Arab Americans, African Americans, and infertility: barriers to reproduction and medical care

Marcia C. Inhorn, Ph.D.,[a] *and Michael Hassan Fakih, M.D.*[b,c]

[a] Department of Health Behavior and Health Education, School of Public Health, University of Michigan, Ann Arbor; [b] Department of Obstetrics, Gynecology and Reproductive Biology, Michigan State University, East Lansing; and [c] IVF Michigan, Dearborn, Michigan

Objective: To compare barriers to infertility care among African Americans and Arab Americans.
Design: Qualitative study using semi-structured reproductive histories and open-ended ethnographic interviews.
Setting: Infertile volunteers in a private IVF clinic in Dearborn, Michigan, an Arab American ethnic enclave community in metropolitan Detroit.
Patient(s): Arab American men presenting for infertility diagnosis and treatment, including assisted reproductive technologies.
Intervention(s): None.
Main Outcome Measure(s): Perceived barriers to effective infertility care.
Result(s): Arab Americans and African Americans living in metropolitan Detroit are at increased risk of infertility and share similar histories of poverty, racism, and cultural barriers to medical treatment. This study, which focused on infertile Arab American men living in or near Dearborn (an ethnic enclave community composed mainly of recent immigrants and war refugees), revealed significant barriers to effective infertility care, including economic constraints, linguistic and cultural barriers, and social marginalization in mainstream U.S. society, particularly after September 11, 2001.
Conclusion(s): Arab Americans experience disparities in access to infertility care, largely because of poverty and social marginalization in post-September 11th America. (Fertil Steril® 2006;85:844–52. ©2006 by American Society for Reproductive Medicine.)

Key Words: Infertility, health disparities, assisted reproductive technologies, Arab Americans, African Americans, health care access

Over the past 25 years, assisted reproductive technology (ART) has become widely available worldwide (1, 2) and is routinely offered to infertile couples as the most effective way to produce a "take-home" baby. Today, more than 420 IVF clinics exist in the United States alone, and 107,000 ART procedures give rise to 40,000 IVF babies annually (3). But who benefits from this ART success story? Are these technologies available to low-income, ethnic minority populations?

To answer these questions, one must consider the average cost of seeking ART services in the United States. In the United States in 2002, the mean cost per IVF cycle was estimated at $9,547—in a country where the gross national income per capita in the same year was only $33,360 (4). Moreover, this does not account for the fact that there is wide variation in prices between U.S. clinics, many of which charge well over $10,000, and as much as $20,000, per cycle. Although such costs are increasingly being covered by the U.S. insurance industry, thereby allowing some middle-class and even working-class couples to access ART (5), many insurance plans provide only minimal coverage for IVF and related services. Although insurance carriers might cover the costs of blood work and ultrasound scans, the expensive hormonal medications and the ART procedures themselves are not covered under most health insurance plans. In short, ART remains a private, fee-for-service form of health care delivery in the United States, accessible largely to white, middle- to upper-class infertile couples.

The very "whiteness" of ART in the United States is reflected in the burgeoning social science literature on this subject, which has documented the struggles of white professional couples to make the "elusive embryo" (6). To date, six full-length ethnographic studies have been published on the ART experiences of white professionals in the United States and the pregnancy losses that often accompany this form of treatment (6–11). This probably reflects the fact that white couples "are most likely to seek infertility treatments and thus make up convenient samples of patients who can be recruited for participation in research projects" (Ceballo [12], p. 5).

Infertility and Health Disparities in the United States

Ethnic minorities' experiences of infertility and infertility treatment, including their attempts at accessing ART, are

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Reprint requests: Marcia C. Inhorn, Ph.D., University of Michigan, School of Public Health, Department of Health Behavior and Health Education, 1420 Washington Heights, Ann Arbor, Michigan 48109-2029 (FAX: 734-763-7379; E-mail: minhorn@umich.edu).

