Study on the Quality of Life of Mothers Whose Children are Sick
– The QOL of Mothers Having Hospitalized and Ambulatory Children—

Introduction:
To maintain good QOL of mothers is important for their children's mental and physical development. However, it is sometimes difficult for mothers with sick children to maintain their own QOL, because of the difficult management of their children's daily lives. We, therefore, investigated the QOL of mothers having hospitalized and ambulatory children.

Methods:
3. Research methods: We used the QUIK—R, a self-completed questionnaire for Quality of Life Revised by Iida and Kohashi, and questionnaires on factors which affect the QOL of mothers.

Results:
1) The average scores of QUIK—R, the presence of sick children's siblings, and the age of mothers showed no significant differences between inpatient and outpatient groups.
2) The distribution of total scores for QUIK of both the inpatient and outpatient groups were “slightly poor” according to a six-tiered rating scale.
3) The QUIK—R scores of mothers showed no significant differences depending on the age of inpatient children, period of hospitalization, and ward for inpatients.
4) Mothers with sick children had poorer QUIK—R scores than those with healthy children.
5) It was found that, when children are hospitalized for a long time, mothers devise means of obtaining happiness and amusement although their physical fatigue is not eased.

Conclusion:
The QOL of mothers with sick children was apt to be poor compared to that of mothers with healthy children. Therefore, it is important for nurses to develop a system to support children's families and medical service workers to decrease physical, mental and social stresses of mothers in hospitals and at home.

Key Words: QOL, Mothers with sick children, QUIK—R scores, Support
Study on the Quality of Life of Mothers Whose Children are Sick
– The QOL of Mothers Having Hospitalized and Ambulatory Children –

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I. Introduction

To maintain good QOL of mothers is important for their children's mental and physical development. However, it is sometimes difficult for mothers with sick children to maintain their own QOL, because of the difficult management of their children's daily lives.

We, therefore, investigated the QOL of mothers having hospitalized and ambulatory children.

II. Research Method

This research was conducted using QUIK-R\(^1\), a Self-completed Questionnaire for Quality of Life revised by Iida and Kohashi, as well as questionnaires on factors which affect the QOL of mothers, including the age of mothers, the age of children, family members, children's self-discipline of daily life behavior, and the period of hospitalization. Subjects were orally informed about the nature of this research beforehand, and their agreement to participate was obtained. We also gained permission to use QUIK-R from Norihiko Iida.

<Definition of words>

QOL: The World Health Organization (WHO) defines the QOL as “an individuals' perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns,” to which their physical function, mental health, and social relationships are included\(^2\). However, a clear definition of the QOL has never existed.

In this study, we define the QOL as “the comprehensive quality of life viewed from physical, mental and social aspects; overall, it is a subjective view of well-being, including consciousness of satisfaction and meaningfulness of one's existing condition.”

QUIK-R: This self-completed questionnaire for Quality of Life was revised by Norihiko Iida and Noriyuki Kohashi\(^3,4,5\). The internal consistency of this evaluation measure is alpha = 0.821, which shows high validity. QUIK-R consists of 55 questions: physical functioning (20 questions), emotional adjustment (10), interpersonal relationships (10) attitudes toward life (10), and checking items (5). One point is added for an answer “Yes,” with the higher score meaning lower QOL evaluation. The total score is divided into six tiered ratings: excellent (0 points), good (1-3), fair (4-9), poor (10-18), very poor (19-29) and grossly impaired (over 29).
III. Results
1. Attributes of subjects
① The age distribution of mothers was 17 in their 20s, 34 in their 30s, and 4 in their 40s, and the average age was 31.96±12.04.
② The average age of inpatient children was 3.28±3.52, while that of outpatient children was 2.85±3.15.
③ The period of hospitalization was 19 children for less than a week, 8 for a week to within a month, 7 for a month to within 3 months, 4 for 3 months to within 6 months, 2 for a year or over.

