

## A DECREASE IN THE INCIDENCE OF SYPHILIS IN IRAN AND THE EFFECT OF ISLAMIC RULES IN CONTROLLING SEXUALLY TRANSMITTED DISEASES

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### ABSTRACT

Venereal diseases are still a common problem in today's world. Even though tremendous advances are being made in medicine and large budgets are being spent to control sexually transmitted diseases (STD), especially in western countries, these diseases are still yet very common, and today AIDS has been added to the threats posed by STD to human life. The status of syphilis was evaluated in Iran in the years before and after the Islamic Revolution by comparing RPR test results in blood specimens obtained for transfusions from all groups of the society. RPR positivity was 0.6% for the years 1974-76, while it was only 0.2% for the years 1985-87, demonstrating a sharp decline. Divine laws, especially those offered by Islamic rules, are much more effective than present expensive medical measures to control venereal diseases, and can return sexual health to the human society.

### INTRODUCTION

Syphilis is an ancient disease<sup>1</sup> which is still common in many parts of the world.<sup>2</sup> Between 1950-1977, syphilis was studied in eight countries including the U.S.A. and Europe (Norway, France, Sweden, Denmark, England, Finland and Wales). The United States ranked the highest among the countries studied. syphilis was first introduced to Iran from the Soviet Union between 1500-1502 by businessmen. With the onslaught of western culture on Iran in the 20th century, the incidence of syphilis was increasing, but in the years after the Islamic Revolution, the trend reversed. Our study upon 2,185,348 blood samples clearly demonstrates a sharp decline of syphilis in recent years following the Islamic Revolution in Iran. This is a unique example which again emphasizes that social

factors should be considered as a major scientific means in controlling venereal diseases, being much more simple, less expensive and more effective. Of these social factors, divine laws especially those offered by Islamic rules, are the most effective and preferred guidelines.

### MATERIALS AND METHODS

Between 1974 and 1976, as well as 1985 and 1987, we reviewed the results of RPR tests in 2,185,348 blood samples. This test is used to screen the possible presence of syphilis in blood donors. These blood samples comprised all of the different groups of the society (workers, teachers, employees....) because the family of any patient requiring an operation donated blood

**Table I. Statistics for syphilis in Iran.**

A comparison between three years before and three years after the Islamic Revolution, reported by the Iranian Blood Transfusion Center.

Year	1974	1975	1976	3 year total	1985	1986	1987	3 year total
No. of blood samples tested	12345	41158	73572	127084	611867	697144	749283	2058264
No. of positive RPR tests	45	283	541	869	611	1531	1829	4521
Average (percent)	0.3	0.6	0.7	0.6	0.1	0.2	0.2	0.2

A sharp decrease is noticed from 0.6% to 0.2%. This reemphasizes the importance of social factors, especially Islamic rules, in controlling venereal diseases.

preoperatively to the Iranian Transfusion Center. This means that the blood samples represent the totality of the Iranian society fairly accurately.

Results as shown in Table I indicate that the rate of RPR positivity for the year 1976 was 0.7% while for the year 1987 it was 0.2%, demonstrating a statistically significant decline. When we compare the average for the years between 1974-76 (pre-Islamic Revolution) and 1985-87 (post-Islamic Revolution), we find the rates 0.6% and 0.2%, respectively. This demonstrates a sharp decline in the incidence of syphilis in Iran, since Islamic rules are encouraged and have become popular in the society.

## DISCUSSION

Since the appearance and spread of sexually transmitted diseases and factors facilitating this spread are very similar, we will shortly discuss the status of some of these diseases in different parts of the world. In the U.S., the incidence of gonorrhea was tripled during 1963-75, and it is increasing daily. Three million people underwent treatment for gonorrhea in 1975.<sup>3</sup> Since W.W.II, gonorrhea has never been such a serious problem in the American society, and since resistant strains of gonorrhea have appeared which elaborate beta lactamase, the battle against gonorrhea is becoming more difficult.<sup>3</sup>

In a ten year period, the incidence of gonorrhea has shown a 42% rise in England,<sup>2</sup> a time during which premarital sexual relationships were reported to have increased considerably in the 15-19 year age group.<sup>2</sup>

The high incidence of gonorrhea and other sexually transmitted diseases are obviously due to liberal sexual relationships and factors encouraging free sexual relationships (use of contraceptive pills in very young girls). Since man is the only natural host for gonorrhea,<sup>3</sup> it can easily be understood that free and unrestrained sexual relationships activate this disease.

Conversely, if the infected person refrains from extra-marital sexual relationships, the disease could never spread in the society.

