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Attitudes and policies regarding access to fertility care and assisted reproductive technologies in Israel

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Abstract Despite the high profile of fertility care and assisted reproductive technologies, their social and regulatory contexts remain largely unexplored. Yet, studies reveal a practice of candidate screening on a somewhat arbitrary basis. Examining the above issues is of special importance to Israel, given its high fertility rates. To this end, this study conducted a survey of physicians' attitudes regarding access to fertility care and treatment. An anonymous questionnaire was distributed among IVF providers in all fertility clinics in Israel during 2008–2009. A total of 46 physicians (>40%) responded. Although all agree that every person has a right to procreate, 15.25% believe it is important to screen candidates and 55.6% believe they should consider non-medical criteria when providing care. Only 47.8% of physicians acknowledge the existence of guidelines in their units, but where they exist, 22.5% state they do not follow them. Furthermore, between 24.4–63.0% of physicians are willing to perform controversial procedures if backed by official guidelines. In conclusion, existing guidelines are often vague or ignored. Contrary to the USA, IVF providers in Israel are shaped by the pro-natalist approach highly encouraged by the state and they act less as trustees and gatekeepers to the future child.

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Introduction

While provision of fertility care and assisted reproduction technologies bring substantial relief to many people, the social circumstances under which such technologies are regulated and used are not fully explored in the literature. Especially latent are the ways through which treatment conflicts with formal principles of justice and equality, specifically whether fertility care should be equally available to whoever needs them or whether access to such care should be subject to certain limitations and, if so, on what grounds.

Although there is some theoretical discussion in the literature on the interrelation between access to assisted reproduction treatment and the principles of justice and equality

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(Coleman, 2002, 2002-2003; Crossley, 2005; Daar, 2008; Elster, 2005; Fong, 2000; Inhorn and Fakih, 2006; Sato, 2001; Rao, 2008; Riley, 2007) very few studies examine the practice of such technologies in light of these principles. Most of the existing studies focus on access to IVF in the US context (Gurmankin et al., 2005; Stern et al., 2001, 2002; Storrow, 2007), revealing a tendency to turn away candidates for IVF and assisted reproduction treatment on a somewhat arbitrary basis (Gurmankin et al. 2005) following vague professional guidelines (ASRM, 2004; Steinbock, 2005). In the UK the clinicians' code of practice issued by the Human Fertilisation and Embryology Authority explicitly holds that assessment of the welfare of the child must be done in a non-discriminatory way, specifically on grounds of gender, race, disability, sexual orientation, religious belief or age (Human Fertilization, 2009). In contrast, professional organizations in the USA such as the American Society for Reproductive Medicine (ASRM) and the Society for Assisted Reproductive Technology (SART) developed an accreditation programme which is merely voluntary and, in any event, ethical guidelines on screening candidates issued by these bodies can be interpreted loosely enough to satisfy each and every party involved (American Society for Reproductive Medicine Ethics Committee Report, 2004).

Examining the relationship between access to fertility services and the principles of justice and equality is highly appealing in the Israeli context. This is because Israel has one of the highest birth and fertility rates in the world, especially within the developed countries (21 per 1000 and 2.9 correspondingly for the year 2007; Population Reference Bureau, 2009) with 15 IVF cycles per 1000 women aged 15-49 (Ministry of Health, 2008). Reproduction in Israel is encouraged by various factors, among them religion, culture, politics and law (Sperling, 2010) and supported by the country's sheer pro-natalist policy, specifically public funding of unlimited IVF cycles leading to the birth of up to two children for all women aged 18-45, supervising surrogacy agreements and, if legally approved, also permitting local egg donations for compensation and allowing healthy single women aged 30-40 to freeze their eggs for future fertilization. Exploring providers' attitudes and beliefs regarding access to fertility care and assisted reproduction treatment and reviewing policies and laws in this area is of high importance in particular since Israel does not have a national and direct policy on this issue.

