

النشرة الوبائية السعودية تصدرها وزارة الصحة

الوكالة المساعدة للطب الوقائي وبرنامج الوبائيات الحقلية
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Evaluation of injury surveillance system in Hajj 1425 Hijra.

The pilgrimage to Makkah (Hajj) is an annual congregation of more than 2 million Muslim pilgrims, the contact among pilgrims and high population density aggravates exposure of hajjes to the risk of injuries. In the past, injuries have been reported as component of the routine health care facility reporting system in Hajj, recently it has been identified as a separate entity in patient management system since Hajj 1423 H. This study was conducted as a cross sectional study by a team from Field Epidemiology Training Program (FETP) to evaluate different components of the Injury Surveillance System (ISS) during Hajj 1425 Hijra (2005 G).

A questionnaire was designed as combined observation/interview based, to record the existing organizational structure, system of injury registration and reporting, and an interview schedule for directors and health workers dealing with injured patients at first contact level in the facility to assess their knowledge and practices about injury reporting system and to assess the completeness of the injury management/ data collection forms. A team of two physicians visited all the participating health facilities i.e. all the hospitals in Makkah and dispensaries in Haram; and all the hospitals and 6 randomly selected Health Centers in Mina. During their visit they observed the system in general, interviewed each health facility director; one physician and one nurse/paramedical worker and reviewed official injury data collection forms, in accordance with the methodology mentioned earlier. Data collection was done from 2nd to 6th of Dhu'ul Hajja, 1425 in Makkah and from 7th to 12th Dhu'ul Hajja, 1425 in Mina.

As shown in table 1, the injured patient were received at reception desk to register before getting medical service in most of the facilities studied except Mina general hospital, Mina PHC No. 1 and Haram dispensaries where patient immediately received medical services without registration. Specially designed Hajj injury forms were utilized in all the Mina hospitals and 4 PHCs in Mina, while all Makkah hospitals and 2 PHCs in Mina used the General Hajj OPD form to manage the injured patients. However, the Haram dispensaries did not use any forms, and just entered all the injured patients in a register along with other patients. In all the Mina and Makkah hospitals, data is entered into computers which are di-

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rectly linked to the central computers at Makkah Regional Health Directorate and Ministry of Health Riyadh. In smaller facilities reports are sent by either telephone or fax. None of the facilities prepared a separate report detailing injuries, however King Abdul Aziz hospital Makkah, King Faisal Hospital Makkah and 2 health centers in Mina reported the injuries distinctly in their regular reports. Detailed data recorded in the new special injury patient management form was not used in reports of the facilities using those forms. In all the facilities visited, reports were sent to the higher authorities within the previous 12 hours. In Makkah regional directorate, Makkah hospitals and Mina Al Wadi hospital facilities existed to generate reports on real-time data, including general injury information. No communication with non-MOH facilities existed regarding reporting of injured patients.

The forms used for management of injured patients were evaluated and among the 180 forms evaluated in Mina health centers, 61.1% were filled for the location and type of injury and among the 90 forms evaluated in Makkah hospitals 90% had these sections filled. Among the 120 forms evaluated in Mina hospitals, 95% filled the code for provisional diagnosis of the patients (as there was no separate section for injuries in these forms).

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Editor's note: Injury is a serious public health issue with a major impact on lives, as a major cause of long and short term disability.¹ Development of a special surveillance system for injuries during Hajj was a major initiative taken by the Ministry of Health. Selecting injuries as an independent entity in the routine surveillance system, which has previously focused on communicable diseases,

was based on the dissimilar causation of injuries and preventive efforts required to minimize their occurrence and impact.

The Centers for Disease Control and Prevention, Atlanta, USA, recommends attributes such as simplicity, flexibility, acceptability, sensitivity, representativeness and timeliness for evaluating any surveillance system.²

Regarding simplicity, a surveillance system should produce all the information needed for informed decision making, in the simplest and most straight forward way possible without wastage of staff time by requiring repeated entry of the same information.^{2,3} This study showed that in the new data collection instruments, the amount of information has been kept to a minimum and the information transmission system was also quite straight forward. On the other hand, absence of cause of injury, its severity and part of body/organs involved limit the usefulness of information.

The surveillance system is also ex-

pected to be sensitive i.e. able to detect all injury cases.^{2,3,4} However, this study reflects that the existing system has a number of sensitivity issues, such as the absence of links to the non-MOH health facilities like Hamla doctors, foreign medical missions; and cases transferred to Makkah directly, especially for severe cases. Furthermore, most of the system hardly reports injuries as a distinct entity, even where it is reported it does not go beyond the total number of cases seen and even the small amount of information available in the forms does not reach the decision makers.

