

Prevalence of Hepatitis B and C among Thalassemia and Sickle Cell Disease Patients in Al Ahsa region, 1428 H.

Sickle cell disease and Beta Thalassemia major are common diseases in Saudi Arabia, especially in Al Ahsa region, and are associated with high morbidity and mortality. Blood transfusion is the mainstay of management of these patients, which places them at a definite risk of acquiring blood-borne diseases, such as hepatitis B and C, which could add to their suffering. The objective of this study was to assess the prevalence of Hepatitis B and C among Sickle Cell Disease (SCD) and Thalassemic patients in Al Ahsa region. The study was conducted as a cross-sectional health facility based survey, based on patient's records and interview. The study involved 75 thalassemia patients registered at the Thalassemia center, and 251 sickle cell disease patients registered at King Fahad Hospital, Prince Bin Jalawy Hospital and Maternity and Children Hospital in Hofuf .

The age of SCD patients ranged from 7 to 55 years (mean $22.1 \pm$ Standard Deviation (SD) 10.2 years). Males constituted 47.4% and females 52.6%. All were Saudis except for one Palestinian. Of the total, 58.6% had been diagnosed below 5 years of age, 31.1% were diagnosed at age between 6-10 years, and 10.3% were diagnosed at 11 years and above (mean 6.4 years, SD \pm 4.8). Based on hemoglobin electrophoresis at time of diagnosis, only 0.8% had HbS above 90%, 15.1% had HbS ranging from 81-90%, 38.2% had HbS ranging from 71-80%, 31.1% had HbS ranging from 61-70% and 14.7% had HbS ranging from 50-60%. Of the total, 29.9% also had G6PD deficiency.

The majority of SCD patients (90.4%) had received blood transfusions through their lives. Regarding the number of blood units transfused over the whole life, 59.4% had received 1-5 units, 18.3% had received 6-10 units, and 12.7% had received 11 or more units (Mean blood units transfused 6.4, SD \pm 4.8). Hemolysis was the most common indication for blood transfusion (51.0%), followed by post-

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operative blood transfusion (13.7%), and infection (13.7%). Among SCD patients, 70.1% had some dental procedure and 45.0% had some surgical procedure performed in their life. Surgical procedures performed included cholecystectomy (58.7%), splenectomy (13.2%) and Hip replacement (4.9%).

Of the total SCD patients, 18.3% had positive hepatitis C virus (anti-HCV) antibodies, 1.2% were HBsAg positive, and 0.4% had both anti-HCV and HBsAg positive.

As shown in table 1, higher age ($P<0.001$), higher number of blood units transfused ($P=0.01$), higher number of dental procedures ($P=0.03$) and having a surgical procedure ($P=0.04$) were found to be significantly associated with being Hepatitis C positive in SCD patients; while no association was observed with gender.

Regarding the 75 Beta thalassemia patients, 46.7% were male. Their ages ranged from 2 to 30 years (mean 12.8 years, $SD \pm 6.1$). Among the total, 30.7% were diagnosed under 1 year of age, 53.3% at age 2 to 3 years, and the rest were diagnosed between 4 to 5 years of age. All thalassemic patients were vaccinated against hepatitis B. All received regular blood transfusions every 3-4 weeks; 21.3% had received up to 50 units of blood throughout their lives, 26.7% had received between 51-100 units, 32.0% between 101-150 units, and 20.0% over 151 units (mean 104.9 units, $SD \pm 66.2$). Of the total, 42.6% had some dental procedure and 18.7% had some surgical operation performed during their life. Among those who had surgical operations, 78.9% had splenectomy and 21.4% had cholecystectomy. Of the total, 13.3% had positive hepatitis C virus antibodies (anti-HCV) and none had positive HBsAg.

There was a statically significant association between Hepatitis C and the number of blood units received, the highest proportion of hepatitis C (46.7%) was among patients who had received over 150 blood units ($P<0.001$). Hepatitis C was found among 28.1% of Beta thalassemia patients who had received dental treatment compared to 2.3% among those who had never

received any dental treatments ($P=0.001$). Among those who had some surgical procedure, 28.6% had hepatitis C, compared to 9.8% among those who had not ($P=0.08$).

- Reported by : Dr. Hanan Al-Sheikh, Dr. Abdul Jamil Choudhry (Field Epidemiology Training Program).