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almost entirely missing from the social scientific literature, with the exception of a small-scale ethnographic study of infertility among African American women (12). This is despite the fact that increased rates of infertility are part and parcel of the overall picture of health disparities that continue to plague ethnic minority populations in the United States (13–17). This research lacuna is, indeed, striking, and reflects the fact that infertile low-income and ethnic minority couples face multiple barriers—social, structural, and ideological—to effective medical care. As noted by Nsiah-Jefferson and Hall (18),

> Members of minority communities have an equal or even greater need for programs to treat infertility, . . . but these needs have not been defined as a legitimate concern and . . . treatments are generally not available to low-income women, who are disproportionately nonwhite. Going beyond this clear mismatch between the needs and services available, the . . . issue for low-income women and women of color comes down to the social construction of infertility as a 'social problem.' Why have the infertility problems of minority communities been ignored? What are the implications for the daily life and social status of low-income women and women of color? (p. 95)

These authors present cogent arguments about the potential barriers to medical care facing infertile low-income and ethnic minority couples in the United States. First, ART services are unaffordable in a for-profit health care system that directs no attention to the needs of the poor. Instead, governmental health care subsidies focus on reducing the fertility of minority and low-income people rather than improving it. Second, nonfinancial barriers restrict access to ART. Namely, IVF clinics tend to be selective about their clients and might limit treatment to married, heterosexual couples who can afford to pay for services.

Both of these structural factors are related to a potent ideological issue—namely, that in the United States, "stratified reproduction" (19) and a "eugenic logic of IVF" prevail (20). To wit, ART is being used to enhance the fertility of married white elites, thereby producing "white babies for married couples who are able to pay for them" (18). In the white majority view, infertility is seen as a "non-issue" for low-income and minority couples, who are seen as being "hyperfertile" and undeserving of further children (12, 21). Indeed, the fact that infertility treatment services are largely restricted to white elite couples in the United States provides a salient example of stratified reproduction, or "the arrangements by which some reproductive futures are valued while others are despised" (Ginsburg and Rayna [19], p. 3).

For African Americans in particular, lack of infertility services provides further evidence of the ways in which black women's (and men's) reproductive needs have been denigrated and ignored—one of many examples of reproductive abuse in what Northwestern University Law Professor Dorothy Roberts (21) has called the "killing of the black body" throughout U.S. history. As noted by University of Michigan psychology professor Rosario Ceballo (12, p. 3) in a provocative article entitled "'The Only Black Woman Walking the Face of the Earth Who Cannot Have a Baby': Two Women's Stories," the medical establishment, academic researchers, and the media simultaneously perpetuate a hegemonic view of infertility as a trauma solely afflicting affluent whites. In the public mind, the image of infertility almost never includes African American women or other women of color. On the contrary, the social stereotype of African American women depicts women with too many babies—certainly not too few.

The social implications of this form of stratified reproduction are devastating for poor and minority infertile couples, especially those coming from subcultural groups where parenthood (and particularly motherhood) is glorified and children are highly valued. Numerous ethnographic accounts from around the world, including the United States, describe the importance of having children and the consequences of infertility for women's social status within marriages, families, and communities (2, 22). Although women carry the greatest social burden of infertility, in terms of blame for the reproductive failing, marital duress, and social ostracism, men might also suffer over their own infertility and childlessness, particularly because infertility and impotency are popularly conflated, and paternity is seen as bound to manhood in many societies (23–27).

Comparing Infertile Arab Americans and African Americans

These kinds of social consequences, as well as the increased barriers to medical care, are salient issues for infertile couples in both Arab American and African American communities in the United States. Indeed, although these two minority populations are rarely compared or studied together, they share many under-appreciated commonalities. Only by comparing the little-known Arab American community with the better-known African American one can we begin to understand the ways in which Arab Americans are both similar to and different from African Americans in terms of infertility and health disparities. In this study, Arab Americans are the primary focus of investigation. However, in the United States, they often live in close proximity to African American communities and share similar risks of infertility, poverty, and discrimination. Thus, it is important to compare these two groups on multiple levels, given their shared histories and similar cultural attributes that are rarely recognized.

