Characteristics of gonorrhoea in Kermanshah, Iran

J Zargooshi

Objectives: To describe the characteristics of gonorrhoea and prostitution in Kermanshah, Iran.

Method: From 1997 through 2000, 100 male gonorrhoea patients were followed for a mean of 18 months (range 8–42 months). Diagnosis and follow up were made by a combination of history, physical examination, and the Gram stained smear.

Results: 4% of patients became infected by girlfriends, 24% by temporary (sigheh) wives, and 64% by street prostitutes; the remaining 8% denied coitus with sex workers. Of 38 married cases, 31 reported unprotected intercourse with permanent wives while infected, and only four of 38 gave prescribed drugs to their wives. 89% of contacts with prostitutes were unprotected. Most of the prostitutes and professional sigheh wives were practising sexual sex. Fear of stigmatisation and presumed severe penalties prevented prostitutes from seeking medical care, and 26% of patrons reported self medication. An average 84% of prescriptions of standard therapies failed. 31% of the cases remained refractory to all available therapies.

Conclusions: The majority of the prostitutes and sigheh wives in Iran exchange sex for survival. Being uneducated survival sex workers, they accept risky sex behaviours easily. Sigheh wives are an important source of infection. The very high rate of persistent infection despite standard treatments is disturbing. Our ideal is a world in which nobody is obliged to enter commercial sex work. In the meantime, however, there is an urgent need to offer medical care and education to sex workers as needy patients in a safe and unprejudiced environment. Denying the presence of such realities as prostitution and sexually transmitted diseases (STDs) because of their disagreement with cant claims and official propaganda, does not eradicate the facts but results in catastrophic public health problems.

In some countries, presence of prostitution and sexually transmitted diseases (STDs) is being systematically denied because their existence contradicts some official claims of their eradication. In these settings, demonising the brothels and killing prostitutes is a “great achievement,” that “proves” legitimacy and moral superiority. There is no study on the prevalence of prostitution in Iran, and the reported figures of 300 000 prostitutes, including 45 000 in Tehran, were not affirmed by authorities. One official announced the presence of 2000 prostitutes in Tehran, however.1 Iranian sex workers (prostitutes and sigheh wives) are suffering from unavailability of medical services and knowledge about STDs. Here, we describe our experience with gonorrhoea in Kermanshah, Iran.

METHODS

During a 36 month period (March 1997–March 2000) 162 cases of male urethritis were seen in a university affiliated centre. The majority self referred for primary care; their mean age was 26.6 (SD 9.2) years (median 27); 62% were single and 86% urban. Patients were followed for a mean of 18 months (8–42 months). Patients also had access to private practices. Of 162 cases, 35 were non-STD related, 18 non-gonococcal, and 109 gonococcal. Of gonococcal cases, seven refused to participate in the study and two were lost to follow up. Informed consent was obtained from all. At the first visit, after a history/physical examination, a Gram stained smear was ordered. It was considered positive if Gram negative diplococci of typical morphology were observed in association with neutrophils, negative if no such organisms were seen, and equivocal if typical morphotypes not associated with neutrophils or cell associated, but morphologically atypical organisms were seen.2 Upon receiving the smear result, one of three standard regimens3 were administered (table 1). Co-treatment was prescribed for index cases to be given to partners, and abstinence from unprotected intercourse was advised until a cure was achieved.

The patients returned a week after completion of treatment for history/examination/smear. If the smear was negative and the patients became asymptomatic, they were followed by phone on a monthly basis. If they became symptomatic again, they were visited for history/examination/smear. Patients with positive smears and persistent symptoms despite standard treatments, were given alternative regimens (table 1). In the monthly follow up of cases of persistent infection, we obtained history/examination/smear without prescribing treatment. In selected patients with persistent gonorrhoea, urethrocystoscopy was performed to rule out urological pathologies.

All data were collected into our UNESCO CDS/ISIS computer database.

RESULTS

In all, 41% of cases initially denied coitus and admitted to having sex only after being confronted with smear results. According to patients, embarrassment and fear of being betrayed to authorities were the reasons for concealment; 89% “forgot” to take their smear records and left them in the clinic. To hide their real identity, 47% had their smears taken and gave false names. Once we obtained their confidence, they revealed their real names. No prostitutes presented to us. According to the patrons, the reasons were fear of identification, stigmatisation, and severe penalties. The same reasons were presented by patients to justify their presentation delay. Twenty six per cent reported self medication for an average of 2 weeks. Many patients presented with false complaints. Patients reported their likely source of infection as girlfriends (4%), temporary (sigheh) wives (24%), and street prostitutes (64%). The remaining 8% of patients denied extramarital sex. In cases of contact with sex workers, 45 of 88 (51.1%) were infected upon first coitus; 89% of intercourse was unprotected. HIV testing, performed in 41%, was negative in all. Frequently, sex workers sold sex for food. Thirty one of 38 married men reported unprotected intercourse with their permanent wives in the presence of urethral discharge. Seven of 100 patients accepted co-treatment for partners. Reasons for low acceptance of co-treatment were fear of disclosure of extramarital sex, unavailability of prostitutes, and/or lack of commitment.
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Table 1  Failure rates of standard and alternative treatment regimens 1 week after completion of treatment

<table>
<thead>
<tr>
<th>Treatment regimen</th>
<th>Failure rate (%)</th>
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<tr>
<td><strong>Standard regimens</strong></td>
<td></td>
</tr>
<tr>
<td>Ceftriaxone 1.25 mg intramuscularly + doxycycline 100 mg orally twice daily for 7 days</td>
<td>69</td>
</tr>
<tr>
<td>Ciprofloxacin 500 mg + doxycycline 100 mg twice daily for 7 days</td>
<td>93</td>
</tr>
<tr>
<td>Ofloxacin 400 mg + doxycycline 100 mg twice daily for 7 days</td>
<td>90</td>
</tr>
<tr>
<td><strong>Alternative regimens</strong></td>
<td></td>
</tr>
<tr>
<td>1 g ceftriaxone for 5–10 days + doxycycline 100 mg twice daily for 10 days</td>
<td>48</td>
</tr>
<tr>
<td>500 mg ciprofloxacin twice daily for 7–14 days + doxycycline 100 mg twice daily for 10 days</td>
<td>64</td>
</tr>
<tr>
<td>800 mg ofloxacin alone</td>
<td>74</td>
</tr>
<tr>
<td>Ceftriaxone 1–3 g 3 times daily + amikacin 500–1000 mg twice daily, + doxycycline 100 mg twice daily for 7 days</td>
<td>18</td>
</tr>
<tr>
<td>Ciprofloxacin 500 mg ciprofloxacin twice daily all for 7–10 days, + metronidazole 500 mg 3 times daily for 7 days ± erythromycin 400 mg four times daily for 14 days</td>
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