

# **Development of the Family Chronicle for Family Nursing Assessment**

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Abstract — Objective: Understanding of family history is essential, but no tools exist for this purpose. This study sought to develop the Chronological Table of the Plot of Family Story (PFS) as a new tool for assessment of the family chronicle, based the Concentric Sphere Family Environment Theory proposed by Hohashi. Methods: PFS was considered by five researchers to enable use of the family chronicle, based on records of family ethnography (family interviews/meetings, participant observation, etc.), conducted in Japan, China (Hong Kong), the Philippines and Indonesia, and family case studies. Results: The four-page PFS consists of a chronological table indicating the relationship and process of the plot of family story, family drama, family story, degree of family events, and condition of changes in the family (family symptoms/signs, family beliefs, family cognition/decisions/acts, etc.). Conclusions: The PFS is an effective family nursing tool that can visibly indicate how the plot acts on family symptoms/signs.

*Key words* – Concentric Sphere Family Environment Theory, Chronological Table of the Plot of Family Story, family chronicle, family drama, family nursing, functional indicator

## I. PRELIMINARY

The Concentric Sphere Family Environment Theory (CSFET) is a middle-range family nursing theory, proposed by family nursing researcher/practitioner Hohashi in 2005, that holistically aims at the high-dimension family existence approaching the family system unit from the aspect of chrono and spatial axes, focusing on the family environment that acts on family well-being [1]-[3].

Development of the CSFET was initiated in 1999, targeting families living in a wide range of areas in Japan (cities, rural areas, offshore islands, mountainous areas, etc.) and various countries and regions (in Canada, China [Hong Kong], Indonesia, Japan, the Philippines, the United States and others). It is a global theory based on a multi-method research, such as family interviews/meetings with over 980 families, questionnaire surveys totaling over 50,000 questionnaire sheets, family ethnography and others.

The CSFET has 43 functional indicators that act on family well-being. These include, for example, family time allocation, family economic power, culture, realizing family demands/family hopes and others. A functional indicator is "an item in the family environment having the function to act upon a family's well-being," and may also serve as an item for family assessment. In 2020, the CSFET was updated to Version 3.0, and the family chronicle was added to functional indicators. The family chronicle is a past record of family events entered on the chronological axis [4], [5].

To enable family assessments of the family environment and condition of family well-being upon which the CSFET is based, the Family/Family Environment Assessment Model (FFEAM) was developed, and the Family/Family Environment Intervention Model (FFEIM), also based on the CSFET, was developed, and well organized to correspond with the practice system [3].

Specifically, the FFEAM is constructed of qualitative assessments (family observation/interview) and qualitative assessments (measurement tests). The family observation/interview incorporates the Family Environment Map (FEM), Family Environment Assessment Index (FEAI) and others. Measurement tests incorporate the Survey of Family Environment (SFE), SFE Family Time Allocation Module (SFE/FTA) and others. In this manner, multiple tools were developed and put on the market, that enable even beginners to collect data with high efficiency and reliability, and enable family assessments.

However the family chronicle newly added to the CSFET had yet to be developed as an assessment tool. To enable assessment utilizing the family chronicle, in the family interview/meeting the family reviews its history and qualitative assessment is conducted from the collection of subjective and objective data. Consequently the tool of "Family observation/interview" should be developed into the Chronological Table of the Plot of Family Story (PFS).

The objective of this study was to develop Japanese and English versions of PFS as a new tool for assessment of the family chronicle, based on family ethnography and family case studies.

#### II. RELATED RESEARCH

CSFET assesses the family utilizing three axes: structural distance, functional distance, and temporal distance (Fig. 1). Temporal distance is a framework for visualizing the process of change in the family environment and family, and the family support that develops throughout this change. It incorporates Hohashi's philosophy of viewing the family in its entirety along a chronological axis, thereby leading to the concept by which, through the family chronicle, family change is reconstructed and the dynamic process of the family system unit can be visualized. Accordingly this study developed the PFS as a new scale. At present no other study equivalent to PFS exists. Through recording the history of the targeted family, it is believed that assessments can be conducted more accurately and conveniently, thereby enabling more effective family intervention.