First, both groups are likely at increased risk for infertility problems because of environmental and lifestyle factors. Both groups tend to be concentrated in urban industrial centers, where they are exposed to reproductive toxins, particularly lead, through occupational exposures, ambient air pollution, and toxic waste disposal in their neighborhoods (28–31). In addition, their infertility problems might be linked to lifestyle factors, including heavy smoking, caffeine consumption, and drug use (29, 32), as well as nutritional

deficiencies and female obesity, which disrupt ovulation (33). Indeed, both African Americans and Arab Americans currently suffer from the "epidemic" of obesity in the United States, which is negatively affecting health status and life expectancy in many regards (29), including reproductive health.

Second, on a social and cultural level, both groups could be described as pronatalist, in that children and parenthood are seen as desirable social attributes. Couples of Middle Eastern descent are expected to have children early within marriage, as reflected in the relatively high marriage and fertility rates across the Middle Eastern region (34). These same trends hold true among Arab American populations (35), who have larger numbers of children in the household and younger age structures than the general U.S. population (36). For Arab Americans, children are a source of social status. For Arab American men in particular, social power is achieved in patriarchal, patrilineal family structures through the birth of children (37), especially sons, who will perpetuate patrilineal structures into the future (23–25, 38). Thus, infertility precipitates a social crisis for both men and women in childless marriages, whose very social identities are determined by their ability to reproduce.

Similarly, in African American communities, procreation, whether through marriage or informal partnerships, is highly valued, as are the contributions of children to family life (12, 18, 30, 39). Even under conditions of economic duress, ethnographic studies document the degree to which African American women prioritize their motherhood roles and strive to create better futures for their children (30, 40, 41). The same can be said of many African American fathers, who, when present, have been found to be more involved in the socialization of their children than white fathers (39, 42). Thus, for African Americans, "losing the option of procreating and parenting" because of infertility might be devastating (Nsiah-Jefferson and Hall [18], p. 110). For African American women who described the plight of infertility in the only study conducted to date, it was a social dilemma that was suffered in "silence and isolation" (Ceballo [12], p. 9).

Third, both Arab Americans and African Americans turn to their religions, be they Islam or Christianity, to make sense of their suffering. The Islamic scriptures describe infertility as a God-given condition, thereby providing a satisfying religious reason for why some individuals are infertile (1, 43). However, the Islamic scriptures clearly disallow alternative modes of family formation, including both adoption and donor gametes, which lead to children of "unknown" lineage (44–46). Thus, unlike other infertile couples in the United States, who resort to donor technologies and adoption to overcome their childlessness (6, 47), infertile Arab American Muslim couples generally have no other way of becoming parents except through medical treatment, which is encouraged in Islam as a religious obligation (43, 48).

Among African Americans, adoption and informal adoption arrangements are allowed both legally and religiously among Christian populations. But in the sole study of infertility among African Americans, neither legal nor informal adoption were popular solutions for childlessness, especially among husbands (12). Instead, women interviewed spoke about their religious faith as the means by which they had endured their experiences and survived without children. Such religiously based coping has been described for other health conditions in the African American community as well (49).

Fourth, both communities regard the U.S. health care system with some suspicion and distrust, for reasons that are cultural in nature or based on experiences of racism (50). For Arab Americans, including recently arrived immigrants, language barriers, illiteracy (in both English and Arabic), and lack of Western understandings of the body and its physiology represent major barriers to negotiating infertility care, especially for women and immigrants from rural areas of the Middle East (48). Furthermore, many Arab American women (and their husbands) might be uncomfortable receiving gynecological care from a male physician, because of cultural notions of modesty and shame.

For infertile African Americans, problems with the health care system are different and are related to a long history of racism documented for U.S. reproductive health care in general (12, 21, 51). African American women's lack of trust in their health care providers to deal with their reproductive complaints effectively and without prejudice is mirrored in other areas of high-technology medicine, including organ donation (52) and the use of advance directives involving life support (53).

Fifth, such distrust is clearly linked to general histories of racism and discrimination against both Arab Americans and African Americans within U.S. society. Although a long history of racial discrimination, negative stereotyping, and hate crimes can be documented for both groups in the United States (17, 54–57), the events of September 11, 2001 ("September 11th") reversed the generally assimilationist efforts of Arab Americans to "blend" into white U.S. society as an "invisible" (and racially unmarked) ethnic minority population (58, 59). Today, both "Arabs" and "blacks" are vilified by many white Americans, who regard Arab and black men in particular as dangerous, untrustworthy, and inherently violent (as well as fanatical, if they are Arabs). The very possibility that Arab American and African American men might be trustworthy, loving, law-abiding citizens—who might want to conceive and nurture children as responsible father figures (60)—seems to have eluded both the media and popular imagination, leaving deeply entrenched caricatures that are difficult to overcome.

