

Prevention of Mothers' Mental Illness Deterioration : Can Their Attitudes Toward Self-care and Childcare Prevent Mental Deterioration?

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Background: Women with severe mental illness experience many kinds of problems during childcare and have a high risk of relapse. Previous studies have not revealed methods for preventing deterioration of mothers' illness. In this study, we retrospectively investigated mothers with severe mental illness, and we attempted to identify characteristics of mothers whose condition did not deteriorate and who did not require hospitalization during childcare.

Methods: Data were collected from a self-administered questionnaire filled out by female outpatients who had experienced childcare and were diagnosed with schizophrenia, schizoaffective disorder, bipolar affective disorder or depression with psychotic symptoms. The questionnaire asked about attitudes toward childcare during the first three years following the first childbirth. It was composed of six sections on A) living situation, B) psychiatric medication, C) sleep, D) subjective symptoms of deterioration, E) resting time, and F) advice for other mothers with mental illness. The subjects were split into two groups: those that were admitted to a hospital within three years following the first childbirth (hospital group, n=16) and those that were not hospitalized (non-hospital group, n=19).

Results: The two groups showed no significant differences in their responses to the questions in sections A-E of the questionnaire. In section F, the non-hospital group wrote significantly more comments than the hospital group. The non-hospital group described concrete ways for taking care of their mental health, while the hospital group did not.

Discussion Our results suggest that whether or not mothers need admission during childcare depends on their assertiveness and ability to communicate.

In the past few decades, women with severe mental illness have had more opportunities to be parents and raise children. A British study found that about 60% of women with psychotic disorders were mothers [6]. The increase in number of mothers with mental illness may be associated with deinstitutionalization, community-based rehabilitation and support

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programs, and development of antipsychotics [13]. Mothers with severe mental illness experience many kinds of problems during childcare. Some are similar to those of women without mental illness, and some are specific to them. Research in the United Kingdom and the United States revealed various difficulties of mothers with severe mental illness [2, 10]. They have difficulties associated with motherhood. They have to cope simultaneously with the responsibility of caring for children and the need to look after their own mental well-being [2]. They often worry about the effect of their mental health problems on their children [2]. The stigma associated with mental illness prevents them from talking openly about their problems and getting appropriate services [2]. Support systems for parents are usually not designed to help mothers with severe mental illness [14]. In addition, they express the fear of losing custody. Women who have lost custody of their children feel a deep sense of grief [1, 7, 10].

These difficulties affect each other in a complicated manner and lead to a higher risk of relapse [5]. Previous studies [11] did not address what can be done to prevent deterioration of mother's illness. How did the subjects of these studies cope with their various difficulties and what were the characteristics of those who were best able to overcome the crisis? In this retrospective study, we attempted to identify characteristics of mothers whose condition did not deteriorate and who did not require hospitalization, and we also investigated how mothers with severe mental illness should take care of their mental health during childcare using an original questionnaire.

MATERIALS AND METHODS

Materials

At four general hospitals, three mental hospitals and one psychiatric clinic located urban areas in Hyogo prefecture, we administered this study to all female outpatients who met the following criteria: (a) diagnosis of schizophrenia, schizoaffective disorder, bipolar affective disorder or severe depression with psychotic symptoms as defined by ICD-10 (International Statistical Classification of Diseases and Related Health Problems, 2003) [15]; (b) mother of at least one child; (c) experience of childcare; (d) mental illness before the first childbirth; (e) no history of mental retardation, organic brain syndrome, or alcoholism; (f) ability to give informed consent. From June to November 2009, 40 patients met the criteria.

Data collection

Our investigation was executed by using an original questionnaire about mothers' attitudes and behavior during the first three years following the first childbirth (see appendix). It consists of 29 questions about care of the first child for three years from birth. Five questions were about living situation, seven were about psychiatric medication, five were about sleep, four were about subjective symptoms of deterioration, and four about resting alone. Additionally patients could write down impressions and advice about childcare. The questionnaire was to know how to help patients to prevent mental deterioration during childcare. We thought that medication, sleep, rest, self-awareness of patients' situation or symptoms, and ability to ask for help are important to prevent deterioration, so the questions were made on these six topics. Socio-demographic and clinical data were collected from chart review. Patients' mental states were assessed with the Brief Psychiatric Rating Scale (BPRS)[11] by attending psychiatrists. This study was approved by the ethics committee of Kobe University Graduate School of Medicine.