Methods

Questionnaire

A three-stage study was conducted. In the first stage, case law, legislation, policy statements and literature discussing access to assisted reproduction treatment and fertility services were reviewed. A detailed questionnaire aimed at IVF service providers and the heads of all public and private fertility clinics in Israel was prepared, pilot-tested and statistically and ethically approved. The questionnaire was strictly anonymous. It enquires as to the respondents' personal and professional characteristics, the process through which requests for fertility care are being carried out in their units and the information sought from candidates. In addition, the questionnaire explores providers' attitudes as to their roles and responsibilities in providing care, what they consider as good parenthood and their views on general moral issues such as cloning, abortions, gamete donation, stem-cell research, etc. Respondents were asked to comment on a few scenarios and statements concerning the screening of IVF candidates and to share their inclination to approve or deny treatment in each of these hypothetical situations. Finally, respondents were requested to identify the personal parameters of candidates which they find most relevant to accepting or rejecting access to fertility treatment. In the second stage of the research, the final questionnaire was distributed by mail to all public and private IVF clinics throughout the country.

Statistical analysis

Statistical analysis of data obtained from the filled questionnaires and legal and policy analysis of results comprised the third and final stage of the research. Comparisons of means and medians by mandated status were performed using the Wilcoxon rank sum test, chi-squared test or Fisher's exact test as appropriate using the Statistical Package for Social Sciences version 17.0 (SPSS, Chicago, Illinois). Results were deemed to be significant if the *P*-value was less than or equal to 0.05. A statistical correlation test was performed in order to examine and reveal certain tendencies among practitioners, dependent on geographical area, years of professional experience, type of unit, etc. Analysis of personal characteristics of providers guaranteed that respondents working in both public and private clinics had not completed two questionnaires.

Results

After several mailings and follow-up calls, a total of 46 physicians (12 of whom are IVF clinic directors) responded to the guestionnaires and all were included in the statistical analysis. Respondents represent more than 40% of all IVF providers from 17 out of 24 IVF units (70.83%) in the country and is considered to be a representative sample. Interestingly, IVF providers from two of the seven units, from which questionnaires were not obtained, specifically objected to participation in this research and feared that although the questionnaire was anonymous their identities might still be revealed. Of the respondents, 90% were men and 10% were women. Most of respondents (81.8%) were born in Israel; 86.7% declared they were Jewish, 4.4% Muslims, 4.4% Christians, 2.2% atheists and 2.2% with no religion. When asked about their nationality, 60.97% reported they were Israeli, 9.75% Arabs and 29.26% Jewish. The questionnaires were collected from various geographical areas (13.33% from the Jerusalem area, 13.33% from the Southern area; 31.11% from the Northern area and 42.22% from Hasharon and Central areas) and represent public (76.08%), private (13.04%) and mixed (10.86%) IVF programmes (correlating to the general ratio of these units: 66.7%: 16.67%: 16.67%. The results are divided into the following three major themes.

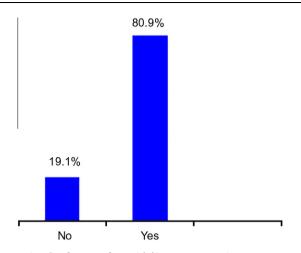


Figure 1 Preference for guidelines on screening: responses to the question 'Do you prefer to have guidelines regarding screening?'

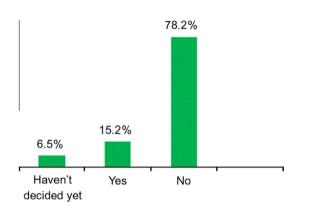


Figure 2 Views on whether screening is important: responses to the question 'Do you think candidates' screening is important?'

The importance of screening and the need for screening guidelines

In reply to two different general questions regarding the screening of candidates (the first enquiring whether in the absence of guidelines for screening candidates, the respondent would prefer to have them; and the second requesting the respondent's view on the general statement that screening in itself is important), the following surprising

result was found: 80.9% stated that they would prefer to have specific guidelines regarding the screening of candidates (Figure 1), while 78.2% did not believe that screening was important (Figure 2).

The study reveals outstanding figures as to physicians' attitudes regarding the notion that every person has a right to procreate and become a parent. Of respondents, 39.1% think such an idea is always true and 60.9% think it is true most of the time (Figure 3). Yet, 15.2% of physicians believe it is important to screen candidates because not every person can be an able parent and 6.5% have not made up their mind on this question (Figure 2).