Sixth, these caricatures of Arab American and African American men include images of male hypersexuality and hyperfertility. Arab American men and Muslim men in general are seen as polygamous fathers of children from multi-

ple wives, harkening back to Western Orientalist fantasies of the harem (61). Similarly, African American men are often portrayed as "informal" polygamists, spawning offspring with multiple, unmarried sexual partners (as well as spreading HIV/AIDS to them) (41). If Arab American and African American men are portrayed as hypersexual, hyperfertile polygamists in the Western popular imagination, then the very possibility that they might suffer from real infertility problems within stable, monogamous unions can be ignored and can lead to the convenient denial of their legitimate reproductive health needs.

Finally, the racism and stereotyping directed at both Arab Americans and African Americans leads to much blaming and scapegoating, including for conditions of poverty. Although a significant percentage of both Arab Americans and African Americans have achieved middle-class status or higher (62), the majority of members of both groups are lower-income, with many families existing below the poverty line (35, 36, 63, 64). Both groups have been affected by changes in the urban industrial workforce and the outsourcing of U.S. factory jobs to foreign countries (65, 66). Both groups have been forced to rely on the U.S. welfare system to supplement meager family wages (39, 67, 68), with negative implications for family structure and health status (65). Indeed, economic impoverishment and accompanying low social class status are major problems for both of these ethnic minority populations in the landscape of America (58, 63). Poverty affects the ability of Arab Americans and African Americans to seek higher education, improve their standard of living, and access affordable health care, including for problems of infertility.

MATERIALS AND METHODS

Research Setting

This article presents a study of infertility and health disparities based in metropolitan Detroit, Michigan, a northern industrial city with one of the largest populations of both Arab Americans and African Americans in the United States, many of whom live below the poverty line. This study focuses exclusively on Arab Americans in metropolitan Detroit, although a future comparison of infertile Arab Americans and African Americans is clearly needed.

According to the recently released findings from the Detroit Arab American Study (DAAS), a major University of Michigan–based survey funded by the Russell Sage Foundation, metropolitan Detroit has one of the oldest, largest, and most visible Arab populations in North America (58). Arab Americans trace their ancestry to four sending areas: Lebanon/Syria (37%), Iraq (35%), Palestine/Jordan (12%), and Yemen (9%). Seventy-five percent were born outside the United States, with most continuing to speak Arabic, even if they have acquired English-language skills. The population reports being deeply religious: 58% Christian and 42% Muslim. Most Christians have achieved middle-class status and are dispersed throughout Detroit's suburbs, whereas two thirds of all Muslims live in the "ethnic enclave" community of Dearborn, Michigan, sometimes dubbed "Arab Detroit" (69).

Compared with Arab Americans nationwide, the Arab Americans of Dearborn are more likely to be Muslim immigrants, refugees from war-torn Lebanon and Iraq or poor rural communities of Yemen. They have larger families and lower family incomes, with a quarter of the population struggling on family incomes of less than $20,000 per year. Fifteen percent of those surveyed also said they personally have had a "bad experience" after September 11th, because of their ethnicity. These experiences included "verbal insults, workplace discrimination, special targeting by law enforcement or airport security, vandalism, and in rare cases, vehicular and physical assault" (Baker et al. [58], p. 2).

Arab Americans in Dearborn live in close proximity to African American communities, including the predominantly black city of Detroit, which is adjacent to Dearborn and surrounds another Arab enclave called Hamtramack. The metropolitan Detroit area is among the most racially segregated cities in the country (70). Over the past several decades, racial and ethnic segregation in Detroit has increased significantly. As whites have moved to the suburbs, the city of Detroit has become increasingly black, with more than 80% of all Detroit residents now African American, according to 2000 U.S. census data (36).

