
Social Consequences of Infertility upon Women in Mosul City

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Abstract:

Background: infertility is a dilemma of global properties. It's a devastating experience. Especially in oriental societies, where the infertility is seen as the problem of woman not for man, thus the childbearing and the male offspring are of the highest valued factors in stabilizing marriage and expected to bring happiness and family harmony. Otherwise these women will be subjected to a tremendous social sequel and emotional sufferings.

Objective: to explore the wide array of conditions women may endure and the sociological context of infertility consequences experienced by women suffering from primary, secondary, and those who have daughters only within their marital home in Mosul.

Methods: a retrospective cohort study conducted in Al-Batool Teaching Maternity Hospital in Mosul City. A sample of 200 infertile women has been sociologically compared with other 200 fertile women according to questionnaire form filled through direct interviews with each woman.

Results: 7.5% of infertile women threatened for divorce, 40% were threatened for husband's remarriage, exposure to physical, verbal and psychological violence, and Emotional, financial and personality negligence all were significantly higher in the respondent group. Additionally the inter-spousal relationship and family milieu have been affected negatively, also the inability to reproduce is a life-size problem in more than three quarters of the sample causing various emotional conflicts as sorrow, jealousy, psychological strain, frustration, feeling with inferiority and low self-esteem. Minority of the infertile women depend on medical treatment alone as fertility seeking behavior, whereas majority sought traditional and faith healers options.

Conclusion: infertility is a stressful experience, and it becomes devastating in traditional societies like our culture, where infertility is seen as the problem of woman not the man. This may subject her to stigmatization, exploitation and other social consequences apparent in terms of threats, marital disruption, physical abuse, emotional negligence, economic dispossession and social ostracism distressing her emotional and social health that necessitate the setting up of the new reproductive technologies with couples education and sympathetic marital counseling.

Keywords: infertility, women, Mosul

Introduction:

Infertility is a global public health concern. More than 80 million people or about 8-12% of all couples worldwide experience some form of infertility during their reproductive lives^[1]. Studies in developed countries suggest that 15% of all couples experience primary or secondary infertility^[2].

A couple is considered clinically infertile only when pregnancy has not occurred when desired, after at least 12 months of regular unprotected sexual activity^[3]. Although WHO publication on the epidemiology of infertility has used a 2-years reference period^[4].

Throughout the world women are expected to bear children, and in most of oriental societies women feel pressured by their parents-in-law to conceive or to give them a male grand child who carries on the family name, wealth and some times for economic survival^[5]. Also producing a child- especially a son is considered to be public proof of man's virility, as well as of his adulthood^[6]. Thus in many communities worldwide, for women childbearing is expected to bring happiness and family harmony, otherwise more stressful consequences will be overt for the infertile and those who have daughters only.

Aim of the study: to explore the wide array of conditions women may endure because of infertility and the sociological context of infertility consequences in Mosul.

Subjects & Methods:

This survey which was designed as a retrospective cohort study has been conducted in the period from February through March 2007. A total sample of 400 women aged 22-44 years was chosen by a simple random sampling technique. Out of this 400; 200 women were infertile (primary or secondary infertility according to the WHO definition)^[4], and 200 women were fertile (have children of both sexes) who were used as a comparison group. The infertile 200 women were those suffering from infertility problems of more than 3 years whether primary, secondary (including those having only daughters) who were attending the Infertility Center of Al-Batool Teaching Maternity Hospital in Mosul for consultation or treatment. The comparison group was collected from women who visited the formerly mentioned hospital for any reason other than infertility. The lower limit for the duration of marriage was 3 years as a criterion for the inclusion of women in the study.

The 2 groups were compared regarding their social context according to a questionnaire that was

filled through a direct interview done separately with each woman in both groups by the researcher only, after taking their verbal consent and ensuring them that all the information will be kept strictly confidential and will be used only for research purposes.

The form includes personal data about age, duration of marriage, reproductive history if present, educational background, type of living (separate or with husband's family), cause of infertility (according to the investigations), social difficulties including exposure to violence, annoyance, embarrassment, marital hardships, threats to divorce or polygyny, and the source of these threats (providing that these hardships were not experienced in the 1st two years of marriage).

