

Sources of health education for international Arab pilgrims and the effect of this education on their practices towards health hazards in hajj, 1427 H (2006).

The Saudi Ministry of Health provides numerous curative and prophylactic services during hajj. One of these services is the health education program to increase the awareness of pilgrims on the health hazards that they may encounter. This cross-sectional study was conducted to identify the sources of health education to international Arab pilgrims, and to assess the degree of benefit from this education, during Hajj 1427 H. Study subjects were selected by stratified random cluster sampling. A self administered questionnaire was used for data collection.

Important health education messages were evaluated, whether pilgrims had received health education on these topics, and whether received in their native countries, on their way to Saudi Arabia, or in Saudi Arabia. Also, pilgrims knowledge was evaluated on 9 important hajj topics: ensuring the expiry dates of foods; food storage; avoiding crowded areas; washing hands before and after eating; avoiding used shaving blades; using the wrist band; avoiding other people's nasal secretions; taking the meningitis vaccine before coming to hajj; using an umbrella; and use of face-mask. The final score was calculated out of 9, after which pilgrims were divided into two groups: those who scored 5 and above as having good knowledge and those who scored 4 and under as having poor knowledge.

A total of 500 pilgrims participated in this study, representing 15 Arab countries. The highest proportion (20.2%) came from Egypt, while the lowest came from Mauritania (3.0%); 90% were male; their ages ranged from 11 to 84 years (mean 43.5, Standard deviation \pm 11.9); 53.0% had an education level of university and above, while 6.2% were illiterate; those performing hajj for the first time were 67.4%; 95.8% had come with an organized hamla. Transportation into Saudi Arabia was by airplanes (75.6%), cars or buses (21.2%), or ships (3.2%).

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Assessment of Knowledge, Attitude, and Practices of MOH Physicians toward surveillance system, cont...

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Over two-thirds (73.8%) had received health education, either in their native countries (64.6%), on their way (40.8%), or after reaching Saudi Arabia (45.4%).

To simplify analysis and comparison, international Arab countries were divided into 3 categories: Arabian Gulf countries, non-gulf Asian Arab countries, and African Arab countries. The highest health education had been provided to Arabian Gulf pilgrims (83.0%), and the lowest among Non gulf Asian Arabic Countries (54.6%). This difference in health education was statistically significant ($p < 0.0001$).

The most frequent channel used for providing health education to pilgrims in native countries was television (56.7%), pamphlets (45.5%) and lectures (44.9%).

All participating pilgrims answered that the ministries of health (MOH) were the largest source of health education in their native countries (69.0%), followed by hajj hamlas (44.0%) and Ministries of hajj (30.0%).

Regarding the timing of starting health education at native countries, 31.3% stated that it started one month before hajj, 27.2% two months before hajj, 19.5% with the beginning of the hajj journey, and 22.0% did not know. Among all participants who had received health education in their native countries, 45.5% believed that the timing of providing health education at their native countries was enough, 27.6 thought it was not enough, and 26.9 had no opinion.

About 41% stated that they had received health education on their way to Saudi Arabia. The percentage was highest among those who came by land (46.2%), followed by those who came by sea (43.8%) and air (39.2%), but there was no statistically significant difference ($p = 0.41$).

Among those who had received health education on their way to Saudi Arabia and had arrived by airplanes, channels used were pamphlets (49.3%), lectures (43.2%), and advice from other pilgrims (29.7%). Among pilgrims who had traveled by land, pamphlets were also used most frequently (61.2%), lectures (51.0%), and other pilgrims advice (32.7%). Among those who had traveled by sea, pamphlets (85.7%),

followed by audio cassette (42.9%), and other pilgrims advice (42.9%).

After reaching Saudi Arabia, only 45.4% stated that they had received health education; pamphlets were the most frequent channel used (64.8%), followed by posters (37.9%) and television (30.4%). Among those who declared having received health education in Saudi Arabia, 60.8% stated that the MOH was the largest source of health education, followed by the Ministry of Hajj (56.8%) and general security (20.7%). Over half had received health education in Saudi Arabia at arrival points (58.1%), followed by all holy places (53.7%), and hotels in Makkah (37.0%).

Regarding knowledge of the pilgrims of important Hajj topics, those with good knowledge constituted 58.2%, and those with poor knowledge 41.8%.

Regarding the effect of health education on knowledge of pilgrims of health hazards, among those who had received health education, 58% had good knowledge and 42.0% had poor knowledge. Among those who had not received any kind of health education, 58.8% had good knowledge, and 41.2% had poor knowledge. The association of the effect of health education on knowledge of pilgrims was not statistically significant ($P = 0.56$).

The effect of health education on practices of pilgrims towards health hazards is demonstrated in Table 1.