Furthermore, the racial segregation of Detroit is mirrored in the city's economic inequalities. Among the 77 cities in the United States with populations above 200,000, Detroit ranked first in the percent of population below the poverty line, with 21.7% of all families in Detroit living in poverty and 39.5% of all female-headed households below the poverty line. For Arab Americans living in Detroit, the poverty rates were even higher, with 37.5% of all families living in poverty and 44.1% of female-headed households in poverty, according to 2000 U.S. census data (36). This stands in stark contrast to the predominantly white suburbs of Detroit, where just 5% of white residents, 7%–10% of Arab Americans, and 13% of African Americans live in poverty (36, 70).

To summarize, a current portrait of Detroit would show three major sectors: [1] a poor, virtually black inner city, [2] a predominantly poor Muslim Arab suburb (Dearborn) attached to Detroit's southwestern border, the home of a growing population of Shi'a Muslim refugees from Lebanon and Iraq, and [3] a ring of suburban white affluence, including many Christian Arabs (primarily Iraqi Chaldeans), who have achieved wealth and consider themselves to be "white," according to the DAAS survey data (58).

This city, with its heavy concentrations of both Arab Americans and African Americans, provides an ideal setting for a study of infertility among these ethnic minority populations. Fortuitously, it is home to IVF Michigan, the Midwest's largest ART treatment center, with seven offices located throughout southeastern Michigan. Although the

headquarters (where all ART procedures are performed) are located in the affluent northern suburb of Rochester Hills, Michigan, IVF Michigan maintains an active office in the heart of Dearborn, headed by an Arab American Muslim physician and catering largely to an Arab American clientele. It is in this Arab American satellite clinic that the present study of infertility and health disparities among Arab American men is located.

Research Methodology

The study began in September 2003 and concluded in August 2005. The study represented a United States–based follow-up to a larger study, "Middle Eastern Masculinities in the Age of New Reproductive Technologies," begun in Beirut, Lebanon in January 2003. This multi-sited study focused on male infertility among men of Arab descent, including their attempts to utilize intracytoplasmic sperm injection (ICSI), a variant of IVF designed to overcome male infertility specifically.

Overall, semi-structured reproductive histories and open-ended ethnographic interviews were conducted with 250 Arab men, including 220 in Lebanon and 30 in the Dearborn sample. This article focuses exclusively on the 30 Arab American men in the study, who were interviewed alone or with their wives (in 10 cases) in the Dearborn office of IVF Michigan. Most interviews were conducted with men alone, because of the focus of this study on male infertility. However, several men in this study were seeking help for their infertility without their wives, a "solo" pattern of treatment seeking that clearly emerged in the Dearborn study. In two of these cases, men's Arab American wives had recently divorced them over male infertility. In two other cases, wives were still residing in Yemen. In the majority of these solo cases, however, men were well aware of their infertility status and were presenting to the Dearborn clinic alone for repeat semen analysis or advice on additional treatment. For these various reasons, this qualitative study focuses primarily on infertile Arab American men and their particular barriers to infertility care.

As in most qualitative research, no representative sampling strategy was used. Rather, men were recruited for the study as they presented to the IVF Michigan office, often on their first or second office visits after a diagnosis of male infertility had been proven. Institutional review board approval for this study was obtained through the University of Michigan; thus, all study subjects were required to sign an informed consent form before the interview. The informed consent form specified that anonymity and confidentiality of the interview data would be strictly maintained. Participation in the study was also entirely voluntary, with small gift pens presented to the men at the end of the interview. None of the interviews were tape recorded because most Arab American men were uncomfortable with this recording technology. Instead, handwritten notes were taken during the interview, with review of all interview transcripts and extensive case summaries written immediately after each interview.

Both the solo and couple interviews focused on reproductive histories, perceived risks for male infertility, social consequences of the infertility for the husband and the couple, and medical care seeking, including attempts to access ART. In some cases, these interviews were supplemented by medical chart review, primarily to confirm recent semen analysis results. Interviews were conducted in English, Arabic, or a mixture of English and Arabic, depending on the primary language and preference of the interviewee. Only half of the study subjects (15) were fluent English speakers. The other half either spoke no English (5) or spoke "broken" English (10) and were therefore interviewed primarily in Arabic.

