





# Premarital counseling and tests



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#### **Editing File**

#### **Color index:**

Main text (Black)

Female slides (Pink)

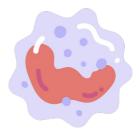
Male slides (Blue)

Important things (Red)

Dr's notes (Green)

Extra information (Grey)

### **OBJECTIVES**





Recognize the Saudi Healthy Marriage program.



Recall the program's areas of pre-marital counseling.



List diseases included in the Saudi pre-marital screening program.



Identify the fate of tested individuals (case, carrier, clear).



Recognize cultural considerations for pre-marital counseling in Saudi Arabia.



### The scene

- The middle East is one of the regions known for high rates of sickle cell disease and beta-thalassemia.
  - In the 80s Saudi Arabia was hyper-endemic with **Hep B Virus.**
- In Saudi Arabia, **Hepatitis C** persists as a problem in hemodialysis patients and IV drug users. In KKUH, Hep C prevalence was 0.58 % in 1996 and decreased to 0.08% in 2006.
- From the year 2000 to 2009, there were 2,956 reported Saudi cases of HIV, a rate of 1.5 cases per 100,000 Saudis.

#### Healthy marriage program





Program started in 2004. It included tests for hemoglobinopathies: sickle cell and thalassemia.

In 2008 the MOH added to the program testing for **HIV**, **Hep B**, **Hep C**.

In 2013, the program changed its name from pre-marital screening فحص ما قبل الزواج to healthy marriage program برنامج , and started electronic integration.

List of MOH centers accredited to give the healthy marriage certificate:

There are others in non-MOH institutes. Ex: PCC1 here in KKUH for KSU staff.



## Pre-marital counseling

#### **Pre-marital**

Pre-marital means before marriage.

#### Counseling

professional guidance of the individual by utilizing psychological methods.

#### **Pre-marital Counseling in KSA**

The Saudi Healthy Marriage program, tests for genetic blood disorders (hemoglobinopathies) and infectious diseases. Then according to the results, it provides counseling on:

- 1 The odds of transferring this disease to their prospective marriage partner.
  - **2** The odds of transferring this disease to their future children.
  - **3** Solutions and how to move forward.
  - 4 The program's objectives: •———



Reducing health costs.



To raise awareness about the concept of a comprehensive healthy marriage.

Avoid spreading diseases in the community.



Psychological impact (anxiety), such as feeling embarrassed to ask the partner whether he has a disease or not.



To make it easier for people who want to make the test to ask for it.



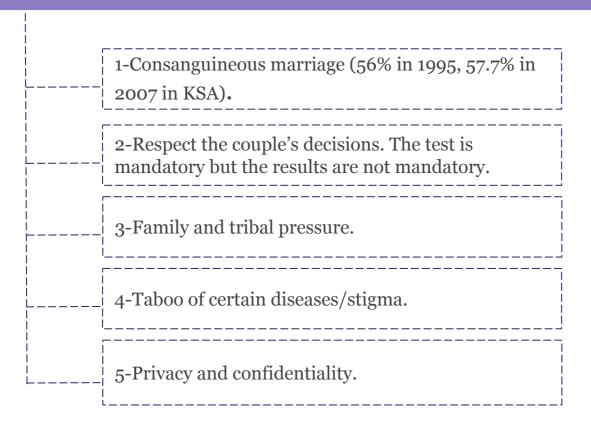
# Certificate of healthy marriage

#### **Definition**

The certificate is issued after the test results have been done and counseling has been performed in the counseling clinic for cases that mandate it.

**Examples of such cases:** Having Hep C, hemoglobinopathy with chance of having diseased children.

#### **Cultural considerations**





### Scenarios

#### Scenario 1

Mohammed and Fatima presented to the primary care clinic for pre-marital screening. You performed the following blood tests: complete blood count, sickle cell test, hemoglobin electrophoresis, and virology tests for HIV, Hep C, and Hep B. Both Were clear from any abnormalities.