- Reported by: Dr. Ibraheem M. Al-Zahrani, Dr. Abdul Jamil Choudhry, Dr. Nasser AlHamdan (Field Epidemiology Training program).

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Table 1: Effect of health education on practices of pilgrims towards health hazards that may be encountered by pilgrims during hajj, 1427 H.

Health education message	Pilgrims practice Count (row %)		P-value
Importance of taking meningitis vaccine (n = 500)			
Message:-	Vaccine received	No vac. received	< 0.001
- received	289 (92.3)	24 (7.7%)	
- not received	153 (81.8%)	34 (18.2%)	
Importance of choosing suitable clean place for hair shaving (n= 405)			
Message:-	Barber shop	Other place	0.367
- received	99 (53.5%)	86 (46.5%)	
- not received	114 (51.8)	106 (48.2%)	
Importance of choosing suitable clean place for hair shaving (n= 405)			
Message:-	Razor blade	Other device	0.525
- received	60 (32.4%)	125 (67.6%)	
- not received	72 (32.7%)	148 (67.3%)	
Importance of avoiding sharing razor blades (n = 132)			
Message:-	not shared	Shared with other	0.053
- received	55 (91.7%)	5 (8.3%)	
- not received	59 (81.9%)	13 (18.1%)	
To carry some emergency medications during hajj journey (n = 191)			
Message:-	Carried	Not carried	0.038
- received	62 (63.3%)	36 (36.7%)	
- not received	47 (50.5%)	46 (49.5%)	
Wearing face mask to minimize acquiring infection (n = 500)			
Message:-	Used face mask	Never used mask	< 0.0001
- received	162 (70.1%)	69 (29.9%)	
- not received	135 (50.2%)	134 (49.8%)	
Importance of wearing identification wrist band (n = 500)			
Message:-	Use of wrist band or other device	Nothing used for identification	0.241
- received	239 (92.6%)	19 (7.4%)	
- not received	220 (90.9%)	22 (9.1%)	

Assessment of knowledge, attitude and reported practices of surveillance teams in Holy places during Hajj 1427 H.

During Hajj each year, special teams are formed to implement the Surveillance system. Efficient functioning of this system is dependent on competent personnel who perform their duties in accordance with its standard protocols.¹

This is a cross sectional interview-based study. Its objectives were to assess the knowledge and practices of members of the surveillance teams during Hajj. The study was conducted among all staff of the surveillance teams assigned to the Holy places during Hajj season 1427 H.

The level of knowledge among members of surveillance teams was assessed for each specialty in 3 fields: knowledge of the basic components of surveillance system, knowledge of infectious diseases of special importance during hajj, and knowledge of protocol of duties assigned by MOH to all teams according to each specialty. They were classified as "Satisfactory" (50% correct answers) and "Not Satisfactory" (< 50% correct answers) according to the scores they received.

The total number of surveillance team members interviewed were 62; 22 (35.5%) physicians, 22 (35.5%) nurses, and 18 (29%) health inspectors, working at 5 hospitals in Makkah; 18 (29%) at Ajjad hospital, 17 (27.4%) at King Abdulaziz hospital, 16 (25.8%) at King Faisal hospital, and 11 (17.7%) at Alnoor and Hiraa hospitals.

Participants were allocated by MOH into 2 types of teams: 41 (66.1%) field teams and 21 (33.9%) internal teams (working inside the hospitals only). Each team included physicians, nurses, and health inspectors. Their experiences in the health field ranged from 3-30 years, 4 (6.5%) had never worked previously in hajj, and 8 (12.9%) had never previously worked with surveillance teams during hajj. Ages ranged from 22-55 years (mean 40.4), males constituted 82.3%. Nationality distribution was: Saudis 24 (38.7%), Egyptians 14 (22.6%), and Sudanese 12 (19.4%), who together comprised (80.7%) of the total team members, the rest belonged to 7 different nationalities.

Those who had received training were 62.9%. Regarding participants' level of knowledge of the basic components of the surveillance system;

35.5% were satisfactory, and 64.5% were not satisfactory. As for each specialty, 68.2% of physicians, 9.1% of nurses and 27.8% health inspectors had satisfactory level of knowledge (p-value < 0.001). Among those with satisfactory knowledge, 48.7% had received training in surveillance. (p-value < 0.001).

Regarding knowledge of infectious diseases of special importance during hajj, 64.5% had satisfactory knowledge, and 32.3% did not. As for level of knowledge for each specialty, 86.4% of physicians, 50% of nurses, and 55.6% of health inspectors were satisfactory. Among those with satisfactory level of knowledge 76.9% had received training (p-value < 0.001).

Regarding knowledge of the protocol of duties assigned by MOH to all teams according to each specialty, 70.9% were satisfactory, and 29.1% were not. As for each specialty, 72.7% of Physicians, 77.3% of nurses, and 61.1% of health inspectors were satisfactory.