Completeness is another issue of quality in surveillance. As observed in this study the information related to patient identification is generally complete but had some lapses in areas which enable the health manager to understand the injury pattern or the outcome. Apparently, timeliness of the information flow upwards is not a

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Table 1: Injury Surveillance System at ER/OPD

Information	Mina PHCs (n=6)	Mina Hospitals (n=4)	Makkah Hospitals (n=4)	Haram dispensaries (n=1)
Registration of Patient at reception desk:				
Always	3	3	4	-
Mostly	2	-	-	-
Never	1	1	-	1
Type of forms				
Special Hajj injury form	4	4	-	-
General Hajj OPD form	2	-	4	-
Others (no form)	-	-	-	1
Preparation of injury report				
Separate report	-	-	-	-
Injury reported distinctly in general report	2	-	2	-
No reporting of injuries	4	4	2	1
Ways of sending report				
Fax	3	-	-	1
Telephone	3	-	-	-
Computer network	-	4	4	-

Al Muftaresheen Revisited, Hajj season 1425 H.

Living on the street during hajj is a major social and health problem that recurs annually. Several problems can occur to the Muftaresheen. In addition to hindering access of emergency vehicles, and interfering with the movement of both pedestrians and vehicles, the accumulation of waste on the streets, let alone their uncivilized sight, they are more likely to suffer from accidents and diseases. This study was conducted to investigate the demographic characteristics of the Muftaresheen in Mina, their behavior, social and health problems, and the reasons for their stay on the street.

A cross sectional study was conducted using Quota sampling technique. A questionnaire was designed and divided into 2 parts, the first for "Individual Hajjis" traveling alone, and the second for "Group Hajjis". Any male hajji who was considered as Muftaresh was interviewed. In case of groups of Hajjis traveling together, only one of them was interviewed. Data was collected from the 8th to 13th of Dhul-Hijjah, 1425 H.

The first part of the study involved 527 single hajjis, primarily located on the pedestrian road (74.4%). Most of them were domestic (91.5%), with 57.9% from Makkah region. Their mean age was 35.2 years (SD 9.8), most were married 74.7%, and from Arab countries 62%. Saudis consti-

tuted 2.7%. Almost half of the muftaresheen had an educational level of secondary school and above 45%. The mean monthly income of domestic muftaresheen was 1347.5 Saudi Riyals (SD 878.8). Regarding medical history, 4.2% had chronic diseases. Hajjis who had Hajj permission constituted only 16% of the sample and 11.4% had paid Hamlas for obtaining hajj permission. During their stay in Makkah, 22.8% had accommodation and only 21 (4%) had paid Hamla for residency in Mina. Of the sample, 54.3% were performing hajj as Muftaresheen with other people. Among those who had performed hajj previously, 81% were Muftaresheen during the last hajj. Only 47.6% had received Meningitis vaccine.

Of the total single hajjis, 12.3% had fallen sick, of who 70.8% had respiratory infection. 1.5% had been involved in accidents during their stay in Mina; of those 62.5% were stepped on by pedestrians, 25% were involved in accidents with vehicles, and 12.5% was stepped upon by moving crowd.

The total number of group hajjis was 1824, with a mean of 6.4 hajjis in each group. Out of who 11% were females, 2.2% were children, 4.6% were aged over 60, 84.6% were domestic, 26.6% had hajj permission, 51.7% had received meningitis vaccine, 5.4% had fallen sick, of who 67.3% had respiratory infection. 0.6%

had been involved in accidents during their stay in Mina.

Several reasons were given for living in the street in Mina, particularly expensive Hamlas or expensive Mina residency (75.5%).

Restaurants were the main source of food (57.3%). General public toilets were mainly used (96.2%). Regarding waste disposal, 84.8% stated that they disposed of waste in the large municipal street bins, 7.2% left it in plastic bags on the street, and 3% just threw it on the street.

Almost 86.5% got a chance to sleep in their places, mean sleeping hours in the last 24 hours was 4.3 hours (SD 2.1), 32.2% could not sleep well due to different reasons, noise was stated as the major cause (23.5%). Saudi authorities asked 10% to leave their places once; 8.8% were asked to leave 2 to 5 times, and 1% were asked to leave more than 5 times.

A large number (63.6%) stated that they had faced no problems as muftaresheen. The main problems stated were crowdedness 7.8%, difficulty obtaining food 4.6%, difficulty finding toilets 3.8%, fighting with other hajjis for the place 4%, and people stepping over them 1%.

Seventy six percent were satisfied with performing hajj as Muftaresheen. Among those planning to perform hajj next season, 53.3% stated that they

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Table 1: Factors affecting satisfaction of hajjis as Muftaresheen, hajj 1425H

	N	Satisfaction		OR	95 % CI	AOR	95 % CI
		Yes	No				
Place							
Jamarat area	62	64.5%	35.5%	0.58	0.33-1.03	0.93	0.44-1.98
Pedestrian road	392	75.8%	24.2%	Ref.	-	Ref.	-
Bridges	73	89%	11%	2.59	1.20-5.62	3.46	1.39-8.62
Nationality							
Arab	325	71.1%	28.9%	0.44	0.28-0.69	0.42	0.23-0.75
Non-Arab	199	84.9%	15.1%				
Changing place							
Regular place	369	80.2%	19.8%	1.97	1.29-3.00	1.72	0.97-50.0
Changeable place	156	67.3%	32.7%				
Sleeping hrs.							
≤ 4 hours	237	75.1%	24.9%	0.42	0.25-0.71	0.49	0.26-0.92
> 4 hours	195	87.7%	12.3%				
Involved in accidents							
No	519	77.1%	22.9%	11.1	2.04-50.0	7.31	0.74-72.1
Yes	8	25%	75%				
Asked to leave place							
No	421	78.9%	21.1%	1.98	1.24-3.15	1.28	0.68-2.42
Yes	104	65.4%	34.6%				

Avian Influenza: A new global threat?

