vaccination rate (24.5%) was reported. More than half of the participants (57.5%) were in low KAP level. There were highly statistical significant associations between vaccination status with knowledge and Practices on Influenza and its vaccine ($0.000.p=0.000$), attitude ($p=0.001$). This study also found statistically significant correlations between knowledge and educational level ($p=0.030$), knowledge and practices ($p=0.036$), and attitudes and practices ($p=0.015$).

ND RECOMMENDATIONS CONCLUSION A

The key components to increasing vaccination coverage are developing novel methods to raise public awareness of the influenza vaccine, reassuring people of the vaccine's efficacy and safety, and including the shot in the national immunization program.

KEYWORDS: Knowledge, Attitude, Practice, Influenza Vaccine and Influenza.

:INTRODUCTION

Influenza is a serious public health issue that affects people all around the world, especially the elderly and high-risk populations [1]. The influenza virus has two surface glycoproteins and nine internal proteins. It is an enveloped negative sense segmented RNA virus. The surface glycoproteins HA and NA help the virus attach to, enter, and exit infected cells [2,3].

Types A, B, C, and D of seasonal influenza viruses differ from one another in terms of their genomic organization, pathogenicity, antigenicity, and epidemiology. Seasonal outbreaks of disease are brought on by the influenza A and B viruses, which circulate [2,3]. In the years 1918–19, at the start of the 20th century, influenza was widespread. A type A influenza isolate was discovered in ferrets in 1933. B-type influenza was first discovered in 1936. Millions of deaths worldwide were attributed to the Asian flu pandemic of 1957, the Hong Kong flu

pandemic of 1968, and the 2009 global H1N1 outbreak that turned into a seasonal trend in 2010 [4]. All age groups are susceptible, however some are at more risk than others. Pregnant women, children under the age of 59 months, the elderly, people with chronic medical conditions (such as HIV/AIDS, people receiving chemotherapy or steroids, or people with cancer) and people with immunosuppressive conditions (such as HIV/AIDS, people receiving chemotherapy or steroids, or people with malignancy) are all at higher risk of developing severe illness or complications from infection.

Due to increased patient exposure and the possibility of influenza virus spreading, healthcare personnel are at a greater risk of contracting the illness [2,3]. The best defense against influenza infection and serious consequences like hospitalization, death, and morbidity is immunization [4-5]. The WHO GVAP aspires to achieve national immunization rates of at least 90% and to hasten the control of all avoidable diseases [4]. Public vaccination uptake was extremely poor, with nations stating that less than half of target populations worldwide had the desired coverage [6]. During World War II in the United States, the first influenza vaccine was created in 1938 and administered to American soldiers [7,8].

Only the monovalent type A influenza virus was used in the first flu vaccinations. In 1942, a bivalent vaccine was available that contained both influenza types A and B. The first brand-new trivalent inactivated influenza vaccine received U.S. licensure in 1978 [7]. The FDA granted approval for the first LAIV, a trivalent vaccine delivered as a nasal spray, in 2003 [8]. The first quadrivalent influenza vaccination received FDA approval in 2012 [9]. Immunization of those at high risk for illness complications, their close contacts, and the healthcare professionals (HCWs) who care for them has been one of the strategies for the management of influenza. In this study, we estimate the levels of knowledge, attitudes, and practices about influenza and its vaccine among people who visit primary health care centers in Baghdad. Estimate vaccination status for this group of people as well as the presence of any relationship between knowledge and attitudes toward influenza and its vaccine.

PATIENTS AND METHODS:

A cross-sectional descriptive study was conducted starting on February 1st. to the end of April 2019; included twelve primary health centers in Baghdad from both regions, Al-kakh and Al-Rusafa. The study was performed in a sample of 200 attendants to primary health care centers in Baghdad City by direct interview. We used multistage simple random sampling technique in this study. Using a questionnaire form for collecting data [10]. The questionnaire form was the participant demographics-ciostructured. The first part included 8 items of so characteristics. The second section tested the participants' knowledge of the 11 vaccination components for influenza. In the third section, individuals' attitudes were evaluated The fourth .emstowards administering influenza vaccine 7 it section included the participants' vaccination habits and preventative strategies

for influenza 9 items. In order to do the statistical analysis, SPSS version 21.0 ve was used. Participant sociodemographic traits were described using descriptive statistics. Categorical variables were described using percentages and frequencies, whereas continuous variables were described using mean, standard deviation, and range calculations. The significance of the association between the variables was examined using the chi square test. A P value of 0.05 or lower was regarded as statistically significant.