Genital herpes simplex virus (HSV) is a disease of great concern to both physician and patient. Its incidence is increasing. It is transferred to sexual partners of infected persons and carries high morbidity and even mortality in infants, with no curative therapy at present.<sup>4</sup>

AIDS (Acquired Immune Deficiency Syndrome), the most recent offspring of the family of sexually transmitted diseases, is now recognized as one of the most serious diseases threatening mankind. It was first reported in 1981, and it has been increasing rampantly every day. Doctors have diagnosed the disease in nearly 60,000 U.S. residents since 1981, and more than half have died.<sup>5</sup> U.S. public health officials currently agree that between 1.5-2 million persons in America harbor the virus.<sup>5</sup> There are still many mysteries and unresolved points about AIDS, with no cure in sight. In fact, every infected person is a real time bomb (Paul A. Volberding from San Francisco General Hospital).<sup>5</sup>

The situation of STD in tropical Africa has become very serious.<sup>1</sup> The need for medical facilities and urgent treatment has become known and preventive measures have to be taken.

The existing statistics are also very high on the incidence of gonorrhea and many complications such as urethral stricture (due to gonorrhea), female genital infections, infertility, and eye infection of infants born to infected mothers accompany the disease. In fact, the incidence of gonorrhea is so high among some tribes that it has come to be known as a sign of puberty. In some areas of Africa, 80% of the work of urologists go toward treating urethral strictures due to gonorrhea.<sup>3</sup> As in other countries, the sensitivity of gonococci is diminishing to penicillin and a decrease in sensitivity of gonorrhea has been reported in Uganda, Nigeria, Ethiopia, Kenya, South Africa, and Swaziland, in

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two-thirds of reported cases.<sup>6</sup> The incidence of syphilis has increased in several African countries as well, especially in urban areas, creating a social problem. A large number of cases have been sighted in Uganda, Ethiopia, South Africa and several other countries.<sup>6</sup>

Other sexually transmitted diseases are also very common, e.g. chancroid, LGV, and granuloma inguinale which are very prevalent in Zimbabwe.

Investigators believe that prostitution as a social factor is the main reason for the spread of venereal diseases.<sup>1</sup> The incidence of syphilis in Swaziland has been reported to be 25%, the highest percentage ever recorded in any country, and it comprises one third of all gonorrhea cases.<sup>8</sup> Infected women, especially prostitutes, have been the main vector of sexually transmitted diseases in Ethiopia, and they continue to spread venereal diseases in that country. The closer we come to urbanization, the greater the number of disease cases. These women are a serious threat to themselves, their families, and the society, and most of them have no knowledge of their disease, which finally leads to their sterilization. In a hospital in Addis Ababa, 15% of pregnant women have had positive syphilis tests and 21% of the surviving infants have shown signs of congenital syphilis. These syphilitic women are perceived as demons in Ethiopia and are thought to be disrespectable.<sup>9</sup>

The main causes of this situation are the weakening of family/social ties and the rise in prostitution. Immigration from villages to cities, prevalence of poverty (\$ 80 annual income per head), and illiteracy (only 7% of Ethiopian children attend school)<sup>9</sup> are numbered among influential factors. The Amara women are encouraged to go into sale of alcoholic beverages which usually leads them to prostitution. Gradually, they are separated from their families and their communities. This situation worsens as immigration and urbanization increase. Prostitution has become a social disaster in Ethiopia today and has yet to see a solution. In a study, various solutions have been offered by the Department of Family Practice of the University of California for fighting the sexually transmitted diseases:

- 1- Join other African countries in data collection.
- 2- Join good health services and increase the number of trained personnel.
- 3- Adopt appropriate health education strategies.
- 4- Change the status of women by increasing their educational and occupational opportunities.

According to the above measures, these poor countries must pay vast sums of money for the program suggested, which will not be successful anyhow, since not only are venereal diseases still prevalent in California using these measures, the new AIDS is becoming more of a threat every day.

Sexually transmitted diseases are a real threat in the 20th century and obviously, current measures have not been able to control these diseases. We will present solutions which are inexpensive, humanitarian, and more effective to fight sexually transmitted diseases all over the world:

- Following divine rules, especially the enlightening rules of Islam, creates the best cultural, political, and economic combination, directing the relationship of men and women in a way that sexually transmitted diseases do not get the chance to spread and penetrate into the society.

- To fight constantly prostitution, drug addiction, alcoholism, homosexuality and, other corruption factors in the society.

- Early (timely) marriages should be encouraged and divorce condemned. Islam gives excellent guidelines in this regard, prohibiting liberal sexual relationships. Since God knows the nature of these relations best, God's command is the best and most scientific in this regard.

In conclusion, it is quite evident and undeniable that divine laws, especially Islamic values, are the best and most scientific means to control sexually transmitted diseases. We recommend that the scientific world and health authorities of the world seriously consider these rules as a practical means of controlling STD before it is too late.

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