Editorial notes: Hemoglobinopathies are an important group of diseases in Saudi Arabia, especially in Al Ahsa region.¹ SCD is a serious debilitating disease, which can lead to life threatening complications, in addition to its social and economic implications for the patient and family, and the increase in the financial burden on health services.^{2,3} The situation is even worse among Beta thalassemia patients, where the child becomes symptomatic within a few months and dependent on blood transfusion. Endocrine abnormalities become evident in the second decade of life, and can lead to growth retardation.⁴

In spite of the fact that the prevalence of Hepatitis B has fallen after introduction of the vaccine, to

less than 2% in Western Europe and North America, it remains high in developing countries, up to 8%.⁵ In the absence of vaccine against hepatitis C, infection remains a major public health problem worldwide. The World Health Organization estimates that about 170 million people, or about 3% of the world population, are infected with hepatitis C.⁶

In this study the prevalence of Hepatitis C was 18.3% among SCD and 13.3% among Beta thalassemia patients, while Hepatitis B was found among only 1.2% of SCD patients and none of the Beta thalassemia patients. This major difference between both disease groups can be attributed to the availability of vaccination against Hepatitis B, that does not exist for Hepatitis C. All Beta thalassemic patients had received three complete doses of hepatitis B vaccine, while 54.4% of SCD had not. It should be mentioned that there is a protocol of regular screening of Beta thalassemic patients every 6 months for Hepatitis B markers and immunity, whereby if the immunity is found to be low, the patient would be given another series of vaccine,

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Table 1: Demographic characteristics, and risk factors for Hepatitis B and C among SCD and Thalassemia patients, Al Ahsa, 1428 H.

Demographic and risk factor	Hepatitis C status				Total	P-value
	Positive (N =46)		Negative (N =205)			
	No.	%	No.	%		
Age group						
0-10 Year	0	0	28	100.0	28	<0.00
11-20 Year	6	6.7	84	93.3	90	
21-30 Year	23	26.4	64	73.5	87	
>30	17	36.9	29	63	46	
Sex						
Male	22	18.5	97	81.5	119	0.95
Female	24	18.2	108	81.8	132	
Blood units transfused						
None	4	16.7	20	83.3	46	0.01
1-5 units	18	12.1	131	87.9	149	
6-10 units	13	28.3	33	71.7	46	
> 11 units	11	34.4	21	65.6	32	
Dental procedure						
None	10	13.3	65	86.7	75	0.03
1-5	28	18.1	127	81.9	155	
6-10	8	38.1	13	61.9	21	
Surgical procedure						
Yes	27	23.9	86	76.9	113	0.04
No	19	13.8	119	86.2	138	

Saudi Premarital Screening Program: Public view after 3 years of implementation.

The Saudi Premarital Screening Program (SPSP) became mandatory since 1425 H. This study aims to explore public attitudes towards consanguinity, SPSP legislation, increasing the number of screened diseases and the different reproductive alternatives for incompatible couples.

This cross-sectional study was conducted at a sample of Primary Health Care (PHC) centers of the Ministry of Health (MOH) in Al-Ahssa region, Eastern Province, Saudi Arabia. Stratified single-stage cluster sampling with probability proportionate to size was used as a sampling method to select centers from the 3 health sectors of the region. The total sample size was 356 randomly selected Saudi visitors to the sampled centers, 18 years and above, with equal gender distribution. A pre-designed interview-based questionnaire was used for data collection.

The sample consisted of 178 males and 178 females. Their ages ranged from 18 to 66 years (mean 33.2, Standard Deviation (SD) \pm 11.46 years). Eighty two (23.0%) were single, 9 (2.5%) were engaged, and 251 (70.5%) were married. Regarding their place of residence, 202 (56.7%) were living in cities and 154 (43.3%) in villages. Thirty six (10.1%) were illiterate, 64 (18.0%) had primary education, 117 (32.9%) had high-school, and 64 (18.0%) were university graduates.

Among participants 160 (44.9%) believed that consanguineous marriage was a good practice, while 218 (61.2%) believed that it may cause diseased offspring. The vast majority (325 or 91.3%) agreed on the compulsory application of the SPSP. Among those who agreed, 236 (72.6%) justified their agreement by stating «to prevent transmission of genetic blood diseases to offspring» (Table 1). Only 21 (5.9%) knew that Sickle Cell Disease and Thalassemia were the only 2 diseases being screened for at that time, and 244 (68.5%) supported raising the number of screened diseases.

