ORIGINAL RESEARCH

Educational effect of a nursing training conference adopting the world café method: Medical care teams

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ABSTRACT

Aim: The study aimed to clarify students' learning about medical care teams through clinical practicum based on the World Café method, to find suggestions useful for developing new methods of education.

Methods: The "roles of nursing in improving medical care teams" reported by students were qualitatively and descriptively analyzed.

Results: Six core categories were identified concerning the roles of nursing in medical care teams, including [Staying close to patients to support them], [Providing information and using obtained information for care as much as possible], [Hub station for interpersonal relationships], [Realizing patient-centered medicine], [Key approaches to promote medical care teams] and [Lubricant for medical care teams].

Conclusions: Education using the World Café method helps students integrate their practice effectively based on theories and experiences, remember during training what has been already learned and pay attention to medical care teams. Furthermore, supportive guidance, such as providing feedback, was useful for them to develop more flexible and deeper thoughts.

Key Words: Clinical practicum, Medical care teams, World Café method

1. INTRODUCTION

In nursing, clinical training is defined as an educational outcome through lectures and preclinical training. It provides learning opportunities for nursing students to integrate their knowledge and skills based on their relationships with patients. Considering the characteristics of such learning and recent trends in public health, medical, and nursing services, the curriculum of our nursing faculty is designed to instruct students in the importance of medical care teams through lectures in basic education. A medical care team is defined as a field in which medical professionals share information regarding aims, goals, and measures, and collaborate/complement each other while playing their roles using their advanced specialties to provide optimal medical

services according to individual patients' requirements.[1] Based on this, clinical adult nursing training aims to help students learn about the functions and roles of nurses as medical team members. As part of the education, students describe their views and thoughts on medical care team-related events that they encounter daily in training records and participate in conferences to discuss medical care teams using these records during clinical training. However, conventional conference styles are not necessarily suitable for novice learners to deepen their thoughts through discussions.

Consequently, we adopted the World Café method to hold student conferences during clinical adult nursing training to define nursing roles in a creative manner based on the events they encounter and experiences they acquire during training,

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in addition to the basic knowledge they previously obtained during lectures on medical care teams. The World Café method is a discussion technique developed by Brown and Isaacs in 1995[2] based on the concept that knowledge and wisdom are developed in areas such as "cafés," where people openly converse and freely create networks, rather than functional conference rooms. It is currently being adopted for various types of conferences in and outside Japan.[3–6] We previously reported that the World Café method was also effective for participants of exchange meetings to deepen and expand their thoughts in a free atmosphere.[7]

However, education methods for nursing students through conferences adopting the World Café method during clinical training or their outcomes have not been reported. Such conferences may be useful for nursing students to deepen their thoughts on nursing roles in medical care teams through actual experiences in the clinical setting, in addition to using the knowledge previously obtained during lectures, and consider more appropriate teams and nursing roles, with an accurate understanding of the activities and essence of medical care teams. Furthermore, allowing students to deepen their thoughts in a free atmosphere during clinical training as an environment for learning with tension may also be of educational significance in developing methods to provide more effective education. Under these circumstances, we conducted a clinical training conference adopting the World Café method. On the final training day, we studied the outcome in terms of education imparted to nursing students to more deeply understand the importance and functions of medical care teams and nursing roles, with a view to consider more effective education as a challenge of educational practices.

2. METHODS

2.1 Study design

A qualitative descriptive study design, by which the thoughts and views of participants are described, was adopted to enable qualitative explanation and interpretation of phenomena that cannot be numerically expressed.

2.2 Previous lectures on medical care teams and clinical training

1) Lectures: during the second half of the second year, students learned the characteristics of medical care teams, factors promoting/suppressing it, and multiprofessional collaboration through seven lecture sessions on the theory of medical care teams. 2) Clinical training: during the third year, groups consisting of seven students each had participated in a 2-week clinical adult nursing training on three wards.

2.3 Practice of World Café method and data collection method

1) Four groups consisting of five to six students who had completed clinical training on three different wards freely chose seats to discuss multiple themes at a conference.

2) Each initial/home group had discussion rounds on the following themes: "learning through medical care teams in the clinical setting," "nursing functions and tasks," and "nursing roles in improving medical care teams." One of the students hosts each round lasting for 20 minutes, during which discussions were held among different members in freely chosen seats. Such rounds were repeated twice (3 rounds).

3) During discussions upon each theme in a free, café-like atmosphere, the students freely expressed their thoughts by drawing characters, illustrations, and lines connecting related items on draft sheets.

4) They went back to the initial/home group to summarize their thoughts on nursing roles in improving medical care teams and complete their drafts.

5) Each group submitted their drafts and made a presentation after a gallery tour.