2. Factors affecting the QOL
① The average QUIK−R score for mothers with sick children aged 0-6 was 13.71, and those for mothers with sick children aged 2-6, 15.56.
② The average QUIK−R score for mothers with sick children who have siblings was 13.76, and those of sick children without siblings, 13.08.
③ The average QUIK−R scores of mothers who stay in hospital with inpatient children, and those with outpatient children, were 13.55 and 10.69, respectively, both of which are classified into “poor” in six-tiered ratings.
④ The average QUIK−R scores for mothers aged under 25, from 25 to 29, from 30 to 34, from 35 to 39 were 10.0, 15.0, 12.41, and 13.5, respectively. (Fig.1)

Fig.1. Mothe's Age and QUIK-R
The average QUIK-R scores for mothers with children aged 0, 1, 2, 3, 4, 5, and 6 were 10.92, 13.8, 17.57, 10.67, 15.45, 16.5, and 17.67, respectively.

The average QUIK-R score for mothers with inpatient children who stayed in hospital less than a week, a week to within a month, a month to within 3 months, 3 months to within 6 months, and over 6 months, were 11.32, 13.0, 19.86, 13.5, 21.5, and 10.0. (Fig.2)

The average QUIK-R scores for mothers with inpatient children in the ward of internal medicine and surgery were 13.2 and 14.41, respectively.

3. Statistical examination

The average QUIK-R scores, the presence of sick children's siblings, and the age of mothers showed no significant differences between groups of mothers who stay in hospital with their sick children, and those of mothers with outpatient children. The QUIK-R scores of mothers showed no significant differences depending on the age of inpatient children, period of hospitalization, or ward for inpatients.

4. Questions that were likely to show higher QUIK-R scores

Questions, to which targets answered many “Yes”es included (1) I am relatively happy (43, 78.18%), (2) I am relatively healthy (42, 76.36%), (3) I have pain in my neck, back, or joints (36, 65.45%), and (4) I am easygoing (33, 60.0%).
IV. Discussion

1. On QOL of mothers who stay in hospital with inpatient children, and those with outpatient children.

Any answers concerning physical functioning, emotional adjustment, interpersonal relationships, attitudes toward life, and checking items of the QUIK-R scores showed no significant differences between groups of mothers who stay in hospital with their sick children, and those of mothers with outpatient children. As shown in the table, though, scores of physical functioning, emotional adjustment, interpersonal relationships, and attitudes toward life among mothers with inpatient children were higher than among mothers with outpatient children. Only checking items ("I have a relatively happy life," "I am satisfied with my life," and "I feel great.") among mothers with outpatient children showed higher scores. This is probably because they, staying at home, can do housework, go to work, or take care of their sick children's siblings.

In this research, the presence of sick children's siblings and the age of mothers showed no significant differences between groups of mothers who stay in hospital with their sick children, and those of mothers with outpatient children, indicating no significant impact on the QOL.

2. On the age of inpatient children, the period of hospitalization and the ward for inpatients.

The QOL of mothers of younger children is thought to be poor because the younger the children are, the more assistance they need. In this research, however, the average QUIK-R scores of children of any age were "poor." Compared with Kitagawa's study 6), in which QUIK-R scores were "fair," the QOL of mothers with sick children was proven to be worse. Therefore, it is estimated that mothers with sick children, who suffer from strong physical and social stresses, have lower QOL than those with healthy children.

The longer the period of hospitalization, the higher the total QUIK-R scores is thought to be. However, the period groups of from a month to within 3 months and from 6 months to within a year showed higher scores than other period groups. It is thought to be because mothers become more and more tired until a certain period of time, but afterward they adjusted to their situation and showed lower scores. For example, the scores of checking items in the period of from the day of hospitalization to within a year continued to decrease, but those in the period of a year and over increased. It is estimated that, as shown in Fig. 2, mothers with inpatient children did not always get over their physical fatigue, but tried to find ways to have pleasure or happiness.

The QUIK-R scores of mothers with inpatient children in the ward of internal medicine and in the ward of surgery showed no difference. In this research, we did not identify how the hospital treated inpatient children and their mothers, where mothers slept, or how they took care of their children. In the future, therefore, research and consideration of the inpatients' life details are needed.

As a result, it is thought that mothers with inpatient children have a hard time
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obtaining satisfaction and refreshment, so their QOL is apt to be poor. To that end, support from their family members and medical service workers is important to help those mothers adjust to hospital life and decrease their mental and social stresses.

V. Conclusion

The QOL of mothers with sick children was apt to be poor compared to that of mothers with healthy children. Therefore, it is important for nurses to develop a system to support children's families and medical service workers to decrease physical, mental and social stresses of mothers in hospitals and at home.

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References
3) Norihiko IIDA, op. cit..