The criteria for screening candidates for IVF and assisted reproduction services which were stated to be important are a general sense of professional commitment (55.6% graded this criterion as the most important) and concern for the unborn child (46.7% graded this criterion as the most important). Other less significant reasons mentioned include fear from malpractice, concern for success rates and saving of limited public expenses, the latter of which is usually argued for as a justification for rationing health-care services.

While 47.8% of respondents report that their units have policy guidelines regarding screening, 23.9% of them say they do not have such guidelines and 28.3% do not know whether such guidelines exist or do not answer this question. Notwithstanding, 80.9% of respondents said they preferred to have clear professional guidelines in all or most screening cases. Interestingly, in those units where some professional screening guidelines had been laid down, 75% of respondents said they followed them in most or all cases and did not exercise any discretion as to patients' requests for fertility care and 22.5% declared they did not follow such guidelines and exercised full discretion.

There is an interesting borderline association between the existence of screening guidelines in a unit and the wish of the respondents to have such guidelines (P = 0.054). While almost all respondents (94.4%) in whose units there are guidelines do indeed wish to have them, only about two-thirds (63.6%) of those in whose units there are no guidelines, wished to have them. No correlation, however, was found between the position held in the unit and the wish to have official guidelines. There is an association (P = 0.048, Wilcoxon test), however, between the professional experience of the respondents and their wish to have guidelines. Those who wish to have them have, on average, 18.43 years of experience (SD = 9) and those who do not want them, have 25.25 years (SD = 9.5).

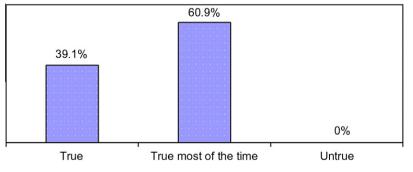


Figure 3 Views on whether every person has a right to parenthood.

Table 1 Information sought from IVF candidates.

Type of information sought	Enquiring respondents
General health; age	97.8 (45)
Drug abuse; HIV; other illnesses or physical disabilities; mental problems	82.6 (38)
Addictions	69.6 (32)
Marital status	65.2 (30)
Past attempted suicide	45.7 (21)
Physical and mental state of existing children	43.5 (20)
Violent tendencies by the candidate's partner	32.6 (15)
Stability of candidate's spousal relationship	21.7 (10)
Reasons for being a candidate	15.2 (7)
Criminal record; nationality	8.7 (4)
Religion; sexual orientation	6.5 (3)
Economic capacity; military service	4.3 (2)
Intellectual capacity	0

Values are % (n).

Specific information requested from candidates

In addition to the information discussed above, the research sought to explore further into areas that may be considered as relevant to the screening process. Providers were asked whether candidates were required to reveal background information in areas that have bearing on child rearing and maintaining family life such as mental state of the candidates, the relationships between prospective parents and candidates' or their spouses' tendency toward violence. The study reveals that almost all respondents require strictly medical information such as age, health (physical and mental), HIV and other significant illnesses. Over 65% enquire further into marital status and addictions, but only about 44% enquire about the physical and mental condition of other children in the family and as to suicidal background of the candidate, 32.6% ask about the spouse's tendency for violence and 21.7% about the stability of the relationship (Table 1).

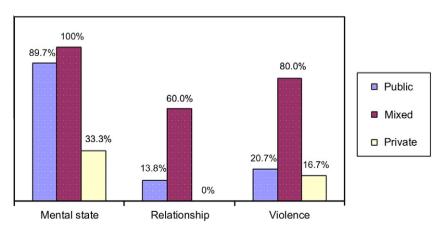
The results detailed above were compared with the type of unit, public, private or mixed (Figure 4). As to the candidate's mental state, an overwhelming majority of the respondents in public or mixed units, declared that they enquire about the mental state of candidates, whereas in private units, only a minority (33.3%) enquire about this issue. As to the stability of the relationship between the prospective parents and the candidates' or their spouses' tendency towards violence, the majority of respondents in both public and private units, do not enquire about these issues, while in the mixed units 60.0% and 80.0%, respectively, do enquire.

