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## RESEARCH REPORT

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### Anxieties and care needs of fathers with multiple-birth children

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**Abstract Purpose :** The purpose of this study was to ascertain the feelings of uneasiness that fathers of multiple births may have had during their wives' pregnancy, labor, and post-delivery periods.

**Method :** For this study, questionnaires related to anxiety were distributed to 50 fathers-to-be of multiple births, of which 29 gave valid responses. **Result and Conclusion :** Of this number, 26 were expecting twins, and 3 were awaiting triplets. Fifteen were becoming fathers for the first time, and 14 already had children. According to the questionnaire responses, the fathers were most worried about the safe delivery of their babies and the care of their wives during pregnancy. The support of the grandparents was considered indispensable due to time and cost involved, especially in cases where older siblings existed. In addition, the fathers felt they needed advice concerning pre-and post-partum childcare to make the difficult but necessary decisions. Based on these results, we feel it is necessary to provide sufficient information to new fathers concerning multiple birth pregnancy care and parturition resulting from sterility treatment. In addition to being present to support their wives, fathers-to-be also require support themselves, either from family members or other parents with multiple birth experience.

*Key words* : multiple-birth babies, fathers, anxiety

#### Introduction

Multiple-birth babies are often side effects resulting from the induction of ovulation drugs used as one kind of sterility treatment, and recently there has been an increase in multiple-birth babies<sup>1-2)</sup>. In spite of advances in reproductive medical treatment, there has been little research on the anxiety that new fathers of multiple-birth babies may have<sup>3)</sup>. In parent and a prenatal classes, pregnant women learn about types of birth mainly through the spread of knowledge concern-

ing pregnancy, delivery, and child care as they energetically try to obtain related resources, of which there are many, in order to be better able to cope with the their condition. There has been much research concerning mentalities of fathers-to-be prior to normal deliveries<sup>4-6)</sup>, but little research has been found regarding mentalities of fathers awaiting multiple births.

On the other hand, women expecting multiple births have a difficult time getting information about their special type of pregnancy, delivery, and child care. Pregnant women of multiple pregnancies readily develop high-risk symptoms that frequently lead to complications such as premature birth and pregnancy-induced hypertension (PIH), while multiple pregnancies also result in various problems for the newborns. These factors may result in a high level of anxiety for the

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fathers-to-be. The purpose of this research was to investigate the uneasiness of fathers of multiple-birth babies.

## Methods

### 1 . Data collection

After we explained the contents of the research at a general meeting of the "Twins' Club", questionnaire paper were circulated along with the "Twins' Club" journal, and the names and addresses of the participants were verified. Return envelopes were inserted along with the documents. The survey documents with the responses were then collected afterwards. In the survey questionnaires, semi-structured question guideline was employed.

### 2 . Subjects and Methods

The subjects of this study were 50 fathers-to-be who belonged to a "Twins' club", 29 of whom responded. The survey period was from April to July, 2005. We mailed out individual questionnaires with accompanying documents that explained the purpose of the survey and that requested their cooperation.

### 3 . Contents

The survey contents were drawn up based on data from previous research<sup>7-9)</sup>. They asked questions concerning : 1 ) Characteristics of the father, his age, the mother's delivery method, the mother's current age and age at time of delivery, the gestation period, and the weight of the newborns ; the feelings of the father upon hearing about his wife's multiple pregnancy for the first

time ; the presence or lack of fertility treatment and therapy ; and the presence or lack of hospitalization during the pregnancy and the reasons for it ; 2 ) Care received by the mothers during their pregnancies and difficulties of prenatal child care ; and 3 ) Advice received from other fathers with multiple-birth babies.

### 4 . Method of analysis

We did a simple calculation by collecting the totals of each item in the questionnaires and applying a free entry system to collate similar words. From the contents of the freely written entries recording the worries and anxieties of the fathers-to-be during the pregnancy and childcare period, ideas were compiled according to similarities and simply recorded by category. The findings were judged to be reliable in that four researchers showed a 70% agreement rate.

### 5 . Ethical considerations

The subjects were not asked to write their names on the questionnaires, and no one other than those conducting the surveys ever saw the responses, which were kept secret. The results were processed statistically and were not used except for research publications and presentations. Finally, the subjects were notified that they would face no disadvantageous considerations if they did not complete the enclosed questionnaire.