There are three types of Influenza viruses: A, B, & C. Type A infects a variety of different host species, and consists of 16 subtypes of Hemagglutinin (H) surf protein, and 9 subtypes of Neuraminidase (N) surf protein (eg. H1N1, H2N2, H3N2). The H subtypes are epidemiologically most important, as they control the ability of the virus to bind to and enter cells, where multiplication of the virus then occurs. The N subtypes govern the release of newly formed virus from the cells. Type B is normally found only in humans, and can cause human epidemics but no pandemics. Type C causes mild illness in humans, and does not cause epidemics or pandemics.

The first Influenza Pandemic that occurred in 1918-19, "Spanish flu," was caused by type [H1N1] virus, and caused the highest number of flu deaths, such that 20-50 million people died worldwide, half of them young and healthy adults. The second pandemic occurred in 1957-58, "Asian flu," was first detected in china, and was caused by type [H2N2], appearing as an assortment of Human Virus and Avian Influenza Virus. The third pandemic occurred in 1968-69, "Hong Kong flu," was first detected in Hong Kong, was caused by type [H3N2], and was also an assortment of human virus and avian influenza virus.

Avian influenza, or "bird flu", is a contagious disease of animals caused by viruses that normally infect only birds and, less commonly, pigs. Avian influenza viruses are highly species-specific, but have, on rare occasions, crossed the species barrier to infect humans.

Domestic poultry are especially vulnerable to infections that can rapidly reach epidemic proportions. In domestic poultry, infection with avian influenza viruses causes two main forms of disease. The "low pathogenic" form commonly causes only mild symptoms, such as ruffled feathers, a drop in egg production, and may easily go undetected. The "highly pathogenic" form causes disease affecting multiple internal organs, and spreads very rapidly through poultry flocks, having a mortality that can approach 100%, within 48 hours.

Migratory waterfowl are the natural reservoir of avian flu viruses, and are known to carry viruses of the H5 and H7 subtypes, usually in the low pathogenic form. These, when introduced to poultry flocks, then mutate to the highly pathogenic form. However, recent evidence suggests that some migratory birds are now directly spreading the H5N1 virus in its highly pathogenic form.

Outbreaks in poultry occurred during 1983-4 in the USA, with H5N2 causing low mortality, which within 6 months became highly pathogenic, leading to a mortality of > 90%, and a decision of destruction of 17 million birds, at a cost of 65 million USD. Another outbreak occurred in Italy during 1999-2000 with H7N1 low pathogenicity, which within 9 months became highly pathogenic, leading to destruction of 13 million birds.

From mid-December 2003 through early February 2004, poultry outbreaks caused by the H5N1 virus were reported in eight Asian countries: Korea, Vietnam, Japan, Thailand, Cambodia, Lao People's Democratic Republic, Indonesia, and China. Most of these countries had never before experienced an outbreak of highly pathogenic avian influenza in their histories. In early August 2004, Malaysia reported its first outbreak of H5N1 in poultry. Russia reported its first H5N1 outbreak in poultry in late July 2005, followed by reports of disease in adjacent parts of Kazakhstan in early August. At the same time, Mongolia reported the detection of H5N1 in dead migratory birds. In October 2005, H5N1 was confirmed in poultry in Turkey and Romania. Outbreaks in wild and domestic birds are under investigation elsewhere. The current outbreaks of highly pathogenic avian influenza, are the largest and most severe on record. The causative agent, the H5N1 virus, has proved to be especially tenacious. Control of the disease in poultry is expected to take several years.

The widespread persistence of H5N1 in poultry populations poses two main risks for human health. The first is the risk of direct infection when the virus passes from poultry to humans, resulting in very severe disease. Of the few avian influenza vi-

ruses that have crossed the species barrier to infect humans, H5N1 has caused the largest number of cases of severe disease and death in humans. In the current outbreak, laboratory-confirmed human cases have been reported in five countries: Cambodia, Indonesia, Thailand, Vietnam and Turkey, over half of those infected have died. Most cases have occurred in previously healthy children and young adults. People became infected by direct contact with infected poultry, or surfaces and objects contaminated by their feces. To date, most human cases have occurred in rural or periurban areas where many households keep small poultry flocks, which they depend on for income and food, and are often allowed to roam freely in homes. Infected birds shed large quantities of virus in their faeces, which allows opportunities for exposure to infected droppings.