- Reported by: Dr. Adel Abubakr, Dr. Osamah Alhyani, Dr. Abdul Jamil Choudhry, Dr. Randa Nooh (Field Epidemiology Training Program).

Editorial notes: The health surveillance program in Saudi Arabia began in 1933 with a royal decree implementing communicable disease prevention. In 1940, Aramco began malaria control activities, particularly in the Eastern Regions, to protect its employees from major endemic health problems. Taking its responsibility as the site of Islam's two holiest cities seriously, the government started its own malaria control efforts in 1952 in order to protect pilgrims on their route to Makkah and Madinah. This program was later expanded to include

all malarious areas in the kingdom. In 1963, the government and the World Health Organization agreed on a plan of operation along the lines of the worldwide malaria control program. In 1979, the first comprehensive annual report of communicable diseases was published by the department of preventive medicine, MOH, and the surveillance system has been expanded over the years.^{2,3}

This study showed that physicians had significantly better knowledge of the surveillance system as compared to nurses and health inspectors. The level of knowledge among those who had received training was significantly better than those who had not. It is therefore obvious that training and education make a difference in the level of knowledge of team members about the surveillance system, and the important infectious diseases during Hajj.

It was recommended that MOH intensify training sessions to members of the surveillance teams in hajj, especially for health inspectors and nurses. Another study should be conducted to assess the real practice of surveillance teams not only reported practices to help bridge the gap between practice and theory.

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Table 1: Relationship of health status factors with development of foot ulcers among male diabetic patients in Riyadh, Saudi Arabia 2007.

Knowledge	OCCUPATION			
	Health inspector	Nurse	Physician	Total
Satisfactory	5 27.8%	2 9.1%	15 68.2%	22 35.5%
Not Satisfactory	13 72.2%	20 90.9%	7 31.8%	40 64.5%
Total	18 100.0%	22 100.0%	22 100.0%	62 100.0%
Chi-squared = 17.436				
P-value < 0.001				

Work-time Behavioral Risk Factors among Slaughterhouse Workers in Mina during Hajj, 1427 Hijra.

Annually more than two million Muslims congregate in Makkah to perform Hajj. In Mina each Hajjee sacrifices at least one animal, usually a sheep, as one of the essential rituals of Hajj. A huge number of animals are sacrificed within three days (between the 10th to 12th Dhul Hajja) in accordance with Islamic teaching. Performing this kind of work within a few days requires a large number of slaughter house workers.

This descriptive cross-sectional study was conducted in Almuaisem slaughterhouses in Mina, during Hajj 1427 H. It aimed to identify high risk behaviors of slaughterhouse workers that exposed them to occupational hazards in relation to their demographic characteristics, in addition to estimating the prevalence of skin lesions on their hands. Data was collected by a pre-prepared questionnaire consisting of two parts. The first part was completed through interview with butchers and other workers, inquiring on personal data including age, nationality educational status, work experience, type of function, compensation, hours of daily work, product per hour, type of handled animal and information about cutting or other type of injury during work. The second part was completed by observation of the workers during implementation of their work. Data was collected during the period from 10th to 12th Dhul Hajja, 1427 H.

The study included 300 workers as a representative sample which was selected randomly from five slaughter houses. Their mean age was 35 years (SD ±7 years).

According to type of function, the participating workers were divided into three groups: Group A included 196 (65.3%) butchers who dealt with meat using sharp instruments, Group B included 60 (20%) butchers who dealt with meat without using sharp instruments, and Group C included 44 (14.7%) workers who did not deal with meat and did not use sharp instruments, but were responsible for cleaning the work areas and fed transported animals.

Among the participants 205 (68.3%) were of Syrian nationality, 58 (19.3%) Egyptian, 11 (3.7%) Yemeni, 11 (3.7%) Bangladeshi, 8 (2.7%) Ethiopian and

7 (2.3%) Tchadians. Workers who dealt with butchering were Syrians and Egyptians. Syrian butchers dealt exclusively with goats and sheep, while Egyptian butchers dealt with cows and camels.

Regarding education, 6.0% were illiterate, 31.3% Primary School, 43.7% Middle School and 19.0% High School or above. The majority (84.3%) claimed that they had a valid health certificate, but were not available for examination at the time of interview, while 15.3% did not have a valid health certificate. Only 29.3% had been instructed about safety measures before working at these slaughterhouses.

Ninety percent of the workers had been hired internationally and 10% locally; 44.3% were compensated by a lump sum for the whole season, 27.7% on a daily basis and 25.7% were compensated per unit (animal).

Specific dress cover was used by 63%, gloves by 8.3%, masks by 2.3%, head covers by 10.0%, and protective shoes (boots) by 41%.