The participants answered the questionnaire at the hospital in the presence of a psychiatrist, nurse, clinical psychologist or social worker so that they could ask questions immediately or so that the session could be stopped if the patient was in bad condition. No children were allowed to be present.

Analysis

The subjects were split into two groups: those with hospitalization within three years following the first childbirth (hospital group) and those without hospitalization (non-hospital group). The characteristics of the patients were compared by chi-square test for categorical variables, and Student's *t*-test or Mann-Whitney's *U*-test for quantitative variables. The answers for question B(5) (ratio of taking medication) of the questionnaire was compared by Mann-Whitney's *U*-test, the answers for C(1) (sleeping hours) was compared by Student's *t*-test, and the other answers were compared by chi-square test (see appendix). In all tests, $p < 0.05$ was considered significant.

RESULTS

Of the 40 patients who met the criteria, 35 answered the questionnaire. Five patients (mean age 45.2 years) did not consent to participate in the study; four of them were diagnosed with schizophrenia and one was diagnosed with schizoaffective disorder. Socio-demographic and clinical descriptive statistics for the overall samples (n=35) are shown in Table I. The majority of patients were married or lived with partners (77.1%). The majority of patients were housewives (85.7%). Seventeen patients were diagnosed with

Table I. Basic socio-demographic and clinical descriptive statistics for the overall samples (n=35)

| Variable | Number of participants | | |
|--|------------------------|--------|-------|
| | (n=35) | (%) | |
| Age range of participants | | | |
| 30-39 years | 16 | 45.7 | |
| 40-49 years | 5 | 14.3 | |
| 50-59 years | 9 | 25.7 | |
| 60 years and over | 5 | 14.3 | |
| Marital status | | | |
| Married/living with partner | 27 | 77.1 | |
| Previously married, now living without partner | 7 | 20.0 | |
| Widow | 1 | 2.9 | |
| Employment status | | | |
| Housewife | 30 | 85.7 | |
| Part-time worker | 2 | 5.7 | |
| Self-employment | 1 | 2.9 | |
| Unknown | 2 | 5.7 | |
| Diagnosis | | | |
| Schizophrenia | 17 | 48.6 | |
| Schizoaffective disorder | 13 | 37.1 | |
| Bipolar affective disorder | 4 | 11.4 | |
| Severe depression with psychotic symptoms | 1 | 2.9 | |
| Variable | Mean±SD | Median | Range |
| Children | | | |
| Mean number of children per participant | 1.3±0.8 | 1 | 1- 4 |
| Mean age of first child | 14.7±11.2 | 12 | 1-34 |

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schizophrenia, 13 were diagnosed with schizoaffective disorder, 4 were diagnosed with bipolar affective disorder and 1 was diagnosed with severe depression with psychotic symptoms. The mean number of children per participants was 1.3 ± 0.8 , and the mean age of the first child was 14.7 ± 11.2 years.

Among the 35 patients, 19 were in the non-hospital group and 16 were in the hospital group. The two groups were not significantly different in demographic or social variables at the time of evaluation (Table II). The non-hospital group had a mean age at evaluation of 47.8 years and a mean age of onset of mental illness of 24.8 years. The hospital group had a mean age at evaluation of 43.9 years and a mean age of onset of mental illness of 23.9 years. In the non-hospital group, ten patients were diagnosed with schizophrenia, six with schizoaffective disorder, two with bipolar affective disorder, and one with severe depression with psychotic symptoms. In the hospital group, seven patients were diagnosed with schizophrenia, seven with schizoaffective disorder, and two with bipolar affective disorder. Seven patients in the non-hospital group and 11 patients in the hospital group experienced psychiatric hospitalization before first childbirth. The mean score of BPRS on study was 36.4 in the non-hospital group, and 30.1 in the hospital group. The mean number of children of the non-hospital group was 1.5 and the mean age of the first child was 17.6 years. The mean number of children of the hospital group was 1.1 and the mean age of the first child was 11.3 years.