It has to be mentioned that the virus cannot spread easily from birds to humans. Although more than 100 human cases have occurred in the current outbreak, this is a small number compared with the huge number of birds affected and the numerous associated opportunities for human exposure.

It is of great concern that the virus, if given enough opportunities, may change into a form that is highly infectious for humans and spreads easily from person to person. Such a change could mark the start of a global pandemic.

With the H5N1 virus now firmly entrenched in large parts of Asia, the risk that more human cases will occur will persist. Each additional human case will give the virus an opportunity to improve its transmissibility in humans, which can occur via two principal mechanisms. The first is a "reassortment" event, in which genetic material is exchanged between human and avian viruses during co-infection of a human or pig. Reassortment could result in a fully transmissible pandemic virus, announced by a sudden surge of cases with explosive spread. The second is a more gradual process of adaptive mutation, whereby the capability of the virus to bind to human cells increases during

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will repeat hajj as Muftaresheen, the main reasons cited for this decision were low cost 76.3%, and easy to perform hajj rituals 18%. Factors influencing this decision were mainly satisfaction with staying as muftaresh this hajj season (OR 15.10, 95% CI 7.24 – 31.49; adjusted OR 18.52, 95% CI 8.55-40.00; and being muftaresh during previous hajj season (OR 4.87, 95% CI 9.24 – 25.59; adjusted OR 5.85, 95% CI 2.23-15.38). Reasons cited for future plan of not staying in the street among hajjis who plan to perform hajj in future seasons were mainly that hamlas are better 80.1%, more privacy 10.8%, and avoiding accidents 6.0%.

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Editorial notes: Hajjis spend around 4 days during hajj in Mina. The Saudi government has provided well-equipped camps for hajjis attached to organized Hamlas during their stay in Mina. The Muftaresheen, however, reside on the streets of Mina, where they sleep, eat, and carry out their daily activities, hence were given their name. They mainly reside on the pedestrian road, around Jamarat, around Al-Kaif mosque, around Mina general hospital and along the bridges.

Muftaresheen are at higher risk than other hajjis, where the environment is unsafe for women, children and the elderly. They are at greater risk of road traffic accidents, or people trampling over them in areas where large groups of people move. Their risk of infection is also higher as a result of the crowdedness, eating from exposed food sold by street vendors, and low vaccination coverage. They also face a number of other problems concerning sleeping, privacy, weather changes, crowdedness and fights over their location.

A previous study conducted by the Field Epidemiology Training Program on the Muftaresheen in 1420 H involving 412 Hajjis,¹ showed that 62% were domestic and about 95% were

non-Saudis. The proportion of domestic Muftaresheen has therefore increased from 62% in 1420 H to 84.6% in this study.

Meningococcal meningitis is a major health risk, especially during hajj², however, this study showed that almost half of the Muftaresheen had not received the meningococcal vaccine. The proportion of vaccinated hajjis among Muftaresheen fell from 81% in 1420 H,¹ to 51.7% in the current study.

In the previous study of 1420 H, the main reason reported for staying on the street was financial, and almost one third were not comfortable with performing Hajj this way.¹ Similarly, in this study the main reason stated for living on the street was expensive Hamlas or high cost of residence in Mina.

This study has demonstrated that the Muftaresheen phenomenon is continuous and repeated annually, such that 80.9% of those who had performed hajj previously had been Muftaresheen, and 53.3% of the Muftaresheen during this hajj season decided to be so again in future.

It seems that this phenomenon cannot be stopped, it can, however, be reduced, as suggested by the Muftaresheen themselves, by decreasing the cost of residence in Mina, providing free camps and decreasing the cost of Hamlas.

References:

1. Fatani AM, Al-Rabeah AM, Nooh RM, Al-Sehli AM, Mustafa T. Health status of non-organized hajjis (Muftaresheen) during 1420 H, Hajj season. *Saudi Epidemiology Bulletin*, 2001; 8 (2):9, 10,15.
2. Al-Mazrou YY, Al-Jeffri MH, Abdalla MN, Elgizouli SA, Mishskas AA. Changes in epidemiological pattern of Meningococcal disease in Saudi Arabia, does it constitute a new challenge for prevention and control?. *Saudi Med J*, 2004; 25 (10):1410-3.

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scenario would probably give the world some time to take defensive action.

In August 2005, the World Health Organization (WHO) sent all countries a document outlining the recommended strategic actions for responding to the avian influenza pandemic threat, aiming to strengthen national preparedness, reduce opportunities for a pandemic virus to emerge, improve the early warning system, delay initial international spread, and accelerate vaccine development.

Vaccines effective against a pandemic virus are not yet available. Vaccines produced for seasonal influenza but will not protect against pandemic influenza. Although a vaccine against the H5N1 virus is under development in several countries, no vaccine is ready for commercial production and no vaccines are expected to be widely available until several months after the start of a pandemic.

