Measles Epidemic In Adults In Diwaniah Governorate.

Aqeel Reheem H. AL-Barqawi*

الخلاصة

تهدف الدراسة الى معرفة مدى انتشار مرض الحصبة بين الكبار بعد عمر الستة عشر سنة في مدينة الديوانية وقد وجد ان عدد المرضى 368 والنسبة الكبرى من المرضى بين عمر (16 -25) سنة ومعظم المرضى لم تكن ملقحة ضد مرض الحصبة والنسبة الكبرى من المرضى هم من سكنة القرى ومعظم المرضى اصيبوا باختلاج التهاب الرئتين والتهاب الامعاء.

Abstract

Background: **Measles is a highly infectious viral disease for which humans are the only reservoir and is highly preventable through vaccination.It is rare disease of Adults, large number of cases were observed during the late 2008 in adult patient.**

Objectives: **to study the abnormal and large epidemic of measles cases in adults in al-diwania city.**

Results: **368 of measles cases was admitted to infectious unit in al-diwania teaching hospital most of cases were male(58%) of cases, most of cases between the age of 16-25 yrs. (50%).vaccinated patient comprise just(34%) of cases, pneumonia was the most common complication.**

Aim of the study: **To address the abnormal and unexpected epidemic of measles cases in adult patients after the age of 16 years old in AL–Diwaniya city .**

Introduction

Measles is a very contagious disease caused by a virus that affects the respiratory tract, including the throat, bronchial tubes and lungs. Measles is also known as rubeola and is highly preventable through vaccination. It can be very serious and result in life-threatening complications. [(1)]

In history, measles caused devastating outbreaks, and nearly every child caught the measles. Outbreaks of measles declined dramatically with the invention of the measles, mumps, and rubella vaccine (MMR) to prevent these other contagious diseases.

although is it still widespread in developing areas of the world where vaccination is not common, such as Africa and Asia.

*Lecturer,College of Medicine-AL-Qadisiaya Unversity.

In the last several years, measles is again on the rise in the adults , due in part to a decrease in vaccination rates. [2]

The measles is extremely contagious, and nearly everyone who is exposed to the measles virus will get the disease unless they are immune to it. [1]

Symptoms of the measles affect the respiratory system and also include fever and a rash. Complications of the measles can be serious, even life-threatening, and include pneumonia, acute bronchitis, encephalitis, miscarriage and death.

Making a diagnosis of measles involves taking a thorough health history, including symptoms and vaccination and travel history, and performing a physical exam. This includes evaluating the rash that accompanies the measles. Some medical testing may be done to rule or confirm other diseases, such as pneumonia or influenza.[2]

It is possible that a diagnosis of measles can be delayed or overlooked because the disease is not common in the adult., and because the symptoms of measles can resemble symptoms or other disease.

Treatment of the measles includes measures to help relieve symptoms and keep the body as strong as possible to minimize the risk of developing complications.

Measles, mumps, and rubella were once very common diseases in adults, but they have become rare because of the use vaccination.

Treatment of the measles starts with prevention. The best protection from getting or spreading the measles is getting vaccinated as recommended with the measles, mumps, and rubella vaccine (MMR).[1]

Matrials and methods

During the period from first of December 2008 to the first of May 2009 an abnormally large number of cases of measles were admitted to the infectious unit in Diwaniya teaching hospital ,information was collected by questionnaire including age ,sex ,residence ,immunization status ,complications of measles ,duration of hospitalization ,frequency of death ,signs and symptoms .

All the gained data were analysed statistically ($P \leq 0.05$) based on *t*- test [3]

Results

During the period of the study from the 1st of December 2008 the 1st of may 2009 the number of cases was 368 who confirmed clinically as measles.

Figure (1) shows the distribution of the disease according to the sex of the study gp. Where males comprise 212 cases (58%) ,and the females were 156 cases (42%) . A significant differences (p≤ 0.05) between the study gp.

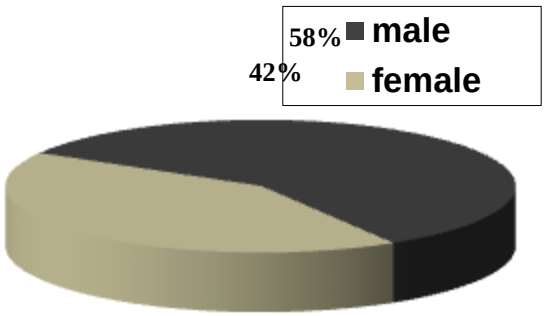

Figure -1: percent of measles cases according to sex.

Figure. 2. shows the distribution of cases according to age group ,50% of cases between the age of 16 – 25 years ,31% of case between the age of 26 – 35years , 17 % of cases between the age of 36 -45 years , 2% of cases after the age 46 years old . the statistical analysis revealed a significant differences (p ≤ 0.05) between the age group studied.