Regarding attitudes towards incompatible results, 163 (45.8%) stated that they would break off the engagement, 112 (31.5%) stated that

the decision would be very difficult, and 55 (15.4%) would continue with the engagement and marriage as belief in Allah's will (Table 2). Moreover, 189 (53.1%) agreed on providing incompatible couples who proceed with the marriage with reproductive alternatives, the most preferred being pre-implantation diagnosis (28.6%). Among those who disagreed (n=77), 36 (46.8%) justified their refusal as interference with Allah's will. The majority (80.6%) agreed on early screening of high school and university students.

Illiteracy was found to have a negative effect. Attitudes of participants who did not have genetic blood diseases or affected children were better than those of affected participants and those who had affected children.

This study highlighted the fact that consanguineous marriages are still preferred by a large proportion of the Saudi population, despite their awareness of its possible harms. The majority accepted the SPSP and its mandatory application, and supported increasing the number of screened diseases, as well as changing its timing to a stage of life prior to engagement.

– Reported by: Dr. Abdulkareem J. Al-Quwaidhi, Dr. Mohammad Al-Mazroa (Field Epidemiology Training Program).

Editorial notes: Inherited disorders represent a major health problem in the Arab World including Saudi Arabia, where consanguineous marriages are common. The frequency of consanguineous marriages has been estimated as 60-65% in Saudi Arabia¹, 50.3% in Jordan, 54.3% in Kuwait, 28.9% in Egypt, and 26.0% in Lebanon.²

The Saudi premarital screening program is a mandatory, targeted screening (primary prevention) for all Saudi couples willing to get married. The most prevalent inherited hemoglobinopathies in the Kingdom, SCD and Thalassemia were the only two diseases screened for at the time this study was conducted. The main objectives of the SPSP are to avoid or reduce risky marriages, to determine the magnitude and distribution of diseased and carriers of SCD and Thalassemia, and to educate non-compatible couples about the probabilities of their having affected offspring and possible alternatives to cancelling the marriage. The screening result is mandatory and required to complete the official marriage license. Compatible couples are provided with «compatibility certificates», while Incompatible couples are referred to a genetic counseling clinic. However, counseling is

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Table (1): Public attitude towards the mandatory application of SPSP,

ATTITUDE	No.	%	95% CI
Reasons for agreeing			
To prevent transmission of genetic blood diseases to the offspring	236	72.6	67.4-77.4%
To prevent transmission of genetic blood diseases from one of the couple to the other	32	9.8	6.9-13.7%
To make sure that the person that will be married is healthy	32	9.8	6.9-13.7%
To ensure own fitness for marriage	17	5.2	3.2-8.4%
Don't know	8	2.5	1.1-5.0%
Reasons for Disagreeing			
This is an interference with Allah's will	6	54.5	23.4-83.3%
Such test results are an insult to the person	3	27.3	6.0-61.0%
The family may prevent continuation of marriage in case of positive results	1	9.1	0.2-41.3%
Don't know	1	9.1	0.2-41.3%

Saudi Premarital Screening Program: Public view after 3 years of implementation, cont ...

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non-directive and the couple has the choice to proceed with the marriage regardless of the screening result, in which case they are given «incompatibility certificates» after obtaining their signatures and providing them with health education.³

This study confirms the popularity of consanguineous marriages among Saudis, mostly attributed to social and traditional values, despite the fact that Islamic teachings discourage first-cousin marriages.⁴ Religious leaders in the community therefore have a vital responsibility to conduct intensive education in mosques, media, and other available channels. In spite of the fact that the majority believed that consanguineous marriages may lead to diseased offspring, a large proportion still encouraged this practice. This has been reported by other Gulf countries, where up to 50% prefer consanguineous marriages.⁵

The vast majority of the study population supported the compulsory application of the SPSP, which was much higher than reported by other studies.⁵ This positive attitude was independent of gender, residence, and whether the subject had a genetic blood disease or affected children. This wide acceptance is essential for success and continuation of the SPSP.