By early 2006, WHO will have a stockpile of antiviral medications, sufficient for 3 million treatment courses. Recent studies suggest that these drugs could be used prophylactically near the start of a pandemic to reduce the risk of emergence of a fully transmissible virus or at least to delay its international spread, thus gaining time to augment vaccine supplies. The neuraminidase inhibitors oseltamivir (Tamiflu) and zanamivir (Relenza) known to reduce the severity and duration of illness caused by seasonal influenza may improve prospects of survival if administered early, but clinical data are limited. However, the main constraints for neuraminidase inhibitors involve limited production capacity and its high price.

The WHO has urged all countries to develop preparedness plans, and has urged countries with adequate resources to stockpile antiviral drugs nationally for use at the start of a pandemic.

From: WHO. Epidemic and Pandemic Alert and Response. Avian influenza frequently asked questions.

http://www.who.int/csr/disease/avian_influenza/avian_faqs/en/index.html

ملخص باللغة العربية

تقييم نظام مراقبة وتبليغ الإصابات في موسم حج عام ١٤٢٥هـ

يقوم أكثر من ٢ مليون حاج بإداء الحج كل عام. ونتيجة للازدحام، البيئة الغير معروفة و الجهل يتعرض الحجاج لمخاطر الإصابات. على مدى سنوات، اتخذت حكومة المملكة العربية السعودية عدة اجراءات وقائية لتقليل حدوث الإصابات في الحج، ولكن مازال هناك عدد من الحجاج يتعرضون للإصابة، معظمهم يلجأون للعناية الطبية في الخدمات الصحية التابعة لوزارة الصحة بمكة والمدينة وعرفات.

تم إنشاء نظام مراقبة إصابات جديد منذ موسم حج ١٤٢٣هـ والذي يستخدم بيانات معالجة الإصابة وأدوات تبليغ منفصلة في كل الخدمات الصحية العاملة في الحج، الغرض الأساسي منه تقديم تقديرات دقيقة لحجم المشكلة بتوزيعها الجغرافي، الزمني والسكاني بالإضافة إلى نوع المصادر المستخدمة لمعالجتها، حتى يكون دليل مرجعي أساسي يتم الرجوع إليه في تخطيط الخدمات الصحية المتعلقة بالإصابات في الحج. و لكن منذ تطبيق هذا النظام لم يتم تقييمه بالنسبة لفعاليته في الميدان. تمت هذه الدراسة المقطعية لتقييم العناصر المختلفة لنظام مراقبة الإصابات في مستويات المعالجة المختلفة، وذلك بالمقابلة، الملاحظة و مراجعة التقنية لجمع المعلومات و البيانات، في ٤ مستشفيات في مكة، ٨ مستوصفات في الحرم، ٤ مستشفيات تابعة لوزارة الصحة في منى و ٣٩ مركزاً صحياً. قام فريق من برنامج الوبائيات الحقلية بزيارة المؤسسات الصحية المشاركة خلال الفترة من ٢ إلى ٦ ذوالحجة ١٤٢٥هـ في مكة المكرمة ومن ٧ إلى ١٢ ذوالحجة ١٤٢٥هـ في منى.

أوضحت الدراسة انه يتم استقبال المصاب و تسجيله قبل اعطائه العلاج في جميع المؤسسات الصحية المشاركة ما عدا مستشفى منى العام و مركز صحي منى (١) و مراكز الحرم الصحية، حيث يتلقى المصاب العلاج بدون تسجيل. و قد تم استخدام النموذج الخاص بتسجيل الإصابات في جميع المستشفيات و ٤ من المراكز الصحية، بينما في مستشفيات مكة و مركزان صحيان بمنى تم استخدام نموذج الحج العام للعديد الخارجية، بينما لم يستخدم أي نموذج في مراكز الحرم الصحية و انما تم تسجيل المصابين في السجل العام مع المرضى الآخرين. في جميع مستشفيات مكة و منى ادخلت البيانات في الحاسب الآلي المرتبط ارتباطاً مباشراً بالحاسب المركزي بمدينة الشئون الصحية بالعاصمة المقدسة ووزارة الصحة بالرياض. بينما تم ارسال المعلومات من المؤسسات الصحية الأصغر حجماً بالفاكس أو الهاتف. و لا يوجد اي اتصال مباشر أو تنظيم بين المؤسسات الصحية الخاصة ووزارة الصحة بالنسبة للتبليغ عن الإصابات.

من خلال تقييم نماذج التبليغ عن المصابين، تبين انه من بين ١٨٠ نموذج في المراكز الصحية بمنى فقط كان بدون بها نوع و مكان الإصابة، مقارنة بـ ٩٠% من ٩٠ نموذج بمستشفيات مكة. كما وان النماذج المعدة لمراقبة الإصابات لا تحتوي على خانة لتدوين سبب

الإصابة، مدى قوتها أو موضع الإصابة بالجسم، مما يحدد فائدتها. أوضحت الدراسة انه لم يتم تطبيق نظام مراقبة الإصابات الجديد بالطريقة المرجوة، كما لم يتم تدريب العاملين المسؤولين عن تطبيقها بالشكل الكافي.