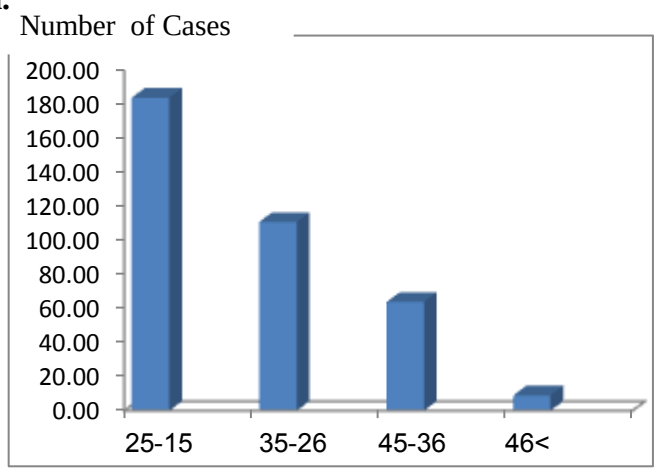

Figure- 2: No. of measles cases according to age gp.

In figure(3) show the distribution of cases according to residence area ,127 patients (35 %) were from urban area , 241 of cases (65%) were from rural area .A statistical analysis showed a significant differences (p ≤0.05) between the rural and urban area.

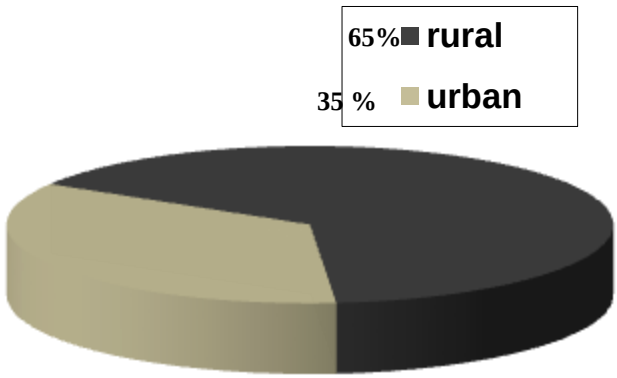

Figure -3 : percent of measles cases according to the Residence of the study samples .

Figure4 concern the number of cases who underwent vaccination ,the no. of patient who non vaccinated was 243 cases (66%) ,while the patients who vaccinated was 125 cases (34%),A statistical analysis showed significant differences (p ≤0.05) between vaccinated and non vaccinated patient.

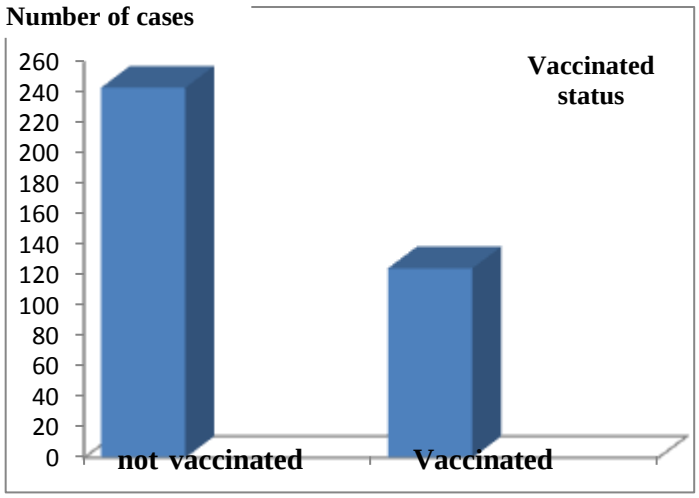

Figure -4:No. of measles cases according to vaccinated status of study gp.

Table (1) concern the complications of measles , pneumonia is the most common complication of measles which comprise (51.3%) of cases , followed by gastroenteritis which comprise (26%) , the third most common complication was otitis media which comprise (21.4%) of cases ,abortion comprise (1.08%)of cases .

Table -1:The Complications in the study sample

Complication	Number	Percentage
Pneumonia	189	51.3%
Gastroenteritis	96	26%
Otitis media	79	%21.4
Abortion	4	1.08%

Table 2. shows the duration of admission of patient to the hospital, most of cases need 1-5 days of admission which comprise (43.4%), while the duration 6-10 was (42.4%),and (14.2%) for duration admission (≥ 10 days). The statistical analysis showed no significant differences (p ≥ 0.05).

Table -2:No. and percent of measles cases according to duration of pts. Admission.

Duration (days)	Number	Percentage (%)
1 – 5	160	43.4
6 -10	156	42.4
> 10	52	14.2

Discution

Measles is an endemic disease in Diwania ,Iraq and many other countries including the developed countries ,outbreak of measles occur in other governorate like Babylon, missan ,thiqar,and muthana as shown in figure (5) (4).