During the current working season in Mina, 13.0% of the 300 had suffered from a cutting injury. The majority of injured cases (76.3%) had not sought medical care, 19.4% received dressing only, while 5.3% had been stitched with dressing. A higher prevalence of cutting injuries was recorded among

butchers from Egypt than those from Syria; 27.6% and 8.8% respectively. The prevalence of cutting injuries among knife users (Group A) was higher than among non-knife users (group B) and non-butcher workers (Group C); 15%, 8.7% and 11.4% respectively. There was no significant association between the prevalence of cutting injuries and type of functional group.

The prevalence of cutting injuries was four times higher among those who were compensated per unit (22.1%) than those compensated by lump sum (5.3%) and one and a half times that among those compensated daily (16.2%). There was a statistically significant association between the prevalence of cutting injuries and type of compensation of butchers (P < 0.001).

The prevalence of cutting injuries was higher among cow handlers (32%) than that among camel (28.1%) and goat handlers (8.1%). There was a significant association between the prevalence of cutting injuries and type of handled animal (P < 0.0001).

When comparing the prevalence of injuries among workers by type of shoe worn, injuries were two times higher among sandal/slipper wearers (21.1%) than among boot wearers (9.8%) and three times more than among normal shoe wearers (6.1%). This difference

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Table 2: Relationship of Life style factors with development of foot ulcers among male Saudi diabetic patients in Riyadh, Saudi Arabia , 2007

Variable	Injury		Total	Chi-square	P-value
	Yes (%)	No			
Functional Groups					
A (Knife users butchers)	28 (15.0)	159	187	1.88	0.391
B (Non-knife users butchers)	6 (8.7)	63	69		
C (No knife, no meat handling)	5 (11.4%)	39	44		
Type of Compensation					
Per Unit (animal)	17 (22.1)	60	77	13.66	0.001
Lump sum for whole season	7 (5.3)	126	133		
On daily basis	14 (16.2)	71	85		
Type of Handled Animal					
Cows	8(32.0)	17	25	19.39	<0.000
Camels	9 (28.1)	23	32		
Sheep/Goats	17 (8.1)	194	211		
Type of Shoes Used					
Sandal/Slippers	23 (21.1)	86	109	10.22	<0.001
Long shoes (Boots)	12 (9.8)	111	123		
Normal shoes	4 (6.1)	62	66		

Work-time Behavioral Risk Factors among Slaughterhouse Workers in Mina, cont...

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was statistically significant ($P < 0.006$). The prevalence of injuries among glove and non-glove wearers was 12% and 13.1% respectively, and the difference was not statistically significant.

On inspection of the hands and forearms of slaughterhouse workers, 19% had old scars, 3.7% open sores, 6.3% dermatitis, 4% warts, 0.3% fungal nail infection and 0.3% blisters. The highest prevalence of skin lesions was observed among butchers of group A; 28.9% old scars, 4.8% open sores, 8.0% dermatitis, 5.9% warts and 0.5% fungal nail infection; In Group B, the prevalence was 4.3% old scars, 1.4% open sores, 2.9% dermatitis and 1.4% blisters; and in Group C, the prevalence was 2.3% open sores, 4.5% dermatitis and 2.3% warts.

- Reported by: Dr. Salem Al-Katheri, Dr. Abdul Jamil Choudhry, Dr. Osamah Al Hayani, Dr. Nasser Al Hamdan. (Field Epidemiology Training Program).

Editorial notes: Butchers and other meat handlers are prone to high disease transmission from infected animals, mainly as a result of poor safety practices and unhygienic behavior.^{1,2,3} Even minor cutting injuries can serve as a portal of entry for microbiologic agents, culminating in serious infection to the injured individual.^{1,2,3,4}

Despite the heavy workload at Almuaiyesem slaughterhouses, compounded by poor safety practices among temporary slaughterhouse workers, the majority of observed injuries were minor. The relative limitation of serious injuries among the butchers is probably due to newly applied safety measures, semi-automated work and other facilities in these slaughterhouses.

Our study attempted to identify the main work-time behavioral risk factors among the current batch of slaughterhouse workers and association of these factors with the occurrence of injuries. Low awareness and poor hygienic practices can explain the occurrence of cutting injuries among non-knife users, and the high prevalence of injuries among cow and camel handlers compared with sheep/goat handlers.

Functional groups of workers were significantly different in acquiring cutting injuries as a result of the type of

handled animal, type of shoes used and method of compensation, while there was no difference regarding use or none use of knife and gloves. Other risky behaviors that may cause direct injury or facilitate transmission of infection included placing the knife in the mouth during work, none use of protective shoes, masks, and gloves, in addition to not changing or cleaning of dress cover during the work session. Findings of this study regarding the existence of some types of skin lesions on the hands and forearms of butchers such as skin sepsis, warts and dermatitis are consistent with those of several other studies.^{4,5,6}

Strict demand of pre-employment examination for all slaughter house workers within Saudi Arabia, and arrangement of training sessions on hygienic and safety measures before the beginning of the work season in Mina slaughter houses are recommended. The role of health inspectors for covering all related aspects of supervision should be enhanced, and more coordination between the administrations of slaughter houses in Mina and the Ministry of Health is also required.