إعداد: منيرة الزامل، د. مسلم أبو حسن، د. أسامة الحياتي، د. عبدالله أبو ميل، د. عادل تركستاني، د. عبدالجمل شودي (برنامج الوبائيات الحقلية).

دراسة عن الحجاج المفترشين خلال موسم حج ١٤٢٥هـ

تشكل الإقامة في مشعر منى أطول فترة زمنية يقضيها الحاج أثناء الحج. يقوم بعض الحجاج باتخاذ الشوارع و الطرقات و الميادين مكاناً لإقامتهم في منى و يطلق عليهم (المفترشين). و هي ظاهرة تتكرر سنوياً و لها سلبيات عديدة، فالمفترشون يشكلون عنقاً للمشاة و جميع أنواع المواصلات خاصة سيارات الإنعاف، بالإضافة إلى خطر تعرضهم للحوادث. قرر برنامج الوبائيات الحقلية القيام بدراسة مقطعية تعنى بالحجاج المفترشين لموسم حج ١٤٢٥هـ. لدراسة التغيرات في خصائصهم العلمية عن آخر دراسة تناولت المفترشين قام بها البرنامج عام ١٤٢٠هـ. الجزء الأول من الدراسة شمل ٥٢٧ مفترشاً بمفرده، و الثاني تناول المفترشون في مجموعات ١٢٩٧ شخصاً.

بلغ متوسط أعمار المفترشين الأفراد ٣٥,٢ سنة (الانحراف المعياري ٩,٨)، أنهى النسبة الأكبر الشهادة الثانوية ٤٥,٧%، ٧٤,٧% متزوجين، ٩١,٥% من حجاج الداخل، و معظمهم من الدول العربية ٦٢%. بلغ متوسط دخلهم الشهري ١٣٤٧,٥ ريال (الانحراف المعياري ٨٧٨,٨). كان ٤,٢% يعانون من أمراض مزمنة، ٤٠% من داء السكري يليه ارتفاع ضغط الدم ٢٠%. الذين حصلوا على تصريح الحج هذا العام ١٦%، ٥٥% منهم من حجاج الداخل. ٤٧,٦% فقط تلقى لقاح الحمى الشوكية. من الذين جاءوا للحج أكثر من مرة، أقر ٨١% بأنهم كانوا مفترشين في آخر مرة. أسباب الإفتراش كانت مختلفة، أهمها غلاء الحملات أو غلاء الإقامة في منى (٧٥,٥%).

شعر ١٢,٣% بالمرض خلال فترة تواجدهم في منى، من هؤلاء أصيب ٧٠,٨% بالتهاب في الجهاز التنفسي. قام (٢٦,٢%) من هؤلاء المرضى بمراجعة المراكز الصحية الحكومية. تعرض ١,٥% إلى حوادث، ٦٢,٥% منهم داس عليه المشاة العابرون، و ٢٥% تعرض لحادث اصطدام مع المركبات، و نتيجة لذلك أصيب ٢٥% منهم أصيب إصابة تطلبت تدخلاً طبياً. كان هناك مكان ثابت للإفتراش لـ ٧٠%، بينما ١٥,٦% كانوا يتجرون أماكنهم يومياً و ١٤% كانوا يتجرون أماكنهم عدة مرات في اليوم. وقد نتج عن اختيار مكان معين للإفتراش ثوب شجار مع ٤% من أجل المكان.

بالنسبة للمفترشين في مجموعات ١٨٢٤، شكلت الإناث ١١% و الأطفال ٢,٢%، و الذين أعمارهم أكبر من ٦٠ عاماً ٤,٦%، وكان ٨٤,٦% من حجاج الداخل. بلغت نسبة الذين

حصلوا على تصريح لحج هذا العام ٢٦,٦% فقط، و نسبة الذين تلقوا لقاح الحمى الشوكية ١٧,٣% (٥,٤%). أصيبوا بالمرض، منهم ١٧,٣% التهاب في الجهاز التنفسي. نسبة من تعرض لحوادث ٠,٦%، من هؤلاء تعرض ٣٦,٤% إلى حادث تصادم مع إحدى المركبات و ٢٧,٣% تعرض لإصابة تطلبت تدخلاً طبياً. و قد دخل ١,٢% في شجار من أجل مكان الإفتراش. معظم المفترشون ٥٠,٣% كانوا يحصلون على طعامهم من المطاعم في منى، ٩٦,٢% استخدموا دورات المياه العمومية، ٨٤,٨% كانوا يتخلصون من النفايات بوضعها داخل صناديق القمامة الموجودة في الشارع، ٧,٢% كانوا يضعونها في أكياس بلاستيكية و يتركونها في الشارع، و ٣% يتكون النفايات على قارعة الطريق.