According to data of the first 3 years of implementation of the SPSP, the majority of incompatible couples are still completing the marriage in spite of their positive results.⁶ It is therefore essential to provide such couples with reproductive alternatives. Over half of study participants agreed on this matter. Among those, Pre-implantation diagnosis through in-vitro fertilization was preferred by 28.6%, followed by contraception (22.2%), then prenatal diagnosis (12.7%). These results are similar to those reported by a study from King Faisal Specialist Hospital and Research Center, Riyadh.⁷ Prenatal diagnosis is specific and sensitive for detection of hemoglobinopathies, but is not yet implemented in Saudi Arabia except for severe abnormalities.⁸

It was recommended to intensify health education on the possible health consequences of consanguineous marriages through educational campaigns at PHC centers, schools, and mass media. Religious leaders of the community should be involved in clarification of Islamic teachings regarding consanguineous marriages, premarital testing, and reproductive alternatives.

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which is not the case among SCD patients. As no vaccination against Hepatitis C is likely to be available in the near future, extra care should be taken in the implementation of general preventive measures against blood-borne infection to reduce the prevalence of hepatitis C among these patients.

SCD and Beta thalassemia patients are particularly at risk to undergo certain operations, such as splenectomy and cholecystectomy, which can place them at higher risk of acquiring Hepatitis B and C. This study confirmed the association between Hepatitis C infection and surgical procedures particularly among SCD patients.

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Knowledge and Behaviour of the Medical Services Department of Armed Forces Employees toward Seat Belt Use, Riyadh, 2007.

Road Traffic Accidents (RTA) represent a major social and economic problem worldwide. Car seat belt use is one of the effective procedures that secure safety during driving. This cross-sectional study was carried out among workers of the medical services department (MSD) of the Armed Forces, Riyadh, Saudi Arabia, to assess their knowledge and behaviour towards use of car seat belts while driving, and investigate factors influencing its use.

The study included 250 participants, of whom 66.4% were military personnel and 33.6% civilian; 48% were between 1830- years of age, most were married (74%), and 42% had secondary school education.

Seat belt use was reported by 62.4% of participants, with almost equal frequency between military and civilian personnel (62.7% and 61.9% respectively). Use of the seat belt was reported to increase from 49.3% to 97.4% after legislation. Reasons for using the seat belt included being convinced about its importance (38.5%), compliance with regulations (38.5%), and its being a civilized behaviour (23.1%).

Eighty five percent of participants were strongly convinced of the importance of seat belt use, however almost half reported difficulties while using it, such as restriction of movement (29.5%) and anxiety (20.5%).

Participants used their seat belts more frequently while driving their cars inside the city rather than on highways (89.1% and 85.2%, respectively).

Compliance with fastening car seat belts significantly increased with level of education (p-value = 0.0001). Compliance also increased with age but was not statistically significant.

Over a third of study participants had been involved in RTAs (35.2%), 53.4% of whom reported having been in at least one RTA. Of those, 38.6% had been injured and 33% had been admitted into hospital. Almost half of them (48.5%) reported not fastening the seat belt at the time. High speed was reported as the main cause of the RTA (63.6%).

Regarding knowledge of the effects of using the seatbelts, 60.3% stated reduction of disabilities caused by RTA, 25% reduction of the frequency of RTA (25%), 11.5% thought it had no effect on the rate of injuries and disabilities, and 3.2% didn't know.

- Reported by : Dr. Ibrahim A. Al-Honaizil, Dr. Mohammad A. Al-Mazroa, Dr. Nasser A. Al-Hamdan (Field Epidemiology Training Program).

Editorial notes: The World Health Organization (WHO) estimates that 1.2 million people are killed and 50 million injured in road-traffic crashes worldwide, costing the global community about US \$518 billion each year. RTA increase death and disability rates and is the second cause of death after infectious diseases, especially among younger age groups.¹

The WHO international report on the protection from casualties resulting from traffic accidents (2004) states that use of the seat belt could diminish deaths resulting from traffic accidents by rates between 25% and 50%.²

The Kingdom of Saudi Arabia has witnessed economic prosperity and development in all sectors, including transportation, in the last three decades. Part of the side effects

of this growth is manifested in traffic problems, including RTAs. Studies indicate that the death rate resulting from traffic accidents comes as the second cause of death for all age groups.³

This study showed that 62% of participants used the seat belt, which is much lower than required. This finding is also lower than previous reports.⁴ Compliance to seat belt use was related to both age and educational level.