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Sources of health education for international Arab pilgrims, cont...

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Editorial notes: The main objective of health education in hajj is to increase the awareness of pilgrims on the health hazards that they may encounter, mainly focusing on food and personal hygiene, precautions to minimize acquiring infections from others, heat-related illness, use of identifying wristbands, avoidance of crowds, and hygienic head shaving.^{1,2}

Each country should provide health education on the hazards encountered during hajj to their native pilgrims before hajj, since they know the cultural, social, and educational background of their people, resulting in more effective health education.³ In this study, about two thirds of pilgrims had received health education in their native countries. The highest percent was among Gulf countries, which is expected, considering their better economical condition which may enhance the ability to use different educational channels. In comparison with a previous study,⁴ there was a significant improvement in the provision of health education in Gulf countries from 54.3% to 83%, but fell in other Arab countries from 67% to about 60% in our study.

Pamphlets were the most common channel used to deliver health messages to pilgrims of Gulf countries, while television was the most common in other Arab countries. Pamphlets and TV are good examples of mass media but remain a one way channel of communication. Direct and interpersonal communication, such as lectures and doctors' advice are more persuasive and effective. The superiority of interpersonal communication over mass media for creation of motivational effect has been well documented.⁵

Health education received on the way to Saudi Arabia had an advantage that pilgrims were located in one place at the same time. However, less than half the pilgrims had received health education by this means, with better health education provided to those traveling by land. This could be due to longer

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ملخص باللغة العربية

ذلك، بينما أمكن التحقق من وجود بطاقة صحية صالحة لدى عامل واحد فقط وأما ١٥,٣٪ منهم فقد أفادوا بعدم حيازتهم لشهادات صحية سارية المفعول.

بينت الدراسة أن ٧٠,٧٪ لم يتم تعريفهم على أية إجراءات تتعلق بالسلامة أثناء العمل في هذه المسالخ. أما من حيث الالتزام بالإجراءات الوقائية، فقد تبين أن ٦٣٪ فقط يرتدون المبريول الخاص بالعمل، وأن ٧٦,٧٪ من المبريولات المستخدمة لا يتم تنظيفها أو استبدالها طيلة أيام العمل. هناك ٩١,٧٪ لا يرتدون القفازات الخاصة، أما الكمامات فإن استخدامها يكاد يكون معدوماً. غطاء الرأس الواقي لم يستخدم من قبل ٩٠٪، الحذاء الطويل الواقي [البوت] تم استخدامه من قبل ٤١٪. من السلوكيات الأكثر خطورة تم رصد حالتين ممن وضعوا السكين بالفعل أثناء تأدية العمل.

تم رصد جروح قطعية بين ١٣٪ من العاملين تركزت بصورة أساسية بين عمال الجزارة الذين استخدموا الأدوات الحادة. وقد حدثت ٨٢,٢٪ منها في اليدين و١٥,٨٪ منها في القدمين. وكانت العلاقة معتبرة بين النسبة الأعلى من الإصابات القطعية المرتبطة بجزارة الأبقار والجمال مقارنة بتلك المرتبطة بجزارة غيرها من المواشي، حيث كان معدل الإصابة بين العاملين في جزارة الأبقار والجمال ٢٧,٧٪ بينما كان المعدل بين العاملين في جزارة الأغنام ٨,٨٪. كما كانت العلاقة الإحصائية معتبرة بين العاملين بالأجر المقطوع بالرأس العاملين بالأجر اليومي ومع العاملين بالأجر المقطوع طيلة فترة العمل، حيث كانت نسبة الإصابة بينهم ٢٢,١٪، ١٦,٢٪ و٥,٢٪ على التوالي.

ما كشفت عنه الدراسة من استخدام محدود مختلف وسائل الوقاية أثناء العمل من جانب عمال المسالخ وعدم الاطلاع الكافي على إجراءات السلامة في موقع العمل بالإضافة إلى عدم استخراج الشهادة الصحية وبعض الممارسات ذات الخطورة ووجود بعض الأوقات الجلدية، كلها يمكن أن تشكل عوامل خطورة مباشرة سواء في ارتفاع معدل الإصابات بين العاملين أو في انتقال بعض الأمراض من الحيوانات المريضة إليهم.