Economic status was roughly categorized according to monthly income of each family as follows: poor (less than \$150), medium (\$150-350), good (\$350-550), very good (greater than \$550/month).

A specific attention was given to the treatment seeking (fertility seeking behaviors) by the infertile women in our locality, their knowledge about the cause of infertility and the endogenous reasons behind their inclination of having a baby.

The data entry and analysis was done using the data entry program of Statistical Package for

Social Scientists version 11 (SPSS Inc, Chicago, IL, USA; 1999). The relative risk then calculated for the concerned social anguishes seen in both study groups. Statistical analysis was used to test variations.

Results:

Table (1) shows the general characteristics of the study sample, the (mean \pm SD) age of the infertile group was (29.9 \pm 5.7) years, mean years of school education (7.6 \pm 4.37) years with mean duration of marriage of (8.1 \pm 5.2) years, while (29.8 \pm 5.9), (8.2 \pm 5.1) and (7.5 \pm 4.35) years for the comparable group. The mean spouse's (education \pm SD) was (10.2 \pm 4.34) years for the infertile and (10.3 \pm 4.32) years for the fertile women. More than half of the women in this study reported that they live in a medium economic status, 18.5% and 15.0% were poor and the remaining claimed that they have good and very good economic conditions. Almost all (95.5%) of the fertile women were the only wife, while 40 (20%) of the infertile group reported that their husbands were remarried and 16 (9.5%) of them were the 2nd wives. About 60% of the study group and 47.5% of the comparable group live with their husband's family (table 1).

Table (1): Demographic description of the study sample

Variables	Infertility group (n = 200)		Comparison group (n = 200)	
	No.	%	No.	%
- Respondent's age (Mean \pm SD)	29.9 \pm 5.7 years		29.8 \pm 5.9 years	
- Duration of marriage (Mean \pm SD)	8.1 \pm 5.2 years		8.2 \pm 5.1 years	
- Respondent's education (Mean \pm SD)	7.6 \pm 4.37 years		7.5 \pm 4.35 years	
-Husband's education (Mean \pm SD)	0.2 \pm 4.34 years		10.3 \pm 4.32 years	
-Economic status: Poor	32	16.0%	30	15.0%
Medium	113	56.5%	118	59.0%
Good	46	23.0%	41	20.5%
Very good	9	4.5%	11	5.5%
-The only wife	160	80.0%	195	95.5%
-Shared dwelling with husband's family	118	59.0%	95	47.5%

The description of the infertile group is clarified in figure (1), 132 (66%) of those women did not have any history of conception throughout their marriage period. Out of 68 women who had history of conceptions, 15 women had no live births

although they had history of conceptions (one of them had 7 pregnancies) followed by infertility, and the remaining had (1-4) live deliveries also followed by infertility albeit none had a son.