Table II. Characteristics of participants on study

| Variable | Non-hospital group (n=19) | Hospital group (n=16) | <i>p</i> value |
|---|------------------------------|--------------------------|----------------|
| Age (Mean±SD) | 47.8±9.84 | 43.9±10.6 | 0.259 |
| Years of education (Mean±SD) | 12.9±1.20 | 14.1± 2.09 | 0.121 |
| Marital status | | | |
| Married/living with partner | 14 | 13 | |
| Previously married, now living without partner | 5 | 2 | 0.595 |
| Widow | 0 | 1 | |
| Diagnosis | | | |
| Schizophrenia | 10 | 7 | |
| Schizoaffective disorder | 6 | 7 | |
| Bipolar affective disorder | 2 | 2 | 0.715 |
| Severe depression with psychotic symptoms | 1 | 0 | |
| Age on first episode of mental illness (Mean±SD) | 24.8±3.31 | 23.9±4.61 | 0.530 |
| Had experienced psychiatric hospitalization before first childbirth | 7 | 11 | 0.059 |
| BPRS on study (Mean±SD) | 36.4±12.3 | 30.1±10.9 | 0.104 |
| Number of children (Mean ±SD) | 1.5±1.0 | 1.1± 0.3 | 0.124 |
| Age of first child (Mean±SD) | 17.6±11.7 | 11.3± 9.82 | 0.094 |

On the responses to the questions about living situation, social services, medication, sleep, subjective symptoms of deterioration, and resting time, there was no significant difference between two groups. Responses to selected questions are shown in Table III.

Table III. Representative distribution of responses to questions

| Question | Response | Non-hospital Group | | Hospital group | | <i>p</i> value |
|---|---|--------------------|------|----------------|------|----------------|
| | | (n=19) | (%) | (n=16) | (%) | |
| Whom did you live with? | Lived with partner | 13 | 68.4 | 9 | 56.3 | 0.754 |
| | Lived with partner and other families | 5 | 26.3 | 6 | 37.5 | |
| | Lived with other families, not with partner | 1 | 5.3 | 1 | 6.3 | |
| How did you make up for your sleep deficit? | Took a nap next day | 14 | 73.7 | 7 | 43.8 | 0.197 |
| | Slept apart from child in another room | 1 | 5.3 | 2 | 12.5 | |
| | Did nothing special | 4 | 21.1 | 7 | 43.8 | |

In the advice about childcare, the patients in the non-hospital group wrote significantly more comments of advice for other mothers with mental illness than those in the hospital group (Table IV). The most frequent comment was “Find supporters.” In the non-hospital group, 13 patients (68.4%) wrote this, while in the hospital group six patients (37.5%) did. The most noticeable difference between the two groups was that the non-hospital group described concrete ways for looking after their mental health: “Consult your attending psychiatrist.” “Take your medication and avoid admission.” These kinds of comments were not seen in the hospital group (TableV).

Table IV. Number of comments of advice for other mothers with mental illness

| | Non-hospital group | | Hospital group | | <i>p</i> value |
|------------------------|--------------------|------|----------------|------|----------------|
| | (n=19) | (%) | (n=16) | (%) | |
| no comment | 1 | 5.3 | 4 | 25.0 | 0.029 |
| one comment | 10 | 52.6 | 11 | 68.8 | |
| more than two comments | 8 | 42.1 | 1 | 6.3 | |

Table V. Index of comments of advice

| Comments | Number of patients | |
|--|---------------------------|-----------------------|
| | Non-hospital group (n=19) | hospital group (n=16) |
| Do not suffer by yourself, find supporters. | 13 | 6 |
| Consult/Trust your attending psychiatrist. | 5 | 0 |
| Take medication and avoid admission. | 2 | 0 |
| Care your children in your own way. | 0 | 2 |
| Do not take it out on your children. | 2 | 0 |
| Keep regular hours and keep clean. | 0 | 1 |
| Be interested in your children. | 0 | 1 |
| Children are your treasure. | 0 | 1 |
| You would grow up with your children. | 0 | 1 |
| Take care of your children as hard as you can. | 1 | 0 |
| Don't give up. | 1 | 0 |
| No comments | 1 | 4 |