وبذلك تم التوصية على وجوب خضوع كل عمال المسالخ في منى للفحص الطبي في المملكة العربية السعودية قبل مباشرتهم العمل بما في ذلك الفحص للتأكد من خلوه من الأوقات الجلدية وألا يسمح بالعمل إلا للذين تم تزويدهم بشهادات صحية تثبت صلاحيتهم للعمل بناء على تلك الفحوصات الطبية. بالإضافة ينبغي خضوعهم لدورة حول السلوكيات الصحية وإجراءات السلامة قبل بدء العمل. كما يجب تعزيز جوانب التنسيق المختلفة بين وزارة الصحة وإدارة المسالخ وخاصة فيما يتعلق بالفحص الطبي للعاملين قبل مباشرة العمل، التوعية الصحية، مراقبة تطبيق إجراءات الصحة والسلامة في مسالخ منى والحفاظ على جودة الخدمات الصحية المقدمة للعاملين في هذه المسالخ وتحسينها باضطراد.

إعداد: د. سالم هياش الكثيري، د. أسامة الحيايني، د. عبد الجميل شودي (برنامج الوبائيات الحقلية).

وقد أفاد ٤٥,٤٪ بأنهم قد تلقوا التثقيف الصحي في المملكة، وتعتبر هذه النسبة قليلة إذا ما قورنت مع الجهود المبذولة من قبل وزارة الصحة في هذا المجال. وقد أجاب ٥٨,١٪ بأنهم تلقوا التثقيف عند نقطة الدخول إلى المملكة. وكانت المطويات هي الأكثر استخداماً ٦٤,٨٪.

تم التوصية على تقوية برنامج التثقيف الصحي للحجاج العرب القادمين من الخارج والمقدم من قبل وزارة الصحة السعودية من خلال زيادة توزيع وسائل التثقيف المصدرة كالمطويات التثقيفية عوضاً عن الملصقات واللوحات الإعلانية، توفير مواد تثقيفية للحجاج بصورة أكثر في الأماكن التي يتواجدون فيها لأوقات أطول مع ضرورة التركيز على أهمية التطعيم ضد الحمى الشوكية، الاحتياطات الصحية عند حلق الشعر للتخلل من الإحرام، طرق الوقاية السليمة لتجنب العدوى.

إعداد: د. إبراهيم الزهراني، د. عبد الجميل شودي (برنامج الوبائيات الحقلية).

عوامل الخطورة في سلوك عمال المسالخ أثناء ممارسة المهنة في منى خلال فترة موسم الحج لعام ١٤٢٧ للهجرة.

خلال أيام معدودات من الحج، تتم تقديم الأضاحي ونحر أعداد كبيرة من المواشي. ومن أجل إنجاز هذه المهمة يتم استخدام أعداد كبيرة من عمال المسالخ كل عام. وقد لوحظ خلال الأعوام الماضية عدم التزام معظم هؤلاء العمال الموسمييين بالاشتراطات الصحية المطلوبة، الأمر الذي من شأنه أن يعرضهم لمخاطر الإصابة ببعض الأمراض.

هدفت الدراسة إلى تحديد السلوكيات ذات الخطورة العالية بين عمال المسالخ في منى خلال موسم حج عام ١٤٢٧ هـ، تقدير معدل انتشار الأوقات الجلدية على اليدين بينهم ودراسة العلاقة بين السلوكيات الخاطئة والخصائص الديمغرافية للعاملين. تم إجراء الدراسة باستخدام المسح المقطعي بين عمال المسالخ بمشعر منى. تم جمع المعلومات بواسطة استبانة مسبقة التجهيز خلال الفترة من ١٠ إلى ١٢ ذي الحجة ١٤٢٧ هـ.

شملت الدراسة ٣٠٠ جزاراً وعمالاً في مسالخ منطقة منى اختيروا بطريقة عشوائية، وكان متوسط العمر بينهم ٣٥ سنة. وتبعاً لجنسياتهم فقد مثل السوريون ٦٩,٣٪، المصريون ١٩,٣٪، البنغاليون ٣,٧٪، اليمينيون ٣,٧٪، الأثيوبيون ٢,٧٪ والشاديون ٢,٣٪.

تم استخدام ٩٠٪ من العمال من الخارج بموجب عقود خاصة، أما المتبقين فهم من العمالة المقيمة في المملكة جرى التعاقد معهم محلياً لتأدية العمل في المسالخ أثناء فترة الحج. وقد تبين أن ٤٤,٣٪ يعملون بأجر مقطوع متفق عليه مسبقاً طيلة موسم العمل، ٢٧,٧٪ يعملون بأجر يومي، ويعمل ٢٥,٧٪ بالأجر المقطوع على أساس الرأس.

ادعى ٨٤,٣٪ أنهم خضعوا للكشف الطبي في بلدانهم قبل التحاقهم بالعمل إلا أنه لم يكن بالإمكان التحقق من ذلك لعدم إبرازهم البطاقات الصحية التي تثبت

مصادر التثقيف الصحي المقدمة لحجاج الدول العربية، وتأثير هذا التثقيف على سلوكهم تجاه المشاكل الصحية التي يواجهونها في الحج. لحج عام ١٤٢٧ هـ.