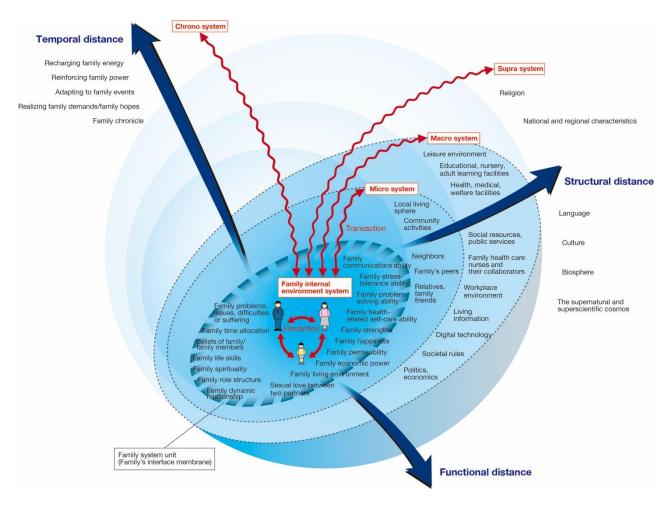


Fig. 1 Model diagram of Concentric Sphere Family Environment Theory (CSFET) (Ver. 3.4).

# III. RESEARCH METHODS

## A. Definition of terms used

In this study, the terms below are defined in accordance with the CSFET:

· Family event: A thing that occurs to the family system unit in the milieu of the family environment.

- ·Family story: The story about the family, consisting of various family events in terms of subjective and objective cognition, arranged on the chrono axis from the past to the present.
  - · Plot of family story: A sequence of family events extracted from the family story having a cause and effect relationship.
  - · Family drama: Family events that decisively brought about change in the family.
  - Degree of family events: The magnitude of the change on the family system unit by a family event.
- · Event positively influencing the family: Distinctive family events that raise family functioning, and mitigate or improve family symptoms/signs.
- · Event negatively influencing the family: Distinctive family events that decrease family functioning, and worsen or aggravate family symptoms/signs.
- · Event with neutral (little or no) influence on the family: Distinctive family events that do not alter the degree of family functioning or the severity of family symptoms/signs.

## B. Procedures for the development of PFS

First, the process of adding the family chronicle to functional indicators was organized and the basic hypothesis established. Based mainly on our past results of family nursing research, insights, and empirical evidence from our family nursing practices and reviews of articles related to family nursing [6]-[8], methods of assessment of the family chronicle were acquired. These were verbalized, and the first draft of the PFS produced.

Next, family ethnography [9] was conducted in Japan, China (Hong Kong), the Philippines and Indonesia. This was done through participant observation, family interview/meeting, participant observation, collection of existing materials in books, literature and internet materials, as well as self-administered questionnaire surveys. Formal family interview/meeting of two hours in length were conducted on 26 families utilizing the Family Environment Assessment Index (FEAI) as a tool for collection of data necessary for family assessment. The written questionnaire survey utilizing the SFE/FTA [3], in which the respective members of a target family enter their daily acts/behaviors, was utilized, and data from 51 families were analyzed. Based on analysis of this material, the first draft was repeatedly revised and the second draft of the PFS was produced.

Finally the PFS was applied to a single family case study, and while confirming the transferability of the PFS, the second draft was repeatedly revised. In one conference and one society for the study related to family nursing, exchange meetings were held concerning the development and discussions concerning PFS. Through this process, the final draft of the PFS was produced.

The entire production process as shown above was worked out through consensus by five family nursing researchers. After having confirmed that no new findings on improving the PFS were available, development was completed. Analysis was conducted in Japanese and following completion of the Japanese-language PFS, an English translation was produced.

# C. Ethical Considerations

The present study was conducted following the obtaining of approval of the Institutional Review Board of Graduate School of Health Sciences, Kobe University in Japan.

## IV. RESULTS AND DISCUSSION

Concerning the inclusive relationship between the terms utilized, in general this would clearly be in the order of: family environment family event family story plot of family story family drama. Concerning the degree of family events, it has been arranged according to the decision of the family and/or nursing professional at the time of entry write in the applicable figures: 0: no influence (in the case of a neutral family event); 1: slightly positive influence; 2: somewhat positive influence; 3: strongly positive influence; -1: slightly negative influence; -2: somewhat negative influence; -3: strongly negative influence.