استطاع ٨٦,٥% الحصول على فرصة للنوم في أماكن الإفتراش، و قد بلغ متوسط ساعات النوم في الساعة الأخيرة ٤,١ ساعة (الانحراف المعياري ٢,١). عن الأسباب التي منعتهم من النوم، الضجيج ٥٦,٩%، الأرضية الغير مريحة ٤,٧%، الزحام ١٠,١%، الأضواء ٧,٨%، و الطقس البارد ٤,١%. و قد قام الممنولون السعوديون بأمر ١٠,١% مفترشاً بترك مكانه في الشارع مرة واحدة، بينما تعرض ٨,٨% لهذا الأمر مرتين إلى ٥ مرات و تعرض ١% لهذا أكثر من ٥ مرات.

أجاب ٧٦,٣% عن رضاهم عن أدائهم الحج كمفترشين، و يخطط ٦٩,١% أداء الحج في السنوات المقبلة، من هؤلاء أقر ٥٢,٣% بأنهم سيفترشون مستقبلاً لانخفاض التكلفة ٧٦,٣%. بالنسبة لإقتراحات الحجاج لمنع ظاهرة الإفتراش في السنوات المقبلة، كانت خفض سعر الإقامة في مخيمات منى ٣٩,٧%، توفير مخيمات مجانية في منى ١١,٨%، و تقليل سعر الانضمام إلى الحملات ٠,٣%.

أثبتت الدراسة ان الإفتراش ظاهرة تتكرر سنوياً، و أن الغالبية العظمى من المفترشين من حجاج الداخل، و مقارنة بالدراسة التي أجريت عام ١٤٢٠هـ و التي كانت نسبة حجاج الداخل فيها ٦٢% فهناك ازدياد واضح لأعداد المفترشين من حجاج الداخل. أما بالنسبة إلى المفترشين من الجنسية السعودية (٢,٧%) فهي أقل من الدراسة السابقة (٥%). و قد أوضحت الدراسة أن نسبة تلقي لقاح الحمى الشوكية بين الحجاج المفترشين أقل بكثير من الدراسة السابقة و التي كانت فيها نسبة التطعيم ٨١%. و بجانب ذلك أثبتت الدراسة وجود سلوكيات خاطئة للمفترشين كرمي النفايات على الطريق و الشجار من أجل المكان.

تم التوصية على العمل على رفع وعي الحجاج بمخاطر الإفتراش أثناء الحج و زيادة الأنظمة المتعلقة بالحصول على تصاريح الحج، و التشديد على جميع الحجاج بالالتزام بالتعليمات خاصة لقاح الحمى الشوكية، مع العمل على توفير حملات ذات أسعار تناسب ذوي الدخل المحدود.

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Evaluation of injury surveillance system, cont...

(Continued from page 18)

problem, as the reports including injury cases are transmitted almost on 1-2 hourly basis in PHCs, while the data in hospitals is transmitted instantaneously to all concerned through the computer network.

The new ISS has been established in Hajj for over 2 years. Our study revealed that its implementation is still patchy. Efficient working of a surveillance although depends a lot on a good design, in the field, however, it primarily depends on the manpower involved in its implementation, which in turn is the product of training and motivation of staff. Unfortunately, it appears that in this ISS training the staff have been ignored completely.

The new hajj ISS is only working in Mina PHCs at present; and except for the timeliness issue, it needs a lot of modification to improve its deficient areas especially incomplete coverage, non-availability of standard operating procedures, poor staff training, weak supervisory and feedback mechanism, and lack of communication with non-MOH facilities.

References:

1. Canadian Injury Prevention Strategy. Toronto, Ontario: Canadian Injury Surveillance Strategy Meeting, summary report, 2003. [cited 2005 Jul 9]. Available from: http://www.injurypreventionstrategy.ca/downloads/Surv_Mtg_Sum_R_ep.pdf
2. Holder Y, Peden M, Krug E et al. Injury surveillance guide lines. WHO/NMH/VIP/01.02. Geneva: World Health Organization, 2001.
3. Klaucke DN, Buehler JW, Thacker SB, Parrish RJ, Trowbridge FL, Berkelman RL. Guidelines for evaluating surveillance system. *MMWR*, 1988; 37 (S-5): 1-18
4. Lyons RA, et al. Development and use of population based injury surveillance system: The all Wales injury surveillance system (AWISS). *Injury prevention*, 2002; 8: 83-6.

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Inside the Kingdom

December 5-7, 2005: The International Conference of Advanced Child Health Care.

Venue: King Fahad Medical City, Riyadh, KSA.

Contact: Academic and Training Affairs, King Fahad Medical City, POBox 59046, Riyadh 11525.

Tel. No.: +966-1-465-6666 ext. 7202 or 4123. Fax: +966-1-465-6666 ext. 4292.

Email: cme@kfmc.med.sa

Website: www.kfmc.med.sa

December 20-21, 2005: Spatial and Temporal Clustering of Diseases and Risk Assessment in Public Health.

Contact: Academic and Training Affairs, CME Section, King Faisal Specialist Hospital and Research Centre, MBC-36. POBox 3354 ·Riyadh 11211.