When asked whether women who wish to become single mothers should undergo psychological analysis to evaluate their parental abilities, a large majority (83.3%) among those providers who declared they were seniors (and nearly two-thirds, 62.5%, among the other respondents) gave a negative reply. Respondents who stated that the stability of the relationship is one of the issues they would ask candidates about were more likely to reject candidates with problems in their relationship (62.5% versus 8.6%; P = 0.003).

Finally, with reference to the maximum age at which it is recommend to begin fertility treatment, 65.9% of respondents declared that the range of such age should be between 35 and 44, 31.7% stated ages between 45 and 55 and one respondent stated a willingness to perform treatment at 'any age'. It is surprising that the stated age was uncorrelated to the type of unit in which respondents worked (whether public, private or mixed).

Response to hypothetical scenarios regarding and willingness to perform controversial treatment

When presented with hypothetical scenarios which may require screening of candidates, in most cases at least 91% of respondents declared they would not turn away candidates and, overall, 73.9% of respondents declared that they would not turn away candidates in at least 10 out of the 12 scenarios presented to them. Thus, for example, all or most



Figuer 4 Background data required from candidates by type of unit.

Hypothetical scenarios	Provider
Female candidate who suffered the loss of a child; the couple is not married	100 (46)
Candidate suffers from chronic disease (diabetes, high blood pressure, severe asthma) or from physical disability; future parents have a low socioeconomic status	97.8 (45)
Female candidate is a single lesbian	95.7 (44)
Male candidate is a homosexual in a stable relationship	95.6 (43)
Candidate has been convicted of felonies that require less than a 3 year imprisonment	95.5 (42)
Candidate suffers of a light mental condition	95.3 (41)
The couple has problems in their relationship	91.4 (35)
The candidate and/or her partner occasionally consume alcohol or light drugs	91.3 (42)
Candidate suffered physical abuse, or inflicted it on others	62.5 (25)
Candidate has a 10% chance of dying of severe diabetes during pregnancy	22.2 (10)
Values are % (n).	

 Table 2
 Providers' tendency to accept IVF candidates following hypothetical scenarios.

of physicians report they would accept or tend to accept requests for IVF of unmarried couples (100%), single lesbians (95.7%) or male homosexuals in stable relationships (95.6%) and of candidates suffering from chronic disease (high blood pressure, asthma, etc.; 97.8%) or minor mental health problems (depression, anxieties; 95.3%). The same response was given when physicians were asked to consider candidates occasionally consuming alcohol or light drugs (91.3%), candidates charged with felonies of up to 3 years of imprisonment (95.5%) and female candidates who had lost a child and are seeking new pregnancies (100%).

Only two cases prompted a significant rate of refusal: a candidate who was the victim or perpetrator of physical or mental abuse (37.5% rejection) and a candidate with a 10% risk of death due to diabetic pregnancy (77.8% rejection; Table 2).

The questionnaire results regarding providers' views on controversial procedures (such as fertility treatments to candidates who suffer from genetic illnesses; availability of care to women who choose surrogacy for reasons of convenience; provision of care to women who are HIV carriers; pre-implantation selection of fetus' sex, intelligence, tendency for obesity etc.; human reproductive cloning) are summarized in Table 3. Most of these procedures, to this date, are not regulated in Israel and some are even prohibited by law, e.g. reproductive cloning. Another interesting finding of this study shows that all respondents (100%) stated that they would not deny access to fertility care from mothers who wish to undergo treatment after experiencing the death of their child.

No correlation was found between the existence of guidelines or the willingness to follow such guidelines and respondents' position regarding controversial treatment. When considering the overall tendency to perform controversial treatment, it was found that over two-thirds (67.4%) of respondents were willing to perform at least three out of the five controversial and (as of today) illegal hypothetical treatments that were presented to them, should they become legal.

This study found some interesting associations between providers' views on controversial treatment and some other questions posed: a non-significant trend towards a positive association between the overall willingness to perform controversial procedures and a tendency to accept candidates in possible scenarios which may require their screening.