In addition to demographic data collected at the outset of the interview, reproductive and sexual histories of the men were taken, incorporating questions about perceived reproductive risk factors and infertility etiology. Open-ended ethnographic interviews focused on histories of medical treatment seeking, including use of ARTs. Perceived barriers to medical care were discussed, along with other problematic aspects of infertility, masculinity, marriage, and perceived community response to childlessness.

Nearly half of the men in the study—6 Lebanese and 8 Iraqis—had come to the United States as political refugees, after experiencing war and persecution in their home countries. As in the earlier study in Lebanon, *el harb*, "the war," figured prominently in men's reproductive narratives, given men's concerns that exposure to war and hardship had cost these men their fertility. For Iraqis, who have come to Dearborn in the past decade as Gulf War political refugees, various chronic illnesses suffered in high rates in the community might, in fact, be the result of Gulf war exposures or of the deplorable conditions in the Saudi Arabian refugee camps where they lived for months or years after they revolted against Saddam Hussein (71).

Themes such as these from interviews were derived through careful content analysis and coding of interview transcripts. Quantifiable aspects of demographic and reproductive history data were analyzed with a commercial software package (SPSS, Chicago, IL). In the Results section, we report largely on the demographic profile of the study population, to illustrate their economic and social marginality as related to mainstream U.S. society and, hence, the significant disparities that face them as they attempt to access effective infertility care.

RESULTS

Of the 30 infertile men interviewed in the Dearborn study, only one had been born in Dearborn. All of the rest were immigrants to the United States from the sending countries of Lebanon (11), Iraq (9), Yemen (6), Jordan (1), or diasporic Arab communities in Latin America (2). Most of these interviewees had emigrated as young men under conditions

of economic or political duress in their home countries, including all of the Iraqis, who came as political refugees. Thus, their lives had been disrupted in significant ways. For example, these men tended to be poorly educated, with most having completed only high school (13 years was the mean level of education). Furthermore, as noted earlier, half of the men in the study were either struggling with the English language or could not speak English at all, thus restricting their abilities to communicate with personnel in U.S. health care settings. In virtually all cases, men in the study had come to the Dearborn office of IVF Michigan to seek diagnostic and treatment services from an Arab American (Muslim) physician, with whom they could feel cultural and linguistic rapport as fellow Arabs and fellow Muslims.

However, significant class differences divided them. More than two thirds of the men in the study were working in low-wage, blue-collar, or service sector occupations, mainly as gas station attendants, dishwashers, and busboys in Middle Eastern restaurants, truck drivers, construction workers, auto mechanics, used-car salesmen, or store clerks. Only eight men in the study had achieved educational and professional mobility in the United States and had either bought small businesses or were working as professionals (mainly computer technicians, engineers, or architects). However, salaries were generally low in this study population, with many men and their wives living in small apartments in Dearborn and generally "eking out" subsistence lives. The mean monthly salary reported by men in the study was $2,380. However, the median and modal monthly salaries were only $2,000. In short, most men were earning less than $24,000 per year, with some men surviving on their low wages (e.g., of only $520 per month in one case) only because of family pooling of resources.

Furthermore, most of the men in the study did not have private health insurance that would cover the costs of infertility diagnosis and treatment (in a state that does not mandate insurance coverage for infertility services). Several of the men were entirely uninsured. Most did not own credit cards. As a result, virtually all of their financial transactions in the IVF clinic setting were handled in cash, which was exchanged over the counter at the end of clinic visits.

Few of these men were able to pay for infertility treatments, especially ART, which generally costs more than $10,000 per cycle with the required medications. After the initial office visit (which cost $150), few of the men in the study—including even the professional men interviewed—were able to return to IVF Michigan for follow-up appointments. Indeed, for many of the men in this study, the economic barriers to seeking ART were insurmountable, even with discounts that were sometimes offered out of sympathy to lower-class Arab American patients. As a result, only four ICSI cycles had been completed among the 30 couples in the study, and only two men in the study had living offspring, both as a result of ICSI. The vast majority reported no spontaneous pregnancies and no initiation of ICSI cycles, despite 5.5 mean years of marriage.