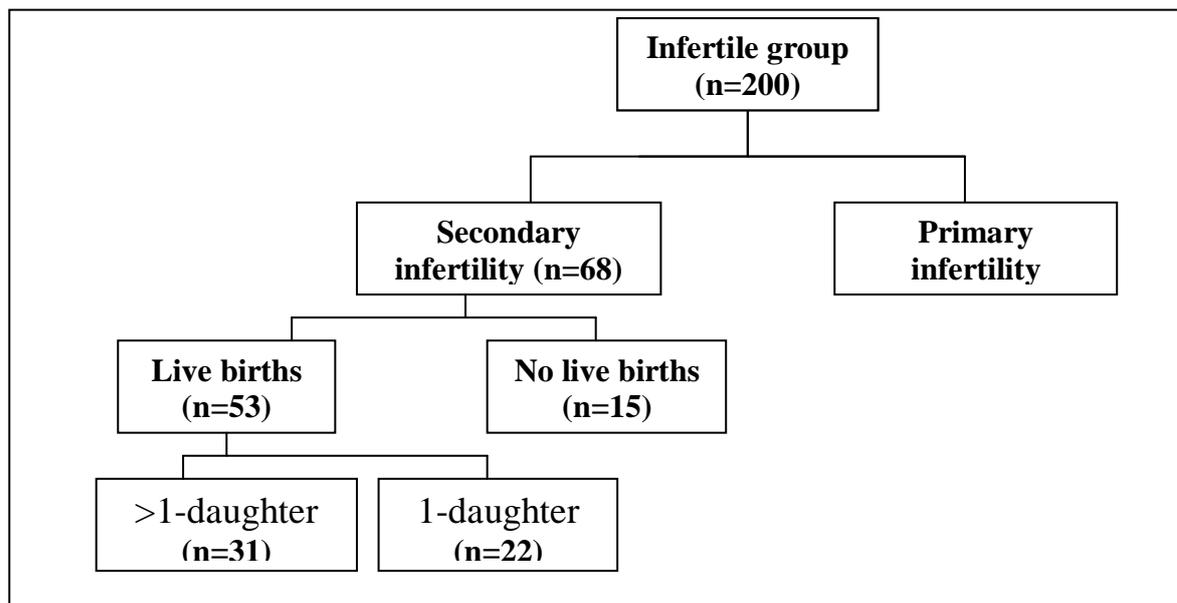


Figure (1): pregnancy outcome of infertility group.

Significant variations regarding the sociological harassment seen between the two groups, as table (2) depicted that 7.5% of the respondent women reported to be threatened for divorce (none in the comparable group), 40% were threatened for husband's remarrying within 1or 2 years if pregnancy not occur.

More than sixty-five percent of the infertile women exposed to violence most of the time, by husband (41.5%), the in-laws (husband's mother and other husband's relatives) (24.0%), which were significantly higher than comparison group (RR=2.4, 4.8, 95%C.I. =1.7-4.7, 2.5-8.4). Verbal and psychological violence was the commonest problem reported in more than half of the infertile women exposed to violence, and 11.5% of the fertile group, physical violence found in 11.0% and 5.5% of the study and comparable group respectively, 18.0% and 5.5% of them suffered from all type of violence, table (2).

The same table shows the different types of negligence experienced in 85 (42.5%) of the respondent women, the emotional type was the most experiencing in 16.5%. financial and personality negligence mentioned in 14.5 and 11.5% of the infertile group, negligence also mentioned in 17.5% of the comparable women.

More than sixty-five percent of the infertile group claimed that childlessness had affected the inter-spousal relationship negatively, above half of them mentioned classical and sometimes unpleasant relations and 14.0% of them noticed disagreeable relations mostly, while a good relations found in 34.5% of those women and 40.5% of the fertile group, at the same time, approximately 16% of the infertile women live in a tense family milieu occasionally and mostly in 8%, and 75% of them exist in a classical and calm family scene compared to 82.5% of the comparable group, table (2) shows that fertility may be a protective factor against these problems.

Table (2): social consequences

Variables	Infertility group (n = 200)		Comparison group (n = 200)		R.R	95% CI
	No.	%	No.	%		
1. Threat by divorce	15	7.5%	0	0.0%	–	–
2. Threat to remarriage	80	40.0%	15	7.5%	5.3	3.1-8.8
3. Exposure to violence:						
- by husband	83	41.5	35	17.5%	2.4	1.7-4.7
- by husband's family	48	24.0%	10	5.0%	4.8	2.5-8.4
Total	131	65.5%	45	22.5%		
4. Types of violence:						
- physical violence	22	11.0%	11	5.5%	2.0	1.0-3.9
- verbal & psychological	73	36.5%	23	11.5%	3.2	2.1-4.8
- more than one type	36	18.0%	11	5.5%	3.3	2.3-4.5
Total	131	65.5%	45	22.5%		
5. Exposure to negligence	85	42.5%	35	17.5%	2.4	2.0-2.8
6. Type of negligence:						
- financial negligence	29	14.5%	15	7.5%	1.9	4.2-7.8
- emotional abuse	33	16.5%	10	5.0%	3.3	2.3-4.6
- personality oppression	23	11.5%	10	5.0%	2.3	1.7-3.6
Total	85	42.5%	35	17.5%		
7. Marital relations						
- good	69	34.5%	81	40.5%	0.9	1.0-0.7
- classical	53	26.5%	65	32.5%	0.8	0.6-0.9
- sometimes unpleasant	50	25.0%	34	17.0%	1.8	1.4-2.1
- mostly unpleasant	28	14.0%	20	10.0%	1.4	1.1-1.8
Total	200	100%	200	100%		
8. family milieu:						
- calm	63	31.5%	85	42.5%	0.7	0.6-0.8
- classical	88	44.0%	80	40.0%	1.1	0.9-1.2
- occasionally tense	33	16.5%	25	12.5%	1.3	1.0-1.6
- mostly tense	16	8.0%	10	5.0%	1.6	1.1-2.8
Total	200	100%	200	100%		