This study also found a non-significant trend towards association between the type of unit (public/private/mixed) and the willingness to perform reproductive cloning. In public and mixed units, a majority of respondents (72.4% and 100%, respectively) were not willing to perform such a procedure, while in private units, the majority (66.7%) were willing. Moreover, the willingness to perform reproductive cloning appears to be related to the degree of professional commitment reported by the respon-

Table 3	Providers'	willingness	to perform	controversia	procedures.
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	Genetic disorders	Convenience surrogacy	HIV carriers	Genetic selection	Reproductive cloning
Willing	31.1	6.5	26.1	0.0	2.2
Only if required by guidelines	55.6	30.4	63.0	43.5	24.4
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dents. A large majority of respondents who placed the degree of professional commitment as first (80%) or second (70.6%) in their list of criteria for screening were unwilling to perform it, whereas 100% of respondents who placed this criterion third were willing. It should be taken into account, though, that the latter category included only two respondents.

Discussion

There is a striking contrast in the finding that, on the one hand, a large majority of respondents would prefer to have specific policy guidelines regarding the screening of candidates, while on the other hand, most of them do not believe that screening is important. Additionally, while the only governmental policy on the criteria for accepting requests for IVF in Israel stipulates that, in case of doubt, providers should consult with experts like a clinical psychologist, an experienced social worker or a psychiatrist (Ministry of Health, 1990), only 68.9% of providers declare they make such consultations. This may reflect providers' preferences to operate and be backed by formal guidelines whatsoever regardless of their importance and may also be related to contrasting trends in the approach of modern society to parenthood: while reproduction is essentially considered natural and unlimited, there is a general tendency to regulate every aspect of human behaviour, including medical treatment (Cheng, 2006). The current study's explanation may be supported by the fact that no correlation was found between the position held in the unit and the wish to have official guidelines.

The current research found that, while almost all respondents in units with guidelines do indeed wish to have them, only about two-thirds of those in units without guidelines wished to have them. This may suggest the influence of practitioners and their world view on the establishment of guidelines: practitioners who do consider the existence of guidelines important and find them missing may strive to establish them in their unit. As expected, more experienced respondents are less likely to wish for formal guidelines, and the less experienced the practitioner, the more likely he or she is to prefer additional psychological backing when considering the candidacy of single women. These findings suggest a tendency to rely on experience, rather than professional psychological evaluation, in screening single mothers.

The criteria for screening which were formally stated to be most important are a general sense of professional commitment and concern for the unborn child. Less important factors were the fear of law suits, rationing limited medical resources and concern over success rates in the respondent's unit. Contrary to expectations, no correlation was found between the type of unit (or whether legal advice is sought by the respondent) or the question of whether respondents hold administrative positions and the various reasons for screening, especially the fear of legal actions. This suggests that physicians and IVF providers in Israel are shaped by the pro-natalist approach highly supported by the state and they regard themselves as professionally responsible for the promotion and advancement of such an approach. Provision, organization and evaluation of fertility care are overwhelmingly focused on pure medical information, as opposed to social or behavioural parameters. This, in addition to the results regarding provider's low inclination to screen candidates in certain hypothetical scenarios, seems to indicate a general tendency to maximize access to IVF treatment. The current findings regarding the information requested from the candidates and its correlation to the type of unit (public/private/mixed) suggest that private units are willing to forego some enquiries (e.g. as to the candidate's mental state).

The responses regarding hypothetical scenarios which may require screening of candidates show that in almost all cases, a vast majority of respondents declared they would not turn away candidates. Only two cases prompted a significant rate of refusal: a candidate with a 10% risk of death due to diabetic pregnancy (77.8% rejection) and a candidate who was the victim or perpetrator of physical or mental abuse (37.5% rejection). This suggests that providers give more weight to direct possible risks to the physical welfare of the mother and/or the prospective child as a cause for refusing treatment than to other factors not directly affecting their physical wellbeing.