Tel. No.: +966-1-442-7238 Fax: +966-1-442-4153 /+966-1- 442-7237

Email: web_symposia@kfshrc.edu.sa

Website: www.kfshrc.edu.sa/symposia

March 15, 2006: Workshop on Diabetes Mellitus in children & adolescents.

Venue: King Fahad Medical City, Riyadh, KSA.

Contact: Academic and Training Affairs, King Fahad Medical City, POBox 59046, Riyadh 11525.

Tel. No.: +966-1-465-6666 ext. 7202 or 4123. Fax: +966-1-465-6666 ext. 4292.

Email: cme@kfmc.med.sa

Website: www.kfmc.med.sa

Outside the Kingdom

November 11-13, 2005: Fourth Lebanese Society of Family Medicine Conference: Connecting body and mind.

Venue: West Hall, American University of Beirut, Beirut, Lebanon.

Contact: Bassem Saab

E-mail: brsaab@aub.edu.lb www.infomedweb.com

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Dr. Abdul Jamil Choudhry
Consultant Epidemiologist.

Selected notifiable diseases by region, Jul – Sept 2005

	Riyadh	Makkah	Jeddah	Madinah	Taif	Qassim	Eastern	Hasa	Hafr Al-Batin	Asir	Bisha	Tabuk	Hail	Al-Shamal	Jizan	Najran	Baha	Al-Jouf	Goriat	Gonfuda	Total	
Measles	8	0	27	0	10	0	2	0	0	0	0	14	0	0	0	0	1	0	0	0	0	62
Mumps	5	0	0	0	1	0	4	0	0	0	0	0	0	0	0	1	0	0	0	0	0	11
Rubella	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Varicella	1037	88	456	276	106	698	556	764	142	806	118	408	101	50	204	103	217	4	36	2	6172	
Meningitis mening.	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Meningitis other	20	4	40	6	26	4	0	6	0	0	0	3	1	0	5	3	0	0	0	0	0	118
Hepatitis B	194	23	281	67	18	75	56	8	1	55	11	83	8	21	19	7	56	0	1	15	999	
Hepatitis C	150	6	258	36	16	39	35	7	0	35	21	41	4	10	4	0	24	0	0	4	690	
Hepatitis unspecified	28	0	6	0	0	0	2	11	0	8	0	50	0	0	60	19	0	0	0	0	184	
Hepatitis A	47	21	28	64	3	28	4	7	22	33	11	55	79	41	9	4	1	7	3	0	467	
Typhoid & paratyphoid	3	1	0	7	0	1	3	7	1	25	1	0	4	18	3	0	2	0	1	0	77	
Amoebic dysentery	9	0	457	5	8	4	19	20	1	56	48	0	8	0	10	4	29	0	1	0	679	
Shigellosis	11	0	2	1	0	8	5	0	3	0	0	6	0	6	1	2	3	0	0	0	48	
Salmonellosis	131	0	38	14	0	7	76	40	10	12	12	23	0	0	3	8	12	0	0	0	386	

Comparisons of selected notifiable diseases, Jul - Sept 2004-2005

DISEASE	Jul-Sep 2005	Jul-Sep 2004	Change %	Jan-Sep 2005	Jan-Dec 2004	DISEASE	Jul-Sep 2005	Jul-Sep 2004	Change %	Jan-Sep 2005	Jan-Dec 2004
Cholera	4	5	-20	10	14	Meningitis mening.	3	3	0	14	10
Diphtheria	0	0	0	7	0	Meningitis other	118	130	-9	342	508
Pertussis	11	30	-63	19	64	Hepatitis B	999	1316	-24	3178	4594
Tetanus, neonat	4	4	0	16	37	Hepatitis C	690	844	-18	1960	2981
Tetanus, other	2	2	0	8	11	Hepatitis unspecified	184	291	-37	972	1260
Poliomyelitis	0	0	0	0	2*	Hepatitis A	467	705	-34	1795	2999
Guillain Barre Syndrome	15	22	-32	87	99	Typhoid & paratyphoid	77	92	-16	271	365
Measles	62	213	-71	258	1775	Amoebic dysentery	679	754	-10	2179	2696
Mumps	11	44	-75	114	349	Shigellosis	48	55	-13	139	310
Rubella	2	2	0	5	17	Salmonellosis	386	615	-37	985	1829
Varicella	6172	10400	-41	36051	67451	Brucellosis	942	1460	-35	3093	5169

* Imported cases

Diseases of low frequency, Jul – Sept 2005

Yellow fever, Plaque, Poliomyelitis, Rabies, Haemolytic Uraemic Syndrome: No Cases

Pertussis: 11 Cases (Qassim 10, Hasa 1)

Neonatal Tetanus: 4 Cases (Jeddah 3, Makkah 1)

Ecchinococcosis: 2 Cases (Baha)

Guillain Barre Syndrome: 15 Cases (Riyadh 7, Asir 2, Jeddah 2, Makkah 1, Najran 1, Tabuk 1, Hafr Al-Batin 1)