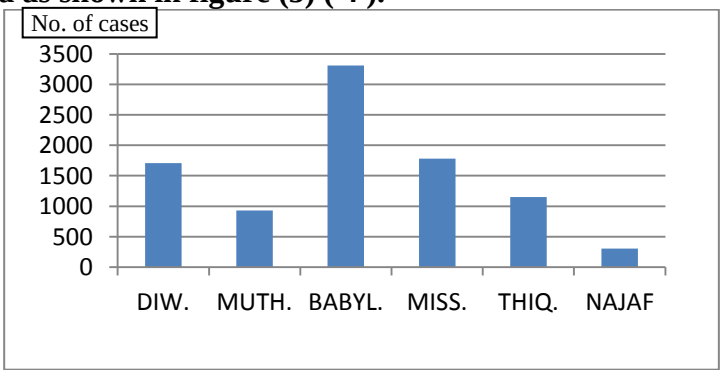

Figure-5:thefrequency of measles in comparison between diw.and other Iraq cities.

Concern the sex distribution of cases show that most of cases were male and less in female and this most likely due to that our populations habit that male who work and more liable for contact and get infection and this is similar to other studies [5,6,7]. In our study the most common the most common age affected between 16-25 yrs. and this most likely due to absence of vaccination because of the economic blockade on Iraq from 1991 and this similar to other studies [8 ,9] .

Concern the residence area most of cases from rural area and this most likely due to poor vaccinations coverage and this similar to other studies [6 ,10, 11 ,12].

Most of cases were non vaccinated in the study sample because of the economic blockade and due to vaccination failure in vaccinated one [11,12,13,14,15,16]. The frequency of complications in our patients is relatively high then in developed countries[9],the most common complication was pneumonia followed by gastroenteritis because of that measles virus has high virulence to the lung in adult [13,17,7,18].

Most of our cases admitted for 1 – 5 days and the second large number of cases admitted for 6 – 10 days this indicate that measles is more severe in adults then in children's [18].

Conclusions and Recommendations

1-measles in Diwaniya is not different from other governorate in Iraq because it endemic in Iraq.

2- Disease frequency increase in young adults with severe infection in adults then in children's .

3- Vaccination coverage in our country was poor in comparison to other countries .

4- Intensification of measles vaccination in adults and in children's .

5- Early detection of measles cases to prevent it complications and spread .

References

1-Steven j.,Maxine A. ,MEASLES ,current medical diseases and treatment ,Mc Grew hill,47th vol. ,2008: 486 -488.

2-David A. ,Timoth M., et al measles, oxford textbook of medicine ,4th ed.,vol.1,2003 :7.10.6.

3-Niazi A. A., statistical analysis in medical research , Republic of Iraq ,Al-nehrin university ,2000: p148.

4- Patrick w. Kelly ,Bruno P. et al ,the susceptibility of young adult Americans to vaccine preventable infections, JAMA ,vol.1 ,1991,266(19).
5-Salmoso S. et al new measles epidemics in Italy ,Euro surveillance ,vol.7 issue 2 ,2003.
6-Richrd JL .measles outbreak in swizeland, euro surveillance ,vol,13,issue 8 ,2008:217 -219.
7-Mahamood F.Saffar M. ,et al ,measles epidemiology in mazandan province ,Trop.Doc.v0l.7,iran 2002 :30 -32.
8-Gustafson TL., measles outbreak in fully immunized secondary school population ,26 ;316 1987 :771-774.
9-Gay N.Ramsay M. the epidemiology of measles in England and Wales, communicable Dis. Review ,vol.7 ,1997: 17-21.
10-Hull HF. ,measles mortality and vaccine efficacy rural west Africa ,Lancet , 1983,1(8331) :972-975.
11-Shu-knan lai, measles in Taiwan 1990-2008,vol. 26 ,issue 1,2010.
12-Amra uzicam et al ,Impact of the 1996- 97 supplement measles vaccination campaigns in south Africa ,international j. of epidemiology , vol.31 ,no. 5 ,2002 :986-976.
13-Nippon K.E., MEASLES .Epidemiology ,2009,56(9): 674-81.
14-Epidemiology of measles in addis ababa implication for control through vaccination ,epid. And infection vol. 30 (3) ,2002:507-519.
15-Perviz Asavia ,measles in united kingdom can we eradicated it by 2010 ,2006, 333 :89-95.
16-Sandra S. et al, prevention of measles susceptibility in hospital staff ,Arch inter. Med. ,1992 ,152(7) :1481-83.
17- Measles and mumps immunity in northern Greece , Euro surveillance vol. 13,(16) ,2008.
18-Measles in Japan, 2006-2007,IASR,28, no. 9 ,sept. 2007:239-240.