Table (3) shows that the women were the cause of unproductiveness in more than third of the cases (hormonal or ovulatory dysfunction), and in about one-fourth of the sample infertility both couple were the cause of inability to reproduce, the reason is idiopathic in 27.5%, while the male

partners were the cause in 18 (9%) of the whole infertile group.

The study showed that childlessness is forming a life-size problem in more than 3 quarters of sample women as shown in table (3), in addition to other emotional conflict as sorrow, jealousy,

psychological strain and feeling with frustration which found in about one-quarter of those women, adding to the feeling with inferiority that experience in about 11.5 % of the childless women.

Minority of infertile female 33 (16.5%) depend mainly on medical issues as a fertility seeking behavior. Majority 41, 0% of inability to reproduce women sought care from traditional

healer, 40.0% from amulet and suggestion, (table 3).

This study also found that most common reason for wanting baby among primary and secondary infertile women was to shut up the talks and gaining respect within her husband's family and others (41.0%), followed by the joy and companionship (26.0%), then security in old age (22.5%) while in 13.5% is to maintain family name.

Table (3): Characteristics in infertile group.

Variables	Infertile group (n = 200)	
	No.	%
1. Causes of infertility:		
- Husband	18	9%
- Wife	83	41.5%
- Both of them	44	22.0%
- Unknown	55	27.5%
2. Emotional conflict*:		
- Infertility is a big problem	164	82.0%
- Feeling with sorrow	160	80.0%
- Feeling with jealousy	75	37.5%
- Psychological strain	69	34.5%
- Feeling with frustration	48	24.0%
- Feeling of inferiority	23	11.5%
3. Treatment seeking behavior:		
- Medical care only	33	16.5%
- Amulet\suggestion	80	40.0%
- Traditional medicine	82	41.0%
- Others	5	2.5%
Total	200	100%
4. Reasons for wanting a baby:		
-To maintain family name	27	13.5%
-Security in old age	45	22.5%
-for joy and companionship	52	26.0%
- To hush the talks\gain respect	82	41.0%
Total	200	100%

*most of infertile women experience more than one type of emotional impact.

Discussion:

Infertility is clearly a major event, and often perceived as a crisis. The study highlighted the widespread but poorly documented consequences experienced, by large numbers of unproductive women and those with inability to give birth to a male child, in their marital homes.

This study found that 7.5% of infertile sample were threatened for divorce and 40% of them for husband's remarrying if pregnancy doesn't occur within a definite time. Higher figures seen in Karachi where 21% of the infertile women interviewed reported being threatened for divorce, 38% were threatened for husband's remarrying and

26% were threatened to be sent back to their parent's home ^[7].

Since currently married women were interviewed only, we could not comment on infertility as a cause of divorce. While husband's remarrying is not an uncommon experience in our society as in other Islamic communities, in this study it has been found that in 11.5% of the respondent women, the husband had married again due to infertility, and 5% of the husbands in the comparison group have been remarried for different causes. Similar study done in a village in Bangladesh concluded that one of the immediate consequences of reproductive failure is divorce, less commonly, a man will take an additional wives regardless of which partner is infertile, a woman's

value as a potential spouse is severely reduced and if she remarries, it will be to someone who is less desirable than her first husband; in addition this process will delay the start of childbearing and further reduces chances of infertility among women who can conceive^[8].

Violence as a consequence of infertility was seen in about two-thirds of women; either by the husbands or the in-laws, worth knowing is that more than half of the participants were living with their parents (in-law) during the time of interviews. Verbal and psychological type was the dominant and the physical violence was noticed in 11% and 5.5% of the respondents and the comparison group respectively. Similar results had been found in a study done in Iraq, in which the prevalence of gender based violence against women was 61.6% and physical violence was seen in 7.6% of the women^[9]. The little bit higher prevalence of the physical violence noticed in this study can be attributed to the pressure and tension of the husbands of being childless, realizing that those women usually bear the major brunt of that stress. Moreover a study conducted in India have showed that due to the problem of infertility, the women become the victims of verbal and physical abuse by the husbands and in-laws, emotional harassment, or being returned to parent's family^[10]. Even in Nigeria the common Yoruba custom is to consider a good sign if a woman is showing a pregnancy on her wedding day, and may consider it a problem if the woman is not pregnant before marriage, then a woman are more likely to suffer physical, mental abuse as a result of their infertile status after marriage^[11].