In short, Arab American men in this study uniformly desired children in their marriages and were willing to undertake ICSI trials to solve their infertility problems. As Muslims, none of them could accept donor sperm as an option, and very few would contemplate adoption, which is also forbidden in the Islamic scriptures. Nonetheless, severe economic constraints impinged on their abilities to seek ICSI, a problem that they routinely lamented in interview conversations about the high costs of treatment. Indeed, most men in the study cited the high cost of ICSI in the United States as their main barrier to care, and many of them had at least contemplated returning to the Middle East, where the cost of a single ICSI cycle is generally less than $3,000 (or, in some countries, might be subsidized by the state). However, even the cost of a return trip to the Middle East was prohibitively expensive. Men often remarked that they could never afford to undertake ICSI, either in Dearborn or abroad, without borrowing large sums of money from friends, family, or a bank. The few men who had undertaken ICSI cycles with their wives had usually received such a loan to subsidize a single cycle.

In general, men in this study described their lives as "hard" and "stressful," given the traumatic conditions that had led them to flee their home countries and the problems of economic hardship, exclusion, and discrimination that faced them in America. Virtually all of the men in this study required ICSI to overcome their infertility. But because of their poverty, lack of education, and low chances for future financial success, their hopes of undertaking even one cycle of ICSI were unrealistic. Most men in the study were deeply demoralized, because fathering a biological child was unlikely without some sort of financial miracle. As one man explained his situation, "Money is the problem. If anybody who is infertile can afford to do it [ICSI], he would do it. But even if we need [ICSI], we cannot afford to do it right now. The doctor gave us a discount and said it will cost only $7,000. But I don't have even $100. What can we do?"

Such economic barriers were true even among men who had received advanced educations in their home countries and were able to speak English fluently. In short, education and English fluency were no guarantee of good jobs and financial security, particularly for those who had come to the United States as political refugees.

The following example, of a man whom we shall call "Ali," is fairly representative of the problems faced by the study population. Although Ali's reception in America was buffered by his good looks and educational background in Iraq, his life in America had been painful and difficult and had been made worse by his recent diagnosis of severe male factor infertility (oligoasthenospermia). In this story, we highlight Ali's perception of his own situation, using his own words (in an interview conducted in English). As Ali makes

clear, his likelihood of achieving fatherhood is low, given the barriers that face him.

The Case of Ali

Ali, a handsome, 37-year-old Iraqi man who was recently married to an Iraqi chemistry teacher, came to the United States as a refugee after the first Gulf War. After a year of childless marriage, Ali sought semen analysis at IVF Michigan, where his first sperm test showed both poor count and poor motility. As Ali stated during his interview, "I was shocked. I cried, 'cause I want a baby. I feel upset. I feel like I'm not a normal person. She [his wife] is the strong one. She said, 'I don't care, as long as I have you. We do our best, and that's it.'" He continued, "Especially among Arab people, I feel like I'm not a man. It's a bad feeling; I don't know where it comes from, but I feel this."

Sadly, Ali believed that his infertility was God's punishment. On the one hand, as a very handsome man with computer science training in Iraq, he had discovered the liberal sexual environment of the United States upon his arrival from Iraq, and he had engaged in sex with multiple female partners. According to Ali, "I am blaming myself. My libido is high, and maybe I 'spent' all of my sperm back before marriage, because I had an active sex life. I don't know, sometimes. I did what I did, but it wasn't right, just for sex, sex, sex. I used girls. Why? Maybe one or two they loved me for me, but I was thinking something else. It's good for me [i.e., the sex], but from God, maybe God wants to punish me. It's 'payback' time. In seven years, I had over 50 women. What kind of person is that, a dog? (He laughed, guiltily). I broke some hearts; even American women, they have hearts."

Furthermore, Ali deems himself responsible for his brother's death in Iraq. As a Shi'ite Muslim, Ali was a fighter in the resistance movement that was encouraged by the United States in the first Gulf War. After taking a bullet to the pelvis, Ali fled to Saudi Arabia, where he spent 6 years in a refugee camp before coming to America. Back in Iraq, Saddam Hussein's regime took revenge on Ali's family by capturing his older brother, the father of four children. Ali lamented, "I lost my brother because of me. After I left, they took him. He has four children and they never heard from him again."