## Results

### 1 . Characteristics of subjects

Table 1 shows the attributes of the subjects. Twenty-six

Table 1 Attributes of the Subjects

N=29

| Item                               | Number                     |          | Number                          |          |
|------------------------------------|----------------------------|----------|---------------------------------|----------|
| Age (years old)                    | Father                     | 37.2±5.1 | Mother                          | 34.3±3.6 |
|                                    |                            |          | Average age of mothers at birth | 30.6±3.0 |
| Kind of multiplet                  | Twins                      | 26       | Triplets                        | 3        |
| Child bearing                      | Fathers for the first time | 15       | Other Children present          | 14       |
| Kind of delivery                   | Cesarean sections          | 23       | Vaginal deliveries              | 6        |
| Treatment for sterility            | Yes                        | 17       | No                              | 12       |
| Hospitalization of premature labor | Yes                        | 25       | No                              | 4        |

of the fathers were expecting twins, while 3 were awaiting triplets. Fifteen were becoming fathers for the first time, and 14 already had children. Seventeen (68%) of the mothers were receiving treatment for sterility, and 12 out of these were undergoing external fertilization treatment. Sixteen out of 17 fathers stated that they had heard explanations concerning sterility. The fathers were most worried about the safe delivery of their babies and the care of their wives during pregnancy. The support of grandparents was considered indispensable due to time and cost involved, especially in cases where older siblings existed. In addition, the fathers felt that they needed advice concerning pre-and post-partum childcare, as making the necessary and important decisions were more difficult than they had imagined.

Twenty-five out of 29 (86.2%) of the mothers had been hospitalized throughout the pregnancy in anticipation of premature labor, with 23 (92%) out of those 25 being hospitalized for possible urgent treatment in case of spontaneous abortion. Two mothers experienced abnormal positioning of the placenta. There were 23 Cesarean sections and 6 vaginal deliveries. The average age of the fathers was  $37.2 \pm 5.1$  years, while the mothers were  $34.3 \pm 3.6$  years old. The gestation period was  $35.6 \pm 2$  weeks, and the average weight of the newborns was  $2200 \pm 448$  grams.

## 2. Fathers' anxiety during the pregnancy

Table 2 shows fathers' anxiety during the pregnancy. All of the fathers reported feeling anxious about their wives' pregnancies, with 21 out of 29 (72.4%) of them being worried about how well their wives bodies would be able to endure the pregnancy.

Table 2 Fathers' anxieties during their wives' pregnancies

| Item   | Number<br>(n=29) |
|--|------------------|
| Concerned about how well their wives would be physically able to endure the pregnancy. | 21<br>(72.4%)    |

## 3. Fathers' worries and difficulties during the child care period

Table 3 shows fathers' worries and difficulties during the child care period. Twenty-five of the fathers felt worried and had difficulty during the child care period. In the questionnaires, 9 out of the 25 fathers stated that because children talked to them at the same time, it was not possible to correspond with each of them. It was frustrating not to be able to communicate with two children at the same time. Even if they intended to talk with them equally, the children knew well if they are not given equal attention, so it became a frequent problem." Six fathers described situations in which if one child became sick, another would also soon get sick. Also, children sometimes became sick at different times, and their sleeping times differed as well. It cost double the time and expense for nursing, bathing, and buying necessary products. Two parents were not enough to bring the children for vaccinations, medical examinations, and hospital consultations when they could not walk yet. Therefore, the support of the grandparents was indispensable. Three fathers noted cases where

Table 3 Fathers' worries and difficulties during the childcare period

| Item  | Number<br>(n=29) |
|---|------------------|
| Cases where two or more children talked to them at the same time, and thus it was not possible to correspond with each of them. It was frustrating not to be able to communicate with two children at the same time. Even if they intended to talk with them equally, the children knew well if they were not given equal attention, so this became a frequent problem. | 9                |
| Cases where If one child became sick, another would also soon get sick. Also, cases where children sometimes became sick at different times, and their sleeping times differing as well. Cost and expense for nursing, bathing, and buying necessary products was also double.  | 6                |
| Cases where older siblings of multiple-birth babies were not able to be properly raised and cared for due to the time needed to provide for the newborns.   | 3                |
| Cases in which they did their best to raise the children in a cheerful atmosphere despite one of the twins being handicapped.   | 2                |

older siblings of multiple-birth babies were not able to be properly raised and cared for due to the time needed to provide for the newborns. Two fathers described cases in which they did their best to raise the children in a cheerful atmosphere despite one of the twins being handicapped.