This study shows that inability to procreation is a ground of disempowerment for the affected women, by mounting the possibility that her human rights will be violated especially when the etiology of the problem is directly or indirectly attributable to her. 42.5% of the respondent women in this study complaining of negligence, which are consequences that are often apparent especially for women in the developing worlds in which infertility is perceived as a women's problem. Either emotional negligence, economic dispossession or loss of the woman's status within her family, the women becomes an outcast that seen in terms of: ostracism from certain family celebration, taunting, withholding of health care even the cost of infertility treatment beside the exclusion from decision making in the family. Nevertheless many couples do not know the true causes of infertility, however the guilt and stigmatization are brunt that usually approved by the childlessness women. Similarly the studies in various parts of Asia and Africa reported that stigmatization and violence, economic deprivation and social ostracism by depriving them of their decision-making powers and their rights to inheritance are just some of the

consequences of infertility that have seen in such communities where a woman gains prestige and security in her husband's home only after she succeeds in proving her fertility^[12].

Childlessness places poor urban women in Egypt at the center of a web of tumultuous relationship with spouses, in-law and neighbors. They paradoxically blamed for their infertility, and they often threats of divorce or polygyny, harassment and disempowerment^[5].

Furthermore, in some areas of Jamaica, a woman who does not conceive within a defined period is considered a mule, the name for the usually sterile offspring of a horse. Some communities do not accept that a man is a sterile until they have proof, once, the results of the husband's seminal analysis show some defects, she asked for a copy so that she could show his family that she was not the mule^[13]. Similarly in some of traditional societies, the infertile women is regarded as a "barren women" who is often has a marginalized figure, and seen as socially incomplete^[6], and among the Ekiti of southwest Nigeria, Ademola (1982) reports that infertile women are treated as outcasts and their bodies are buried on the outskirts of the town with those of demented persons^[14]. This enforces the fact that infertility is a productive health problem perpetuated by the cultural experiences and traditional community beliefs around the procreation.

The study found that approximately two-thirds of the study sample mentioned classical, unpleasant marital relations and family environment occasionally and mostly. This means that inability to reproduce had affected the inter-spousal relationships and family milieu negatively. Similar results have been reported in Karachi where the study highlighted that secondary infertility negatively affected the marital relations and subjected the women to exploitation^[7]. On the other hand similar studies done in Denmark found that most of the couples involved in these qualitative studies, the infertility experience had strengthened their marriage and had improved their partners' mutual connection, they have called this effect on marriage "marital benefit". It is defined as the perception that infertility has brought the partners' closer together and strengthened their relationship, and the infertility coping strategies were the predictors^[15]. This understandable variation owing to the cultural background differences that render the in fecund couples in traditional society are regarded as having failed in a fundamental way and the other positive values in marriage such as companionship and friendship are not thought to be important. In such a community therefore, the concept of reproductive choice must be all embracing and must encompass a commitment that couples are free to aspire to have

the number of children they wish to have. Moreover; this marital discomfort may be due to the increased desire to produce a child has caused several negative side effects for many couples consistently with a tremendous amount of pressure on their relations.

In our society as in most traditional societies, infertility is seen as the problem of women not for man, thus, the inability of those women to perform their roles as child bearers and rearers with the stress of the treatment, outcome in addition to the common misconception of infertility all are observed to take a huge toll on the woman appear in terms of grief, emotional strain, frustration, and the feeling of inferiority, even some of the respondent women mentioned that people commonly avoid those women known to be infertile either because they think those women might harm their children because of their bitterness, or because they might not know how to look after other children properly.