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DISCUSSION

It has been well noted that enough sleep and regular taking of psychiatric medication prevent relapse of mental illness such as schizophrenia [15]. In mothers with severe mental illness, these two points are more important, since mothers can be easily susceptible to acute exacerbation of their mental illness when they face difficulties in parenting during the postpartum period [5]. Thus, it is clear that mothers whose psychiatric conditions do not deteriorate during childcare have more appropriate attitudes toward self-care including sleeping well and taking medications. In the responses to questions regarding attitudes toward these two points, however, we were unable to find any significant difference between patients who needed hospitalization during childcare and those who did not. The results suggest that the mothers' retrospective self-evaluations included denial and devaluation, so that it might be difficult to show distinctive differences between the two groups, even about these two points. There might be the other factors associated with prevention of deterioration in the mothers with mental illness.

The mothers in the non-hospital group wrote significantly more comments of advice for other mothers with mental illness than those in the hospital group, indicating that mothers in the non-hospital group could actively express their opinions. Another feature was found from the comments of advice in the non-hospital group. In the non-hospital group, more mothers than those of hospital group wrote, "Find supporters." Additionally, many of them also wrote, "Consult your attending psychiatrist." The comments show that mothers in the non-hospital group could trust and rely on supporters and attending psychiatrists.

Some mothers with severe mental illness are unwilling to use mental health services [3], probably because of their fear or avoidance of negative evaluation of parenting capability [2], and some are unable to use them because of their psychopathology [8], such as emotional and social withdrawal in schizophrenia and ideas of guilt and unworthiness in severe depression. In our study, the mothers of the non-hospital group emphasized the necessity of active communication with supporters and psychiatrists, suggesting that under the current services and support system, whether or not mothers need admission during childcare depends on mothers' assertiveness and ability to communicate.

To support mothers with severe mental illness, it is common to propose enriching social services for these mothers [e.g., 9]. In this study, however, the use rate of social services did not differ between the hospital and non-hospital groups. These results indicate that just providing services is insufficient to prevent mental deterioration in mothers with mental illness. We should be careful about their psychopathology, interpersonal functioning and level of coping capacity [4], and try to make it easy to access to the best services or treatment on an individual basis.

This study has some limitations. First, the number of subjects was small because of the short period of this study. Second, long times have passed since the patients' childcare. Third, hospitalization in this study was equated with deterioration, but there must be some exceptions to it. In addition, we must take the effect of separation from children into consideration. This might intensify anxiety or grief, or, on the other hand, give the mothers needed rest. In future studies, a prospective study should be administered and the meaning of hospitalization should be evaluated in each case.

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<Appendix>

Questionnaire

Please try to remember the first three years following your first childbirth. All questions are about this period.

A.

- (1) Who did you live with?
- (2) What kind of services did you make use of?
- (3) Did your first child drink milk well?
- (4) Did you breast-feed your first child?
- (5) Did you think your first child was easy to bring up?

B.

- (1) Who managed your medication?
- (2) To what extent did you think your psychiatric medication was necessary for you?
- (3) To what extent did your husband think your psychiatric medication was necessary for you?
- (4) Did different members of your family have different views about your psychiatric medication?
- (5) How often did you take psychiatric medications?
- (6) Did you want to quit psychiatric medications?
- (7) If you wanted to quit your psychiatric medications, who did you consult?

C.

- (1) How long could you sleep?
- (2) Were your sleeping hours shorter than before?
- (3) How did you make up for your sleep deficit?
- (4) Did your husband help you when your sleep was deficient?
- (5) Did your other family members help you when your sleep was deficient?

D.

- (1) Did your mental illness deteriorate during those three years?
- (2) What kind of symptoms made you notice deterioration of your mental illness?
- (3) What did you do when you encountered such symptoms?
- (4) Who did you consult when you had trouble or were anxious about your mental illness?

E.

- (1) Did you have enough time for yourself own during those three years?
- (2) How did you feel when you took a rest without the child?
- (3) Who took care of your child when you took a rest alone?
- (4) What did family members that you lived with say when you took a rest alone?

F.

- (1) What was the hardest experience during those three years? Please write down freely.
- (2) What kinds of things supported you during those three years? Please write down freely.
- (3) What was the happiest or best experience during childcare? Please write down freely.
- (4) What advice can you give other mothers with mental illness like you about childcare? Please write down freely.

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