Cousin marriage and premarital carrier matching in a Bedouin community in Israel: attitudes, service development and educational intervention

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(Objected 2 September 2003)


Abstract

Context. Premarital carrier matching is a form of genetic counselling in which two individuals are told, if both are carriers, that they have a 25% risk at each pregnancy of having a child affected by the disease for which they were tested. If only one individual is a carrier this information is not disclosed. This scheme is offered to a consanguineous Bedouin community characterised by high prevalence of genetic diseases and a religious ban on abortion.

Objective. To elicit attitudes of community members concerning cousin marriage and genetic counselling.

Method. Semi-structured interviews were conducted with Bedouin respondents (n = 49).

Results and conclusions. Interviews revealed that a majority of Bedouin respondents confirmed the traditional and social role of cousin marriage. The main reasons given in this context were clan solidarity, interpersonal compatibility, preservation of family property, parental authority and social protection for women. A majority of the respondents also associated cousin marriage with genetic diseases. Regarding genetic testing, the majority of respondents preferred the option of premarital carrier matching, which was supposed to reduce stigmatisation, especially of women. Prenatal genetic testing was rejected on religious grounds. The result of this community-based and culture-sensitive process was a focus on premarital carrier matching.

Key messages points

- In premarital carrier matching, potential partners waive their right to receive personal information, and are told instead whether they are ‘genetically compatible’ or not (‘incompatibility’ meaning that the two partners are carriers, and thus have a 25% risk at each pregnancy of having an affected child).
- Such ‘couple testing’ is carried out before two people are introduced, in line with the tradition of matchmaking.
- The option of premarital carrier matching is supported by health professionals and community members as culturally appropriate for traditional communities such as the Bedouins, where consanguinity increases the prevalence of genetic diseases.
- Individual testing carries a risk of stigmatisation, especially for women.
- The traditional and social roles of cousin marriage, involving clan solidarity, interpersonal compatibility, preservation of family property, social protection for women and parental authority, preserve its practice despite growing awareness among community members of the association between cousin marriage and genetic diseases.
- Further research is needed to explore the actual uptake of the genetic counselling service and its use in the decision-making process as regards marriage, family planning and reproduction.

Introduction

The Negev area in the south of Israel, which constitutes about 60% of Israel, comprises around 510 000 inhabitants, of which about 23% are Bedouin and the rest are Jews. This area is less developed, economically and culturally, than the urban centre surrounding the cities of Tel-Aviv, Haifa and Jerusalem. Bedouin Arabs have been in the Negev since the 6th century, having migrated from the Arabian peninsula. Formerly a semi-nomadic people living from herding and agriculture, the Bedouin have been undergoing, since the 1950s and increasingly after 1967, a rapid process of sedentisation. In 1998 about 50% of the Bedouin population lived in seven towns which were planned for them by Israeli governments, while the rest lived in scattered encampments.

The Bedouin population of the Negev is characterised by low socio-economic and educational levels, high levels of unemployment, high fertility rates (about 8.0 children per woman, on average, as opposed to 3.9 children per women on average in the Negev district), poor utilisation of prenatal services, and a Muslim ban on pregnancy termination. Consanguineous marriages, particularly cousin marriage, are highly prevalent and polygyny is common. To assess the prevalence of consanguinity (for which there are no official records) we interviewed the local marriage registrar in a Bedouin community targeted for genetic research and counselling. The number of new marriages in this community (population size approximately 3000) was 57 during the period 1999–2002. A total of 51 (89%) of these marriages were consanguineous, with 21 (37%) being double-first-cousin marriages, 12 (21%) first-cousin marriages, seven (12%) uncle-niece marriages, five (9%) marriages of first cousins once-removed, and six (11%) second-cousin marriages. Approximately similar frequencies of double-first-cousin marriage, which is the preferred pattern of endogamy among the Bedouins, were found in other studies conducted in the larger Bedouin population. In the last decade, infant mortality attributable to genetic conditions was approximately four times higher in the Bedouin population as compared to the Jewish population in the Negev area. At the same time, less than 10% of eligible Bedouin women underwent amniocentesis, compared to about 50% of Jewish women in the area. One of the obvious reasons for not being tested is the Muslim objection to abortion. As a result of genetic studies that began around 1991, more than 10 genetic diseases have been mapped in the Negev Bedouin population, including thalassemia and congenital hearing loss (prevalence of affected individuals estimated at 4% and 3%, respectively), which are the genes currently included in the genetic screening service offered to a Bedouin community targeted for the piloting of premarital carrier matching.
Method

Semi-structured interviews, conducted in Hebrew and Arabic, were held during the period January 2001–November 2002 with Bedouin men (n = 26) and women (n = 23) stratified by age (range, 16–30 years), consanguinity level, susceptibility (measured by the existence of a family relative affected by a genetic disease) and education. Questionnaire surveys were found to be an impractical option in the Bedouin population owing to difficulties of access, literacy and compliance. Difficulties of access and compliance were also responsible for the fact that to date only 49 Bedouin men and women have been interviewed. Interviews lasted between 1 and 2 hours and were usually conducted at the respondent’s home. Questions used in the interviews included perceptions of genetic testing and of cousin marriage, specifically in terms of genetic risk, social goals, paternal authority and romantic love. The interviewers asked these questions in the same way but in an open-ended manner (without offering specific options for responses, so as to let respondents speak their minds in their own words). While the interview was structured around these standard questions, open discussions also developed around particular questions. A brief summary of the research was presented to each interviewee prior to the interview. All participants had the right to refrain from answering any question and could also withdraw from the interview at any time. The transcribed interviews were analysed to reach agreement between the researchers on the categorisation of attitudes related to each question. Disagreements were resolved by discussion.