#### Is counseling required in this situation?

No, they don't need to.

#### Scenario 2

Amal and Tareg performed pre-marital screening tests and it was found that Tareg is a Hep B carrier. Repeat the tests to confirm. To issue them a health marriage certificate it is mandatory that they go to the counseling clinic.

#### what will you counsel them about? Transmission to Transmission to Solutions: refer wife-Hep B to specialty clinic future childrenvaccine. Hep B vaccine. as needed. What if it was Hep C or HIV? 2. Counseling is mandatory as well: 3. The marriage 1- Transmission to If decided to wife- no vaccines, proceed, sign that health education 1. Repeat the they received 2- Transmission to tests to confirm. counseling and they

future children

3- Solutions: refer

to specialty clinic as

needed (antiviral therapy).

are going ahead

with the marriage

despite counseling.



### Scenarios cont.



#### Scenario 3

# Ali, from the Eastern region, presented to your clinic for pre-marital screening as he intends to marry his cousin. His prospective wife did the test and was clear from any abnormalities. Ali's hemoglobin electrophoresis shows Hb A: 60%, Hb SS:40%, Hb F:2%, meaning he is a carrier of sickle cell trait.

Case

#### Counselling

What would you tell them about the odds of inheritance for their future children?

Normal + carrier = 50% carrier Carrier + carrier = 25% diseased Carrier = trait

# usual trait AA AS AA AS usual trait usual trait

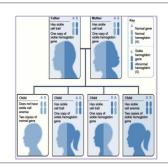
**Pictures** 

What if Ali's fiancé Sara was also a sickle cell trait carrier?

#### **Counseling:**

- 1- Transmission to future children?
- 2- Solutions/alternatives?
- Find another partner for marriage who doesn't have sickle cell trait or anemia.

Certificate of healthy marriage will be given after they go to the counseling clinic.



What if Ali had sickle cell anemia and Sara was clear?

What if Ali is a carrier and Sara has

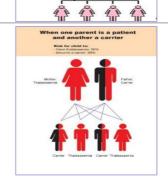
sickle cell anemia?

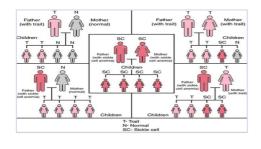
- 1- Odds of transmission to future children?
- 2- Is an appointment at the counseling clinic mandatory to issue the certificate?

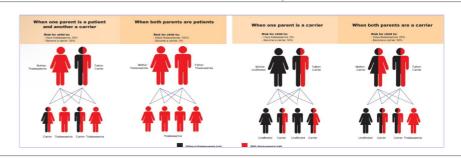
#### **Counseling:**

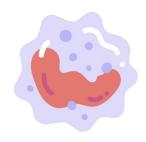
- 1- Odds of transmission to future children?
- 2- Alternatives/solutions?
- Find another partner for marriage who doesn't have sickle cell trait or anemia.

Certificate of healthy marriage will be given after they go to the counseling clinic.









## **MCQs**

#### Q1

If a couple both have the thalassemia trait what are the chances that one of their children will have the disease?

A- 50% B- 25% C- 100% D- 75%

#### Q2

If one of the couple have the thalassemia trait and the other is normal what are the chances that one of their children will have the disease carrier?

#### Ó3

Ahmad -27 years old- and Suha -23 years old- are planning to get married soon, but they are afraid about their future children to have sickle cell anemia because each one of the two has a brother suffering from this disease. Ahmad's and Suha's parents are healthy and they do not show any symptoms of sickle cell anemia. They haven't done any blood tests yet. They came to your clinic seeking your advice about their situation, you are going to?

A- Ask them to do more genetic tests to figure out. B- Discuss with them about how genes mutations are transmitted from parents to children.

C- Tell them to avoid marriage.

C-A

D- Tell them to not worry.



# FAMILY MEDICINE TEAM

Leader سلطان البقمي



Leader

رغد المصلح



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