:RESULTS

participants who attended to 200 ‘In this research primary health care centers in Baghdad City from both regions, Al-kakh and Al-Rusafa by direct interview. There were 117 females (58.5%) and 83 males (41.5%) with female to male ratio .1.4:1 The mean age of the respondents was 34.57 years, (SD=15.258), median 32.00 with a range of 70 years. All socio-demographic characteristics distribution is shown in table1. 38 -Most participants were in age group range from 29 female (58.5%), married (74.5%), middle income (68.5%) , low ,(23.5%) education (40.5%) and employee (37%).Regarding knowledge on influenza and of participants were in a good knowledge on %vaccine are shown in table 2. 97 influenza symptoms, 93% knew mode of transmission and 91.5% knew the risk of influenza and complications. Regarding Attitude statements on influenza are shown in table vaccine are shown in table 3. Regarding Practices on influenza Distribution of study sample regarding total level scores KAP are shown in .4 .table 5

:DISCUSSION

In this study, 24.5% of the participants had been immunized. This is similar to the findings of a study conducted by Akram M. et al Baghdad Iraq 2017 [17] 21.7% and Blank et al 2012 for rates of influenza vaccination in 5 countries, 25% in Germany, 29% in France, 30% in Mexico, and 24.7% in UAE, which agreed with the question "how long flu this study results [12]. Only 38.0% correctly answered vaccine could protect individuals against influenza," which differs from the findings of Rehmani et al. in KAS 2010 [13]. Attitudes toward influenza vaccine, study said "vaccine is effective," which is similar to the results of a %60.5 conducted by Khazaeipour et al.2010 in Iran, which showed 51.4%[14], and vaccination reduces the "approximately 73% of participants correctly answered risk of influenza transmission from one person to another," according to the aaragi et al. 80.58% in Karbala City/Iraq in -conducted by Al findings of a study Regarding Preventive measures of seasonal influenza, only 21.5% were .[15] 2015 "ksam gniraew gnisu" erew %32, "dnah gnihsaw" erew %99, "eniccav gnisu" neezing and coughing", these were" covering nose and mouth during s %94 findings were higher in US citizens, showing differences in cultural personal hygiene awareness. 63.5% were "avoid crowding places", which agreed According to a study published by Yanni et al USA 2010, 55% [16], 74.5% were counter medication," which was higher than the findings of an -the-ng overusi"

Akram M. study. et al Baghdad Iraq 2017 38.7% [17] and Yanni et al 2010 Table 6 shows a significant relationship between knowledge level and .[16](%17) was similar to the findings of a study conducted in practice level ($p=0.036$). This Jempol, Malaysia (Mohd Shahrman et al., 2009) [18] and Latiff et al. in Kuala Lumpur, Malaysia 2012[19]. There was a statistically significant association This was consistent with the .7 between attitudes and practices ($p=0.015$) table .[findings of Wisedjinda(2009)[19

:CONCLUSION AND RECOMMENDATIONS

Our data show that the uptake of seasonal vaccination among primary health care center attendants in Baghdad is low (24.5%). This is largely due to a lack of understanding about influenza vaccine and its benefits (56.5%). The total low KAP level is (57.5%), which necessitates educating people about this anomaly. We need to increase vaccination coverage among the general population by establishing an educational program for adults about influenza using all media (internet, television, and radio), as well as using newspapers to spread positive attitudes toward influenza vaccine; assuring the population about the safety and efficacy of influenza vaccine, and educating the population about the risk groups that would benefit the most from vaccination.

Table 1: sociodemographic characteristics of study sample with .vaccination status

Variables	Groups	Frequenc y	Percent
Age	17-15	39	19.5
	28-18	39	19.5
	38-29	47	23.5
	48-39	42	21.0
	58-49	17	8.5
	59<	16	8.0
Gender	Male	83	41.5
	Female	117	58.5
Marital Status	Married	149	74.5
	Unmarried	51	25.5
Financial Status	Low	26	13.0
	Middle	137	68.5
	High	37	18.5
Occupational Status	Employee	74	37.0
	Student	22	11.0
	Free job	23	11.5
	Housewife	63	31.5
	Unemployee	17	8.5
	Others	1	0.5
Educational Level	Illiterate & Primary	81	40.5

	school	74	37.0
	Middle school	5	22.5
	College and Post graduate		
Presence of chronic illness	Present	55	27.5
	Not present	145	72.5
Vaccination Status	Vaccinated	49	24.5
	not vaccinated	151	75.5
Total		200	%100

Table 2: Distribution of study sample regarding knowledge on influenza .and vaccine