Currently, Ali is trying to make money at a local Arab-owned computer firm, while also finishing his computer science degree at a local community college. He makes only $1,500 a month—not enough to cover his household expenses, as well as the remittances his large Iraqi family expects him to send back to the home country. Furthermore, his employer offers no health insurance, so he has been uninsured for the past 4 years. When he was told that he would need a $15,000 cycle of ICSI with accompanying medications, he was shocked. "I *could* do it if it costs $5,000," he explained, "because I might be able to save the money or borrow the money from a friend. But $15,000, no way."

DISCUSSION

Like Ali, most infertile Muslim men who participated in this study of Arab Americans in Dearborn, Michigan, will never have the joy of making an ICSI baby. As an ethnic minority population living economically and socially marginal lives in America, Arab Americans in Dearborn generally face disparities in access to affordable infertility care, despite their pronatalist desires for children. Even though men in this study had bypassed other barriers to medical care—by choosing an Arabic-speaking, Arab American Muslim physician, who respected their religious and cultural beliefs and would not discriminate against them as Arab men—they nonetheless could not take full advantage of the clinic's ART services, by virtue of their relative poverty as recent immigrants and political refugees to the United States.

To our knowledge, this is the first study to examine the impact of infertility in an Arab American community in the United States. In terms of health disparities, the results are not heartening. Even though the Arab American population in the United States as a whole is diverse, with many well-educated, gainfully employed, and healthy Arab Americans among them (62), it is clear from this study that Arab Americans in Dearborn, a largely Muslim enclave of recently arrived immigrants, face significant health disparities in treatment access, which they share with poor African Americans in the vicinity. Indeed, a similar study of infertility among African American women in southeastern Michigan showed the degree to which disparities in income effectively barred infertile African American couples from proper medical care (12).

For Arab Americans in this study, many of whom are "unassimilated" into U.S. society in general, their barriers to medical care include being unable to speak English and to mingle freely in society outside the protective enclave of their ethnic community. Indeed, it is striking to note the degree to which Dearborn looks "like the Middle East." Signs are written in Arabic, stores sell Arabic foodstuffs, and the medical building in which IVF Michigan's Dearborn office is located is reminiscent of a clinic in the Middle East, given the Arab children and veiled women in the first-floor pediatrics clinic.

Understanding this Arab American community is important and timely, given the repercussions of September 11th. Until that date, Arab Americans were largely "invisible" within U.S. society (59). However, September 11th changed all that—for better and for worse. On the positive side, September 11th led to a spate of research on Arab Americans and American Muslims (55, 58, 72–74). On the other hand, most of this research has focused on Arab American identity politics, religiosity, and experiences of discrimination since September 11th. Research on Arab American health has

been sidetracked, resulting in "a critical need for Arab Americans and the research community to take up the challenge of actively developing and funding research, education, and intervention programs" to combat the high rates of disease, trauma and stress, and barriers to good health care in this population (Hassoun [29], p. 174). Indeed, authors of a recent article entitled "Arab Immigrants: A New Case for Ethnicity and Health?" (62) argue that:

> Americans of Arab descent are a population of increasing size and importance, and future research should attempt to distinguish their health status from other immigrant populations and from the majority white population. Future research should also attempt to capture more diverse cross-sections of the Arab-American population to provide a more complete understanding of the mechanisms that produce adverse health among some Arab immigrants. (p. 82)

As we have tried to make clear, many Arab Americans, like African Americans, now experience the effects of stratified reproduction, including poverty, lack of access to affordable, high-quality reproductive health care, and post-September 11th anti-Arab, anti-Muslim sentiments in U.S. society as a whole. Sadly, Arab Americans now share with African Americans their poor health status and the combination of fear and prejudice displayed by many white Americans. Both of these populations face significant reproductive disruptions but are despised as reproducers in a racist and classist society. Only with further studies of the Arab American experience can we begin to combat these forms of stratified reproduction and to shed light on the very humanity and dignity with which members of this oppressed group strive to overcome the many barriers that face them—including those that prevent the infertile from becoming loving parents.

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