يعتبر التثقيف الصحي من أهم الوسائل الفعالة في تحسين إدراك الحجاج بالمخاطر التي قد يتعرضون لها وفي تغيير سلوكهم تجاه هذه المخاطر. تتم عملية التثقيف بطرق مختلفة تبدأ من بلدان الحجاج القادمين منها وتستمر إلى أن يغادر الحجاج الأماكن المقدسة. تهدف هذه الدراسة إلى تحديد رسائل التثقيف الصحي الرئيسية التي تقدم للحجاج القادمين لأداء فريضة الحج لعام ١٤٢٧ هـ، دراسة العلاقة بين التثقيف الصحي و سلوك الحجاج تجاه المخاطر الصحية في الحج، مقارنة التثقيف الصحي المقدم للحجاج في بلدانهم مع ذلك المقدم لهم بالمملكة، وتقديم الاقتراحات المناسبة المعتمدة على البراهين لتحسين الطرق المتبعة في التثقيف الصحي.

استهدفت هذه الدراسة المقطعية حجاج الدول العربية القادمين من خارج المملكة لأداء فريضة الحج. تم اختيار العينة بطريقة عشوائية عنقودية بسيطة. جمعت المعلومات في منى خلال الفترة من العاشر إلى الثاني عشر من شهر ذي الحجة.

بلغ العدد الكلي للحجاج المشاركين في الدراسة ٥٠٠ حاجاً، يمثلون ١٥ دولة عربية. وقد مثل الحجاج القادمون من دولة مصر أعلى نسبة مشاركة (٢٠,٢٪)، بينما كانت أقل مشاركة للحجاج القادمين من دولة موريتانيا (٣٪). تراوحت أعمار المشاركين ما بين ١١ إلى ٨٤ سنة، والوسط العمري كان ٤٣,٥ سنة (انحراف معياري $\pm ١١,٩$). كان معظم المشاركين في الدراسة من الذكور (٩٠,٢٪).

معظم الحجاج استخدموا الطائرة في رحلتهم إلى السعودية (٩٧,٦٪)، بينما كانت نسبة الذين أتوا عن طريق البحر ٢١,٢٪، والذين أتوا عن طريق البحر ٣,٢٪.

شكل الحجاج الذين تلقوا تثقيفاً صحياً عن مشاكل الحج نسبة ٣٣,٨٪، حيث كانت أعلى نسبة من الحجاج قد تلقوا التثقيف في بلادهم التي أتوا منها بنسبة ٦٤,٤٪، بينما كانت نسبة الحجاج الذين تلقوا تثقيف صحي أثناء الطريق إلى السعودية ٤٠,٨٪، وفي السعودية كانت النسبة ٤٥,٤٪.

تنوعت الوسائل المستخدمة في التثقيف الصحي ما بين المسموع والمرئي والمقروء، ففي دول الخليج العربية أكثر نسبة من الحجاج تلقوا التثقيف الصحي عن طريق المطويات ٦١,٥٪، تليها المحاضرات المتلقاه من حملات الحج ٥٣,٨٪، ثم عن طريق التلفاز ٤٨,٧٪. أما في الدول العربية الآسيوية الغير خليجية فقد كان التلفاز هو الأكثر وسيلة تلقى للتثقيف بنسبة ٥١,٦٪، تليها المحاضرات ٤٨,٤٪، ثم المطويات ٤٢,١٪. وكانت وزارات الصحة هي المصدر الأكثر تقديماً للتثقيف في جميع الدول العربية.

بلغت نسبة الحجاج الذين تلقوا التثقيف الصحي أثناء الرحلة إلى المملكة حوالي ٤٠,٨٪، وكانت الوسيلة الأكثر استخداماً للتثقيف هي المطويات.

Sources of health education for international Arab pilgrims, cont...

(Continued from page 229)

available time for those who used land transportation arriving by buses with organized hamalas.

Less than half the international Arab pilgrims stated that they had received health education in Saudi Arabia in spite of the large effort made by the kingdom during hajj, when large numbers of pamphlets, posters, and tapes are distributed to pilgrims in many languages annually to achieve this purpose.⁶ This could be due to lack of pilgrims time, or distribution of educational materials in areas where pilgrims are scarce.

Among pilgrims who had received health education in Saudi Arabia, over 50% had received it at arrival points, but only 12% received it in Mina where hajjis reside for more than 3 days, and which represents a good location for provision of health education.

Heat exhaustion and heatstroke are common and can be fatal during Hajj, as evidenced by one study that reported over 1700 fatalities in a single Hajj season, most of which were judged to be heat related.⁷ In spite of its importance, only less than 50% of pilgrims received messages regarding the importance of taking precautions to avoid direct exposure to the sun.