Knowledge statments	Correct answer		Incorrect answer		Don't know		Total
K1=Awareness of influenza symptoms [fever, sore throat, cough, muscle ache, fatigue, nasal discharge, red and watery eyes, and headache].	194	97.0	3	1.5	3	1.5	
K2=Knowledge of influenza transmission [coughing and sneezing, face-to-face communication, hand shaking and embracement, and indirect hand contact].	186	93.0	2	1.0	12	6.0	
K3=Knowledge about influenza risk and complication [pneumonia, sinusitis, otitis media, deaths and others].	183	91.5	4	2.0	13	6.5	
K4=Have you ever heard about flu vaccine?	170	85.0	10	5.0	20	10.0	
K5=Is flu vaccine freely available in PHC?	123	61.5	7	3.5	70	35.0	
K6=When is appropriate time to take flu vaccine? [Before, during, or immediately after flu season starts].	52	26.0	37	18.5	111	55.5	

K7=For how long flu vaccine can protect you against influenza? [One, two or three or more flu season].	76	38.0	25	12.5	99	49.5
K8: How many different influenza vaccines are there for preventing the illness? a single or two	8	4.0	33	16.5	159	79.5
K9=How can flu vaccine be giving? [Injection, nasal spray, or mouth drop].	122	61.0	8	4.0	70	35.0
K10=Dose the vaccine has side effect? [Headache, soreness/swelling at injection site, fever, nausea, muscle ache and others].	62	31.0	43	21.0	95	47.5
K11: Are severe allergic reactions to chicken, egg, or other vaccine ingredients a contraindication to vaccination?	60	30.0	25	12.5	115	57.5

Table 3: Distribution of study sample regarding Attitude statements .vaccine on influenza

Attitudes statements	Correct answer		Incorrect answer		Don't know		Total
	No.	%	No.	%	No.	%	
A1=Is flu a serious illness and therefore vaccination is necessary?	130	65.0	44	22.0	26	13.0	
A2=Is the vaccine safe?	141	70.5	14	7.0	22.5	45	
A3=Is the vaccine effective?	121	60.5	16	8.0	63	31.5	
A4=Influenza vaccine can prevent serious	121	60.5	9	4.5	70	35.0	200

complication and severity of influenza?						
A5=Is vaccination reduces the risk of transfer of influenza from one person to another?	146	73.0	15	7.5	39	19.5
A6=Do you advice your family and friends to take influenza vaccine?	145	72.5	32	16.0	23	11.5
A7=Do you prefer herbal medications (honey, nigella sativa& ginger) on influenza vaccine?	103	51.5	70	35.0	27	13.5

Table 4 : Distribution of study sample regarding Practices on .influenza

Practices statements	Correct answer		Incorrect answer		Don't know		Total
	.No	%	.No	%	.No	%	
P1=Are you using vaccine?	43	21.5	156	78.0	1	0.5	200
P2=Are you washing hands?	198	99.0	2	1.0		0	
P3=Are you using wearing mask?	46	23.0	147	73.5	7	3.5	
P4=Are you covering nose & mouth during sneezing & coughing?	188	94.0	11	5.5	1	0.5	
P5=Do you avoid crowding places?	127	63.5	60	30.0	13	6.5	
P6=Are you using over the counter medication?	149	74.5	50	25.0	1	.5	
P7=Are you using doctors prescribed medication?	123	61.5	75	37.5	2	1.0	
P8=Are you using home based remedies?	157	78.5	40	20.0	3	1.5	
P9=Do you isolation yourself when you infected?	128	64.0	69	34.5	3	1.5	

Table 5: Distribution of study sample regarding total level scores.

Level score	low	moderate	high	Total
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	.No	%	.No	%	N	%	
Level KAP on Influenza & Vaccination	115	57.5	49	24.5	36	18.0	200
Knowledge level on Influenza & Vaccine	113	56.5	55	27.5	32	16.0	
Attitude level toward Vaccine	120	60.0	43	21.5	37	18.5	
Practice level on Influenza	80	40.0	100	50.0	20	10.0	

:Table 6 Association between knowledge and practices on influenza & its vaccine.

Variables	Groups	level practices score			square-Chi	value-p
		Low	Moderate	High		
level knowledge scores	Low	52	54	7	^a 10.261	0.036
		%46.0	%47.8	%6.2		
	Moderate	21	28	6		
		%38.2	%50.9	10.9		
	High	7	18	7		
		%21.9	%56.3	21.9		

Table 7: Association between attitudes and practices on influenza & its vaccine.

Variables	Groups	level practices score			square-Chi	value-p
		Low	Moderate	High		
Level attitude scores	Low	57	56	7	12.314	0.015
		47.5	%46.7	%5.8		
	Moderate	13	25	5		
		30.2	%58.1	11.6		
	High	10	19	8		
		27.0	%51.4	21.6		



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