One third of participants in this study had been previously involved in a RTA, with speeding reported as the main reason (63%). This confirms the findings of previous studies reporting that up to two-thirds of RTAs are related to speeding.^{4,5}

Most study participants were strongly convinced of the importance of using the seat belt and its impact on reduction of injuries and disabilities. Use of the seat belt was found to increase after legislation, which is similar to findings of other studies in the Kingdom.^{5,6}

It was recommended to enforce seat belt use with implementation of road traffic regulations. Drivers of younger ages should be educated to improve their attitude toward using the seat belt and speeding. Traffic laws against speeding should be rigorously implemented.

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Table 1: History of RTA exposure by age groups among MSD employees,

Age groups	Previous RTA	No Previous RTA	Total	Chi square	P-value
18-30	35 (29.2%)	85 (70.8%)	120 (48.0%)	7.25	0.06
31-40	30 (35.3%)	55 (64.7%)	85 (34.0%)		
41-55	21 (50%)	21 (50%)	42 (16.8%)		
> 55	2 (66.7%)	1 (33.3%)	3 (1.2%)		
Total	88 (35.2%)	162 (64.8%)	250 (100%)		

Table 2: Frequency of injury in previous RTA by seat belt use among MSD employees, Riyadh, 2007.

Seat Belt Use	Injured in Previous RTA	Not Injured in Previous RTA	Total	Chi square	P-value
Fastened Seat Belt	18 (32.7)	37 (67.3)	55 (62.5)	2.16	NS
Did not fasten seat belt	16 (48.5)	17 (51.5)	33 (37.5)		
Total	34 (38.6)	54 (61.4)	88 (100)		

ملخص باللغة العربية

في المشكلات المرورية ومنها حوادث السيارات.

وتشير الدراسات إلى أن معدل الوفيات الناجمة عن حوادث المرور تاتي في المرتبة الثانية بعد الوفيات الناجمة عن الأمراض السارية. ويعتبر حزام الأمان أحد الإجراءات الفعالة التي تكفل الأمان أثناء القيادة. فقد ذكر في التقرير العالي عن الوفاة من الإصابات الناجمة عن حوادث المرور الصادر عن منظمة الصحة العالمية لعام ٢٠٠٤ أن فرض استخدام حزام الأمان يمكن أن يقلل من الوفيات الناجمة عن حوادث المرور بنسب تتراوح بين ٢٥ و ٥٠٪. وأشارت دراسة أجريت في المملكة العربية السعودية إلى أن جميع المصابين في حوادث المرور في عينة الدراسة لم يكونوا مرتدين لحزام الأمان.

كان الهدف من هذه الدراسة المقطعية هو تقييم معارف وسلوك العاملين في الخدمات الطبية للوات المسلحة تجاه استخدام حزام الأمان.

بلغ عدد الموظفين الذين شاركوا في هذه الدراسة ٢٥٠ شخصاً، منهم ٦١,٤٪ عسكريين و ٣٣,٦٪ مدنيين. حوالي نصف المشاركين في عينة الدراسة (٤٨٪) كانوا من الفئة العمرية ١٨-٣٠ سنة، ٧٤٪ منهم متزوجون، و ٤٢٪ يحملون شهادة الثانوية العامة.

أوضحت الدراسة أن ٢٢,٤٪ يستخدمون حزام الأمان وتقریباً بنفس النسبة بين العسكريين والمدنيين. وقد أفادت الدراسة أن الإلزامية استخدام حزام الأمان قد أدت إلى ارتفاع ربط الحزام من ٤٩٪ إلى ٩٧٪.

أفاد ثلث المشاركين بأنهم قد تعرضوا لحوادث مرورية سابق، منهم ٣٨٪ قد تعرضوا للإصابة خلال هذه الحوادث، وأن ٣٣٪ منهم قد تم تثبيطهم بالمستشفى. كانت السرعة الزائدة السبب الرئيسي لمعظم هذه الحوادث. ووجدت الدراسة أن من بين الذين تعرضوا لإصابات، ٦١٪ لم يكونوا رابطين بالحزام أثناء القيادة.

أظهرت الدراسة أن ٨٥٪ من المشاركين مقتنعين بأهمية ربط حزام الأمان، وأن ٦٠٪ لديهم معرفة عن أهمية ربط حزام الأمان في تقليل الإصابات عن حوادث الناتجة عن حوادث الطرق.