Head shaving is one of the common practices among male hajjees. Using razor blade, especially if this blade was used by another, can increase the risk of blood borne infections such as HIV and hepatitis B and C from infected individuals.² In spite of the importance of this issue, the message given in this regard was received by less than 50% of pilgrims in our study. However, when compared with previous studies,⁴ the practices of pilgrims of shaving their head hair has improved. Only about one-third of pilgrims chose razor blade for head shaving, only 2.3% of whom shared their blades with others, and over 50% of pilgrims chose to shave their heads at specialized barbershops.

Every year the messages provided to pilgrims should be reviewed according to changes in health hazards. Nowadays, with Hajj occurring during the winter months, the hazard of rain has emerged, which requires more health education efforts. However, this was found to be the least message given in our study.

This study has demonstrated that health education received by international Arab pilgrims remains inadequate.

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Selected notifiable diseases by region, Oct - Dec 2007

	Riyadh	Makkah	Jeddah	Madinah	Taif	Qassim	Eastern	Hasa	Hafr Al-batin	Asir	Bisha	Tabuk	Hail	Al-Shamal	Jizan	Najran	Baha	Al-Jouf	Goriat	Gorfu	TOTAL	
Measles	0	0	4	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
Mumps	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Rubella	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Varicella	1283	99	548	259	184	2297	763	1627	197	1173	304	706	287	157	121	314	158	203	46	28		10754
Meningitis mening.	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Meningitis other	12	1	17	1	12	6	5	2	1	3	0	5	0	0	1	0	0	2	0	0	0	68
Hepatitis B	185	0	198	59	22	60	87	6	1	66	10	76	5	5	36	18	0	46	0	15		895
Hepatitis C	123	0	220	27	7	30	60	5	1	40	13	12	1	1	7	8	0	11	0	9		575
Hepatitis unspecified	2	0	0	3	0	0	1	3	0	4	0	1	0	0	22	0	0	0	0	0		36
Hepatitis A	59	13	29	26	0	27	8	13	7	41	0	24	2	18	28	26	5	0	59	0		385
Typhoid & paratyphoid	1	2	26	3	0	2	9	6	10	3	0	0	2	0	0	0	1	0	1	0		66
Amoebic dysentery	27	0	598	6	13	4	65	37	1	38	9	4	0	0	3	1	5	0	1	2		814
Shigellosis	4	0	3	1	0	1	4	2	1	0	0	0	0	0	0	15	0	0	0	1		32
Salmonellosis	129	2	33	6	0	5	103	25	5	8	22	10	0	0	2	20	0	9	1	1		381
Brucellosis	79	9	10	34	30	121	61	9	29	216	32	7	26	5	28	20	0	15	1	6		738

Comparisons of selected notifiable diseases, Oct - Dec 2006-2007

DISEASE	Oct - Dec 2007	Oct - Dec 2006	Change %	Jan - Dec 2007	Jan - Dec 2006	DISEASE	Oct - Dec 2007	Oct - Dec 2006	Change %	Jan - Dec 2007	Jan - Dec 2006
Cholera	2	2	0	4	10	Meningitis mening.	2	5	-60	13	22
Diphtheria	0	0	0	3	2	Meningitis other	68	74	-8	316	395
Pertussis	3	7	-57	68	34	Hepatitis B	895	1030	-13	4501	4264
Tetanus, neonat	5	2	150	21	18	Hepatitis C	575	722	-20	2776	2964
Tetanus, other	2	1	100	6	8	Hepatitis unspecified	36	67	-46	192	691
Poliomyelitis	0	0	0	0	0	Hepatitis A	385	460	-16	1383	2631
Guillain Barre Syndrome	21	24	-13	93	105	Typhoid & paratyphoid	66	71	-7	281	293
Measles	12	290	-96	4648	807	Amoebic dysentery	814	709	15	3645	2907
Mumps	2	3	-33	32	79	Shigellosis	32	54	-41	154	149
Rubella	0	2	-100	32	23	Salmonellosis	381	364	5	1894	1572
Varicella	10754	7744	39	47691	43070	Brucellosis	738	726	2	4194	3997

Diseases of low frequency, Oct - Dec 2007

Yellow fever, Plaque, Poliomyelitis, Rabies, Haemolytic Uraemic Syndrome, Echinococcosis: No Cases
 Pertussis: 3 Cases (Jeddah 1, Qassim 1, Jazan 1)
 Neonatal Tetanus: 5 Cases (Makkah 3, Jeddah 1, Madinah 1)
 Guillain Barre Syndrome: 21 Cases (Riyadh 9, Jeddah 6, Madinah 3, Najran 2, Hail 1)