This study found that social stigmatization habitually reinforce low self-esteem that prevail among childless women and make 83.3% of them feel that to have a baby or a male offspring is the leading problem in their life. In Karachi the study also found that majority of these women (72%) felt severely pressurized and stressed due to the conflicts^[7]. Furthermore, studies conducted in Thailand have shown parallel results where psychological trauma resulting from infertility ended up in low self-esteem, security and self-confidence in such women^[16].

In more than 41.5% of primary and secondary infertile cases, there were some identifiable factors affecting female partner manifested by the investigations (including hormonal, endocrinal tubal, acquired non-tubal factors as cervical and uterine disturbances and congenital abnormalities). There is however some sort of mystique surrounding infertility with common misconception tested in 37 (18.5%) of the women with secondary infertility, who labeled their infertility as a punishment of god because of their using some forms of contraception previously and they suggested that these contraceptives may damage the uterus, leading to infertility; and this may be a powerful disincentive to the contraceptive use, which are the influential mean in preventing unwanted pregnancies. Because contraceptives prevent pregnancy, they may mask underlying fertility problems, but they do not cause infertility^[17]. Even family planning providers sometimes misunderstand the effects of contraceptives on fertility (18). In fact the risk of long-term impaired infertility after using any contraceptive method is low, and fertility usually returns immediately or shortly after contraceptive discontinuation^[17]. Additionally in southwest Nigeria also there is a common belief, that

contraceptives themselves cause infertility, as well the belief in supernatural causes of infertility is widespread, even some obstetricians and gynecologists who treat infertility patients with modern methods believe that witchcraft or a vow a woman took in an earlier life not to bear children can make her infertile^[11].

This can explore that there is a complex relationships between culture and reproductive health and how cultural beliefs can affect the accuracy and depth of people's knowledge about the causes and appropriate treatment of infecundity.

The study showed that the minority of the infertile group depends purely on medical approach as a fertility seeking behavior and most of them sought the spiritualists and traditional medicine beside medical option. It means that medical treatments alone are less often used by the respondents may be because of perceptions of the causes of infertility or the lack of confidentiality at the treatment centers. Although many people believe in traditional and religious method of treatment, the efficacy of these modes had not been adequately tested. However, the infertile women might be so desperate for assistance with her infertility problem, and under such pressure she may submit to such treatment manners that may cause some complications as secondary gynaetresia followed burning and irritation of vagina which result from using some herbs locally to treat infertility (seen in one patient).

Elujoba (1995) has provided a compendium of the local herbs and medications used by traditional birth attendants for the treatment of female infertility in southwest Nigeria^[19]. Similarly, In Egypt, women go through a complicated ritual known as Kabsa (a form of infertility producing, polluting boundary violation) in efforts to overcome infertility^[20]. Furthermore in hopes of becoming pregnant, some infertile women in Mozambique may engage in extramarital relations, a behavior that places them at risk of STIs, including HIV^[21].

The main causes of wanting baby in our study were to gain respect among the households, for joyfulness, for future security and to maintain family name. While in a similar study done in South of Vietnam, the reasons people gave for wanting children were for stabilizing their marriage and bringing happiness in their family lives, continuing the family line and for their elderly days and to pass on family name, away of financial support, caretaking and keeping company in future [22]. Insight in the motives for wanting babies is needed to understand the socio-cultural and psychological effects of infertility on woman's life. It is clear that these objectives do not follow strict rules, or guidelines, the fact that they dependent upon the circumstances, the nature of living and the sociological constituents of each society.

The study **concluded** that the experience of infertility is a devastating condition by itself. This become particularly traumatic in traditional societies like ours, where infecundity is seen as the problem of woman not the man. Thus, the inability of the women to reproduce or to give birth to a son, subject her not only to stigmatization and exploitation, but also to other social consequences oftenly apparent as threats, marital disruptions, physical abuse, emotional negligence, economic dispossession and social ostracism upsetting her emotional and social health appear in terms of grief, emotional strain, frustration, feeling of inferiority with low self-esteem. The inability to reproduce also had affected the inters-spousal relationships and family milieu negatively. Some misconceptions around procreation have been tested among such women that affect the selection of appropriate methods of treatment. All that **recommended** the improvement of reproductive health services, setting up of the new reproductive technologies with couple's education by broad reliable reproductive information. Sympathetic counseling, emotional support and the adoption of Stress Management Program with coping skills for the affected woman.

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