Results

Attitudes regarding cousin marriage that were categorised from the interviews are detailed in Table 1. Due to space limitations the results of the analysis of attitudes regarding cousin marriage are presented in a succinct form, based on the categorisation of attitudes as representing agreement/disagreement with the questions posed.

Regarding genetic testing, the majority (44%, 90%) of respondents preferred the option of premarital carrier matching over individual testing, because the former was supposed to reduce stigmatisation, especially in the case of women. Prenatal genetic testing was rejected on religious grounds. Many of the respondents commented that if a woman were found to be a carrier then this would make it impossible to marry her. The categorisation of attitudes as representing agreement/disagreement with the questions posed.

Table 1 Attitudes regarding cousin marriage among Bedouin respondents

<table>
<thead>
<tr>
<th>Attitude</th>
<th>Total (%) (n = 49)</th>
<th>Males (%) (n = 26)</th>
<th>Females (%) (n = 23)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cousin marriage is associated with increased risk for affected babies</td>
<td>32 (65)</td>
<td>18 (69)</td>
<td>14 (61)</td>
</tr>
<tr>
<td>Cousin marriage serves social goals</td>
<td>18 (37)</td>
<td>6 (23)</td>
<td>12 (52)</td>
</tr>
<tr>
<td>Cousin marriage is inevitable because parents do not allow out-marriage</td>
<td>11 (22)</td>
<td>3 (11)</td>
<td>8 (35)</td>
</tr>
<tr>
<td>Cousin marriage is good if it has a romantic basis (‘love marriage’)</td>
<td>11 (22)</td>
<td>6 (23)</td>
<td>5 (22)</td>
</tr>
<tr>
<td>Cousin marriage reflects too much parental intervention</td>
<td>4 (8)</td>
<td>4 (15)</td>
<td>0 (0)</td>
</tr>
</tbody>
</table>
Conclusions
The focus on premarital carrier matching was presented in this study as the result of a community-based and culture-sensitive process. Embedding genetic counselling in the Bedouin community was done for the purpose of marriage and family planning, and is expected to lead eventually to a reduction in the prevalence of affected babies. It remains to be seen whether, in the Bedouin setting, an incompatible result derived from premarital carrier matching would indeed be acted upon. Further research is needed to explore the actual uptake of the genetic counselling service and its use in the decision-making process as regards marriage, family planning and reproduction.

Acknowledgements
The authors wish to thank all the Bedouin respondents and genetic counsellors who participated in this study. They are also indebted to the anonymous journal reviewers for their useful comments. The authors would like to acknowledge the co-operation of two co-investigators who initiated and oversaw the project described here and who were responsible for the tremendous genetic and epidemiological work that preceded this project, namely Profs Ilana Shoham-Vardi and Rivka Carmi.

Statement on funding and competing interests
Funding. This study was funded by grants from the Israel Foundation Trustees (Project PS14/3) and the Israel Science Foundation (Grant 769/00-2).
Competing interests. None identified.

References

Decision making and referral prior to abortion: a qualitative study of women’s experiences

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(Accepted 21 October 2003)


Abstract
Background. Despite abortion being one of the most common gynaecological procedures performed in the UK, significant regional variation exists in access to services.

Objective. This study explores women’s experience of referral for abortion in three inner London boroughs to determine if services met their expectations.

Method. In-depth interviews conducted with 21 women of varying ages, gestations and ethnicity, 3–9 weeks after termination of their pregnancy. The data were subjected to qualitative analysis.

Results. Most women had made a decision to proceed with abortion before approaching the health service, and expected non-judgemental support, information and prompt referral. We found variations in the extent to which these expectations were met. Delays in referral occurred when health professionals either required women to have more thinking time, referred them elsewhere for pregnancy testing or avoided discussing abortion. This was further compounded by difficulties in making appointments via the centralised telephone booking service. The brief counselling session offered to most women by the abortion providers, although helpful to some women, was viewed as unnecessary and intrusive by others.

Conclusions. Most women seeking an abortion prefer not to discuss their decision but expect information and prompt referral. Delays in referral cause distress and later abortions and should be avoided. High-quality counselling should be targeted at those in need.

Key message points
- Most women prefer not to discuss their decision to have an abortion, but seek information and prompt referral.
- Unnecessary delay is traumatic, results in later abortions and should be avoided.
- Counselling resources would be best utilised by targeting them at those in need.

Introduction
Induced abortion is one of the most common gynaecological operations performed in Great Britain with one in three women undergoing an abortion by the age of 45 years.1,2 The Royal College of Obstetricians and Gynaecologists (RCOG) guidelines on ‘The Care of Women Requesting Abortion’ sets quality standards for abortion services but there remains significant regional variation in access to and quality of services provided.1,3,4 The National Health Service (NHS) Plan requires each NHS Trust in England to obtain feedback from patients about their experiences of care5 but there has been little work to date on women’s experience of abortion services. Questionnaire surveys provide some information6–9 but cannot provide a detailed account of women’s experience of this procedure, and in-depth qualitative data are scarce.10–12 Data on the experience of women using the NHS abortion service in three inner London boroughs are presented, from the time the women suspected that they were pregnant until their first visit for assessment prior to the abortion procedure.