The results regarding physicians' views on controversial procedures indicate that while a majority of respondents were willing to perform at least three out of the five presented, some procedures are more controversial than others: a large minority is willing to provide care for people with genetic disorders or for HIV-positive women even if not required to do so by guidelines, whereas a significant majority would insist on being required to do so officially (it may be inferred that they oppose such procedures in principle). This majority is smaller for the case of genetic selection, which indicates a stronger opposition to such a procedure. Yet, procedures such as surrogacy demanded out of convenience and reproductive cloning are most strongly opposed: most respondents will refuse to perform them even when required by official guidelines. As for reproductive (non-therapeutic) cloning, about two-thirds of respondents in private units were willing to perform it should it become legal, while the majority of respondents in public or mixed units were unwilling to do so. However, a very slight majority (52.2%) stated they would refuse to perform a pre-implantation genetic selection of the fetus for purely non-medical reasons (such as for determining the child's gender/intelligence/tendency to suffer obesity). This finding leads to the conclusion that a rather large minority would be willing to consider favourably such demands made by future parents and carry out the requested examinations. Such a conclusion may be explained by the more general change in atmosphere and policy concerning selection for non-medical reasons by pre-implantation genetic diagnosis in recent years in Israel (Grazi et al., 2008).

Contrary to the expectation that private units were more likely to treat older candidates, this study did not find a correlation between the maximum age for treatment stated by the respondents and the type of unit. This may suggest that despite having greater experience in providing treatment to aged women, physicians working in private units (most of whom also work in the public sector) are able to make solid opinions regarding the desirable age for procreation and parenthood, mainly deriving from medical concerns.

Finally, no correlation was found between the unit's size or its geographical location and the respondents' answers to morally controversial treatment and screening in hypothetical scenarios.

In conclusion, this study reveals that nearly all IVF providers agree that every person has a right to procreate and become a parent and only 15.20% of them believe it is important to screen candidates. The major criteria for screening stated to be important were a general sense of professional commitment and concern for the unborn child. Regardless, 80.9% of respondents said they preferred to have clear professional guidelines in all or most cases. Interestingly, in those units where some professional guidelines had been laid down, 75% of respondents said they followed them in most or all cases and did not exercise any discretion as to patients' requests for IVF while 22.5% did not follow such guidelines and exercised full discretion.

Contrary to the USA, IVF providers in Israel are shaped by the pro-natalist approach highly encouraged by the state and they regard themselves as professionally responsible for its promotion and advancement, acting less as gatekeepers and trustees to the future child. In almost all cases presented, a vast majority of providers declared they would not turn away candidates. Almost all respondents require strictly medical information. Nearly 70% enquire further into marital status and addictions, but only about 45% enquire about the physical and mental condition of other children in the family and as to suicidal background of the candidate. Significant difference between private and public clinics was shown to have effect on only few components of the information sought from candidates. The sex, religion, geographical area, unit size, place of birth or professional experience of providers did not have any significant bearing on their responses to the questionnaire.

Ignoring the moral issues pertinent to provision of fertility care and assisted reproduction treatment would leave the field wide open to arbitrary decisions and abuse of power. As also observed in the US context, barring access to treatment based on criteria which had not been fully scrutinized by the public and by qualified professionals may hinder the application of the principles of justice and equality and give rise to claims of discrimination. In the Israeli case, this study has found that the lack of uniform guidelines did not appear to result in unequal access to fertility care and assisted reproduction treatment. However, the current status still leaves major decisions that concern candidates' private lives in the hands of IVF providers and their individual world view. In order to ensure just and equal treatment of candidates' applications, examining the establishment of formal guidelines in this area is recommended. The Israeli case reflecting extensive experience in this area may help develop strategies for constituting such guidelines which may be of interest to other places as well.

Limitations

These results must be considered within the limitations of the study. First, the study surveyed the opinions of 46 respondents representing more than 40% of all practicing physicians (about 100 all over the country) in 71% of fertility units in Israel. Yet, the conclusions presented in the paper are based on survey data that indicated large majorities and highly significant tendencies within the sample. Therefore, the statistical analysis can be considered to be sound and reliable. Second, few of the questions in the study focused on hypothetical scenarios. It remains unknown whether respondents would actually follow their instincts as described in those hypothetical scenarios and would act accordingly. Nonetheless, this type of limitation is not special to this survey but represents a more general concern characterizing the kind of research performed.

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