أكدت الدراسة أهمية ربط حزام الأمان في تقليل الإصابات والإعاقات الناتجة عن حوادث الطرق، مما يؤكد الاهتمام باستمرار تثقيف التوعية الصحية وتطبيق أنظمة المرور بصفة مستمرة.

إعداد: د. إبراهيم الحنيظل، د. محمد المزروع، د. ناصر الصمدان (برنامج الوبائيات الحقلية).

عدد الأمراض التي يتم الكشف عنها.

وافق ١٨٩ فرداً (١٠٣٪) على تزويد الأزواج غير المتوافقين ببائول تضمن لهم عدم إنجاب أطفال مرضي، و كان أكثر البائول المفضلة هو اختيار الأجنة السليمة قبل زواجها في الرحم، حيث فضله ٥٤ فرداً (٢٨,٦٪). واستحسن أغلب المتوافقين (٢٨٧ أو ٨٠,٦٪) إجراء الفحص في مرحلة مبكرة مثل أثناء الدراسة الثانوية أو الجامعية.

كما أظهرت الدراسة أن ١٤٢ شخصاً (٣٩,٩٪) من المتوافقين قد قيموا نتائج وآثار البرنامج بأنها ممتازة، مقارنة بـ ١٣ شخصاً فقط (٣,٧٪) قيموها بأنها ضعيفة.

وقد لوحظ بأن الأمية أثرت سلباً على اتجاهات المجتمع نحو القضايا السابقة، كما أن اتجاهات المتوافقين الذين لم يكن لديهم أمراض دم وراثية أو أطفال مرضي كانت أفضل من اتجاهات أولئك المتوافقين الذين كانت لديهم أمراض دم وراثية أو أطفال مرضي.

تمت التوصية بتكثيف التثقيف الصحي والديني لدى المجتمع عن طريق كل القنوات الممكنة، مثل المدارس والإعلام والمساجد ومراكز الرعاية الصحية الأولية، بخصوص الأضرار المترتبة على زواج غير المتوافقين وراثياً، كما تمت التوصية بتغيير توقيت الفحص بحيث يشمل طلاب الثانوية و الجامعات قبل مرحلة الخطبة و عقب القران. تمت التوصية أيضاً على زيادة عدد الأمراض التي يتم الكشف عنها لتشمل أمراضاً أخرى ذات أهمية عامة مثل فقر الدم الفولي (G-٦PD Deficiency) و الإيزين و التهاب الكبد الفيروسي من النوع (ب) و (ج) و الزهري التناسلي. كما أوصت الدراسة بتفيذ أبحاث خاصة بمدى إمكانية و جدوى توفير ببائول و راقبة للأزواج غير المتوافقين وراثياً.

إعداد: د. عبد الكريم جاسم القويضي، د. محمد عبد العزيز الزروع (برنامج الوبائيات الحقلية).

دراسة حول معارف وسلوك العاملين بالخدمات الطبية للقوات المسلحة تجاه استخدام حزام الأمان.

شهدت المملكة العربية السعودية نمواً خلال العقود الثلاثة الماضية ازدهاراً اقتصادياً ونمواً ملموساً في جميع القطاعات ومنها قطاع النقل والموصلات، الذي انعكس في ازدياد حركة المرور. وكان لهذا الازدياد جوانب سلبية ثقلت

دراسة اتجاهات المجتمع نحو برنامج الفحص قبل الزواج بعد ثلاث سنوات من تطبيقه بالمملكة العربية السعودية.

تعتبر الأمراض الوراثية من المشاكل الصحية الرئيسية في العالم العربي بما فيه المملكة العربية السعودية، وقد زواج الأقارب سبباً رئيسياً في تركيز تلك الأمراض بها. ويعتبر الفحص قبل الزواج من أهم الإجراءات التي تمنع ظهور هذه الأمراض.

ولقد تم تطبيق برنامج الفحص قبل الزواج في المملكة للكشف عن فقر الدم المنجلي و الثلاسيميا كإجراء إلزامي منذ بداية عام ١٤٢٥ هـ.