The PFS consists of four pages. This is developed as a chronological table indicating the relationship and process of the plot of family story, family drama, family story, degree of family events, and condition of changes in the family (family symptoms/signs, family beliefs, family cognition/decisions/acts, etc.) (Fig. 1).

On the cover, Instructions for completing the form and an Example of completed form are given. In the family story, it is clear that in addition to narratives provided by individual family members, it includes family events recognized by the nursing professional. Consequently the PFS is produced while the nursing professional conducts a family interview/meeting, it instructs the family how to jointly produce it. Moreover, as it may be difficult to write out a family history as requested by the PFS, a sample of the completed form is provided.

Pages 2 and 3 adopt the fill-in entry format. One PFS is supposed to be produced for every family condition that indicates the process (family symptoms/signs, family beliefs, family cognition/decisions/acts, etc.).

Page 4 indicates information related to copyright and so on. In order to utilize it for research or in practice, etc., the PFS may be purchased from the publisher.

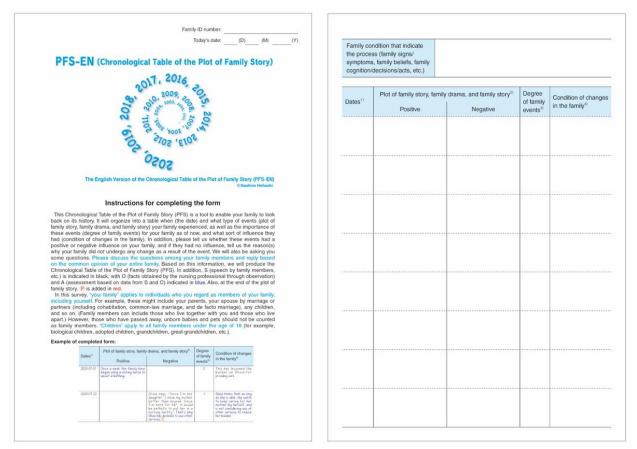


Fig. 1 The English Version of the Chronological Table of the Plot of Family Story (PFS-EN) (Version 1.1EN).

Families have their own respective stories. From among them, the PFS can clarify family dramas. What's more, since it can identify the plot of family story from family events of which the family story is composed, family signs/syndromes stemming from family events, and the influencing factors of those family signs/syndromes, can be assessed. By controlling the plot of family story, which is an influencing factor, family symptoms/signs can be mitigated or improved.

In family assessment, the target family is observed from every angle, data collected, and the entire image of the family must be clarified. In CSFET, by means of structural distance, functional distance and temporal distance, a three-dimensional analysis of the family environment is conducted, making family phenomena three-dimensional and structured, and thereby enabling comprehensive family assessment from the perspective of family life [3]. The family chronicle is a functional indicator related to temporal distance.

The FFEAM incorporates family observation/interview and measurement tests, and the PFS serves as one tool when conducting family observation/interview. PFS is combined with use of other multiple tools, and through the mixed methods with qualitative and quantitative family data, the family system unit can be comprehensively assessed, and can be harnessed in a clinical setting. In family interview/meeting the nursing professional listens to the family story concerning family symptoms/signs, and should provide support for the family to narrate subjectively the family chronicle in the family's own words. Through this process, the family symptoms/signs that the family itself was not aware of can be discovered and interpreted, negative family stories can be rewritten into positive family stories, and, through converting of family beliefs, the family will be able to mitigate and improve family symptoms/signs on its own.

## V. CONCLUSION

In this study, the PFS was developed as a tool for qualitative assessment of the family chronicle based on family observations/interviews in the CSFET. It is an integrated family story structured to include a variety of

family data, and is characterized by its ability to clarify the plot of family story and family drama. The PFS, then, is an effective family nursing tool that can visibly indicate to what degree and in what manner the plot acts on family symptoms/signs. In the future, we would like to further refine the PFS to enable it to be utilized in clinical settings. Through family intervention studies utilizing the PFS, we hope to demonstrate that it can be effective in reducing and improving family symptoms/signs.

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