#### 4. Advice from fathers with previous multiple-birth experience

Concerning advice from fathers with previous multiple-birth experience, 15 out of 29 of the surveyed fathers stated that it helped that the experienced fathers who were members of a "Twins Club" set aside time before delivery to discuss their experiences of raising their own children, and to explain roles of individual family members and the need for mutual cooperation, as well to provide examples of concrete situations that had occurred. Five fathers recognized the task of raising multiple-birth babies to be more difficult than they had imagined, and that the most important consideration was to be mentally prepared for the work ahead of them. Four fathers wanted specific knowledge because they lacked an adequate understanding of pregnancy and delivery as well as to what extent the condition of the mother's health may influence the role of the father.

## DISCUSSION

In 1985 Imaizumi<sup>10)</sup> explained that there is a correlation between external fertility drug use and the increase in multiple-birth babies, with delivery of multiple-birth babies resulting from fertility treatment occupying at least 68% in that year. Spontaneous abortion and premature delivery rates are high among multiple-fetal cases, and hospitalization during pregnancy to prepare for abortion or premature delivery had been necessary for 86.2% of mothers surveyed for this study. The occurrence of handicapped babies resulting from premature birth was also high, with two out of 29 newborns showing symptoms.

Although for our study we did not conduct a survey regarding hospitalization terms for the mothers, since a

number of fathers claimed to have been worried about their wives' physical condition during pregnancy, it is conceivable that the possibility of a spontaneous abortion or premature birth would influence the anxiety levels of the fathers and other family members. We therefore believe that we will need to examine the effects of the hospitalization period during pregnancy in the future. Also, it will be necessary to verify whether or not there are differences during pregnancy between the anxieties of fathers expecting single-birth babies and the anxieties of those expecting multiple-birth babies.

The method of our research on fathers was similar to that on mothers which had been conducted by Kashiwagi et al.<sup>4)</sup>, in which feelings of anxiety, stress, and powerlessness were evident as the women tried to cope with the sudden changes in their bodies and minds. In the case of fathers, they became very excited about the anticipated birth of their children upon hearing of their wives' pregnancies. However, since 79.3% of the deliveries were by cesarean section, it is probable that this fact reinforced the anxiety and stress that the fathers felt. It is evident that hospitals will need to offer sufficient information on predicted delivery methods and control of complications for fathers of multiple-births babies.

According to Wakamatsu et al.<sup>11)</sup>, Japanese men cannot easily change their attitudes regarding housework and child care as being the work of women. However, we have found that fathers of multiple-birth babies are very good in caring for their wives during pregnancy and after delivery, to the extent that they are willing to forgo adequate sleep themselves in order that their spouses may be able to get enough sleep. They were able to alter their behavior in taking on housework and child care, in addition to doing their regular jobs, in order to help overcome the difficulties involved in raising two or more children simultaneously. To be able to fulfill their new roles, these new fathers counted on advice from support organizations where those fathers with previous experience were available for consultations concerning pre-natal and post-delivery care. These support organizations can be utilized in

the future to provide concrete plans to deal with the specific situations that new fathers of multiple-birth babies may encounter. Finally, it is important to recognize that pre-natal and post-delivery child care is often more difficult than what new fathers may imagine, and thus it is necessary to provide them with as much information as possible to enable them to prepare themselves mentally for the tasks that they will soon need to do.

### Conclusion

Although our study included responses from only 29 fathers-to-be, which may appear to be a small number, we feel that our results demonstrate the need to provide sufficient information to new fathers concerning multiple-birth pregnancy care and parturition resulting from sterility treatment. In addition to being present to support their wives, fathers-to-be also require support themselves, such as from family members or other fathers who have already had experience with multiple births.

We presented this study at a conference with the theme of "The Impact of Global Issues on Women and Children" in February, 2006 in Dhaka, Bangladesh.

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