قام فريق من برنامج الوبائيات الحقلية بدراسة مقطعية تهدف إلى استكشاف اتجاهات المجتمع نحو زواج الأقارب، و تقييم رأيه في الإلزامية ببرنامج الفحص قبل الزواج، و دراسة اتجاهاته نحو زيادة الأمراض التي يتم الكشف عنها، و نحو البائول المختلفة التي من الممكن أن يُؤرد بها أولئك الأزواج غير المتوافقين عبر الفحص.

تم تنفيذ الدراسة في عينة من مراكز الرعاية الصحية الأولية التابعة لوزارة الصحة في محافظة الأحساء من المنطقة الشرقية بالمملكة. و تم اختيار العينة من المراكز الصحية بالقطاعات الصحية الثلاثة بالحافظة عشوائياً.

بلغ حجم العينة الكلي ٣٥٦ زائراً سعودياً للمراكز الصحية المختارة، تم اختيارهم عشوائياً و بالتساوي بين الذكور و الإناث الذين كانت أعمارهم ثمانية عشر عاماً فما فوق، و تم تصميم استبيان لجمع البيانات من المشاركين عن طريق الغاية الشخصية.

شملت الدراسة ١٧٨ مشاركاً من الذكور و ١٧٨ من الإناث، و كانت أعمارهم تتراوح ما بين ١٨ - ٦٦ عاماً بمتوسط وانحراف معياري قدره ٣٣,٢ ± ١١,٤٦ عاماً. و أظهرت الدراسة أن ١٦٠ شخصاً من المشاركين (٤٤,٩٪) رأوا بأن زواج الأقارب يعتبر عادة جيدة، مقارنة بـ ١٣٧ شخصاً (٣٨,٥٪) خالفوهم في ذلك. و كان ٢١٨ فرداً من الإناث يعتبرون زواج الأقارب قريباً من المتوسط، مقارنة بـ ١٣٧ شخصاً (٣٨,٥٪) خالفوهم في ذلك. و كان ٢١٨ فرداً من الذكور يعتبرون زواج الأقارب قريباً من المتوسط، مقارنة بـ ١٣٧ شخصاً (٣٨,٥٪) خالفوهم في ذلك. و كان ٢١٨ فرداً من الإناث يعتبرون زواج الأقارب قريباً من المتوسط، مقارنة بـ ١٣٧ شخصاً (٣٨,٥٪) خالفوهم في ذلك.

الغالبية العظمى (٣٢٥ فرداً) من المشاركين بالدراسة (٩١,٣٪) كانوا موافقين على الإلزامية ببرنامج فحص ما قبل الزواج. كما أظهرت الدراسة أن ٢١ شخصاً (٥,٩٪) فقط من مجموع المشاركين كانوا يعلمون بأن المرضين اللذين يتم الكشف عنهما حالياً هما فقر الدم المنجلي و الثلاسيميا فقط، لكن ٢٤٤ فرداً (٦٨,٥٪) منهم أبدوا زيادة

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Mark your calendar . . .

Inside the Kingdom

January 19 -21, 2009: The 2nd Saudi Conference for Health Education & Training.

Location: Recreation Center Riyadh Military Hospital
Contact: Conference Coordinator Tel. +966-1-4777714 Ext. 26705/26664/26668
E-mail: alshalaw@yahoo.com

March 1-4, 2009: The 3rd Arab-ISPCAN Regional Conference on Child Protection: Preventing Child Abuse and Neglect in Arab Countries.

Location: King Faisal Convention Hall, Intercontinental Hotel, Riyadh, Saudi Arabia.
Contact: Tel: +96612520088 Ext: 45889-45885, Fax: 45884
email: nfsp@ngha.med.sa
www.arabcanconf.org

March 28-30, 2009: 1st Saudi and 4th Gulf Scientific Meeting, Saudi Society of Family and Community Medicine: Ideal Collaboration for Better Health.

Location: Hilton Hall, Jeddah Hilton Hotel, Jeddah, Saudi Arabia.
Contact: Phone: 0096626696838, Fax: 0096626696838
Email: ssfcmj@yahoo.com
URL: <http://almobile.maktoob.com/org/uploads/0eab0b9603.pdf>

Outside the Kingdom

September 20-24, 2008: XVIII World Congress of Epidemiology and VII Braziln Congress of Epidemiology.

Location: Porto Alegre, Brazil.
Contact: Congress Secretariat
Website: www.epi2008.com

August 03-08, 2008: XVII International AIDS Conference.

Location: Mexico city, Mexico.
Contact: International AIDS Society
Email: info@aids2008.org
Website: www.aids2008.org

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Send correspondence, comments, calendar listings, or articles to:

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For epidemiological assistance, call or fax the FETP at 01-496-0163

Website: www.fetp.edu.sa

Selected notifiable diseases by region, Jul — Sept 2008

	Riyadh	Makkah	Jeddah	Madinah	Taif	Qassim	Eastern	Hasa	Hafr Al-batin	Asir	Bisha	Tabuk	Hail	Al-Shamal	Jizan	Najran	Baha	Al-Jouf	Goriat	Gorfuada	TOTAL
Measles	1	0	0	0	1	0	0	0	0	0	0	0	1	1	1	4	0	0	0	0	9
Mumps	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	3
Rubella	0	0	1	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	3
Varicella	836	99	671	97	186	617	517	518	82	431	156	122	47	66	127	165	12	56	23	34	4862
Meningitis mening.	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Meningitis other	9	3	6	0	6	7	2	2	0	1	0	0	1	0	2	0	0	0	0	0	39
Hepatitis B	228	1	309	41	13	41	109	9	0	70	8	38	7	15	12	33	0	28	1	2	965
Hepatitis C	174	0	284	14	6	22	85	6	0	20	9	13	2	0	1	3	0	15	0	3	657
Hepatitis unspecified	6	0	6	3	0	0	0	2	0	1	0	0	0	0	10	0	0	0	0	0	28
Hepatitis A	23	7	18	3	3	2	8	6	3	2	1	12	2	8	7	44	2	1	2	0	154
Typhoid & paratyphoid	3	0	21	0	0	0	6	0	2	9	1	0	0	0	0	0	0	1	0	2	45
Amoebic dysentery	33	13	705	1	7	3	42	21	0	28	9	0	0	1	5	0	2	0	0	0	870
Shigellosis	6	0	3	0	0	0	5	0	0	0	0	0	0	0	0	2	0	0	1	0	17
Salmonellosis	128	3	24	0	0	3	68	32	6	6	18	3	0	2	0	10	0	6	2	1	312
Brucellosis	70	8	14	12	36	106	30	11	20	79	30	0	38	22	4	40	0	6	1	1	528

Comparisons of selected notifiable diseases, Jul – Sept 2007 – 2008

DISEASE	Jul - Sep 2008	Jul - Sep 2007	Change %	Jan - Sep 2008	Jan - Dec 2007	DISEASE	Jul - Sep 2008	Jul - Sep 2007	Change %	Jan - Sep 2008	Jan - Sep 2007
Cholera	5	1	400	7	4	Meningitis mening	2	0		5	13
Diphtheria	0	3	-100	0	3	Meningitis other	36	70	-49	204	316
Pertussis	7	34	-79	28	68	Hepatitis B	965	1138	-15	3831	451
Tetanus, neonat	2	6	-67	9	21	Hepatitis C	657	637	3	2164	2776
Tetanus, other	0	1	-100	4	6	Hepatitis unspecified	28	23	22	168	192
Poliomyelitis	0	0	0	0	490	Hepatitis A	154	240	-36	1222	1383
Guillain Barre Syndrome	27	18	50	87	93	Typhoid & paratyphoid	45	64	-30	211	281
Measles	9	295	-97	151	4648	Amoebic dysentery	870	1038	-16	2435	3645
Mumps	3	8	-63	21	32	Shigellosis	17	61	-72	122	154
Rubella	3	0		3	32	Salmonellosis	312	636	-51	898	1894
Varicella	4862	8565	-43	53218	47691	Brucellosis	528	1083	-51	2734	4194

Diseases of low frequency, Jul – Sept 2008

- Yellow fever, Plaque, Poliomyelitis, Rabies: No Cases
- Pertussis: 7 Cases (Jeddah 4, Eastern 1, Makkah 1, Qassim 1, Najran 1)
- Neonatal Tetanus: 2 Cases (Makkah 1, Jeddah 1)
- Ecchinococcosis: 1 Case (Eastern 1)
- Guillain Barre Syndrome: 27 Cases (Riyadh 6, Asir 4, Jeddah 3, Jazan 2, Tabuk 2, Bisha 2, Hafr Al-Batin 2, Eastern 1, Madinah 1, Hasa 1, Makkah 1, Qassim 1, Baha 1)