6) After the last presentation, all students described in 10-20 minutes their thoughts on nursing roles in improving medical care teams on A5 sheets. These sheets were collected to analyze their descriptions of such roles.

7) The filled-in sheets were placed by individual students into the answer box located at the place of the World Café method-based training conference. The descriptions given in these sheets were analyzed in this research.

2.4 Study period

Between May 2016 and February 2018.

2.5 Participants

The participants were 104 third-year Japanese students of the Faculty of Nursing at a medical university (4 males and 100 females, mean age 20). They entered what they had learned on the answer sheet during the training conference with the World Café method on the last day of training.

2.6 Data collection

Contents representing the students' learning and awareness related to nursing roles in improving medical care teams after discussions at the conference were extracted for analysis.

2.7 Method of analysis

(1) Three coauthors analyzed the data in the following steps.

    A. Each report, arranged to secure anonymity, was read in detail, with close attention paid to the

description about "roles of nursing in improving medical care teams".

    B. After each report was read in detail, the parts describing the student's learning, awareness and thoughts about "roles of nursing in improving medical care teams" were extracted.

    C. The extracted parts were classified according to similarities in meaning, to yield sub-categories.

(2) The sub-categories identified by the three coauthors were combined to yield higher-level categories and core categories.

(3) All six coauthors analyzed the relationships among the higher-level categories and core categories and attempted their structuralization.

2.8 Trustworthiness

The three coauthors conducted separate analysis until the process of coding. Then, the code integration and subcategorization were carried out jointly by the three coauthors through continued discussions, to secure credibility, transferability and confirmability. The relationship among the higher-level categories and core categories was discussed jointly by all six coauthors continuously to secure confirmability.

2.9 Ethical considerations

Students were informed orally and by official posting about the objectives and significance of the research, thereby assuring them that students could decide participation in the study at their own discretion, that the data would be analyze while keeping anonymity of participants and that the rights of participants would be protected. In addition, consent of each student to utilization of his/her reports in research was obtained in writing. Students not desiring utilization of their reports in research were advised to report such intention to a school staff member not involved in the joint research so that their reports could be excluded from the data for analysis. Analysis of the data was started after assessment of the student's performance in a given subject was completed so that participation in the study would not affect the student school performance assessment.

3. RESULTS

We analyzed the reports of 104 consenting students, and their descriptions of nursing roles in improving medical care teams were classified into 38 subcategories, 20 categories, and 6 core-categories (see Table 1).

In subsequent parts of this report, core categories are marked with [ ], categories are marked with < > and italics give examples of codes constituting a given category.

3.1 Entire structure of nursing roles for better medical are teams

The structure of the relationship among core categories is shown below. Students viewed nurses as [Staying close to patients to support them] and considered that a role of nurses is [Providing information and using obtained information for care as much as possible] making use of the true information they can access while working beside individual patients. They positioned nursing as [Hub station for interpersonal relationships] in the context of medical care teams and viewed nursing as laying emphasis on [Lubricant for medical care teams] while setting a goal at [Realizing patient-centered medicine] and attempting [Key approaches to promote medical care teams] (see Figure 1).

3.2 Structure of each core-category

[Staying close to patients to support them] outlines the students' thoughts on nursing roles in patient care and comprises four categories. Caring for patients on a 24-hour basis, nurses are medical professionals closest to patients and are consequently characterized by being able to collect information and identify patients' needs, besides being able to clarify the patients' actual situations through assessment. They are also characterized as being able to sympathize with patients and provide psychological care.

> I think nurses should pay attention also to whether or not a given patient has expressed his/her real emotions, on the basis of the patient's character assessed during daily care. The patient's real intention may be understood only by doing so. <Being able to clarify patients' actual situations>

> A role of nurses is to listen to what the patient says and to understand the patient's background and psychological aspects including feelings about family and illness, and anxiety about the future. <Providing psychological care>

[Providing information and using the obtained information for care as much as possible] outlines the students thoughts on nursing roles in the medical care teams. This core-category comprises the following three categories: nurses share obtained information with other professionals, they represent the patients' true emotions and explain emotions of patients/families that are difficult to express, and they simplify explanations provided by multiple professionals to patients. Additionally, nurses directly utilize information from multiple professionals for patient care.

> A role of nurses is to assess the patient's condition through daily observation and care and

to transmit such information to the professions needing the information as soon as possible. <Utilizing information for care>

If a problem with a given patient cannot be re-

solved immediately, it is a role of nurses to seek consultation to relevant professionals for the sake of the patient or his/her family. <Representing patients' true emotions>

Table 1. Categories representing nursing roles in improving medical care teams from the students' viewpoint

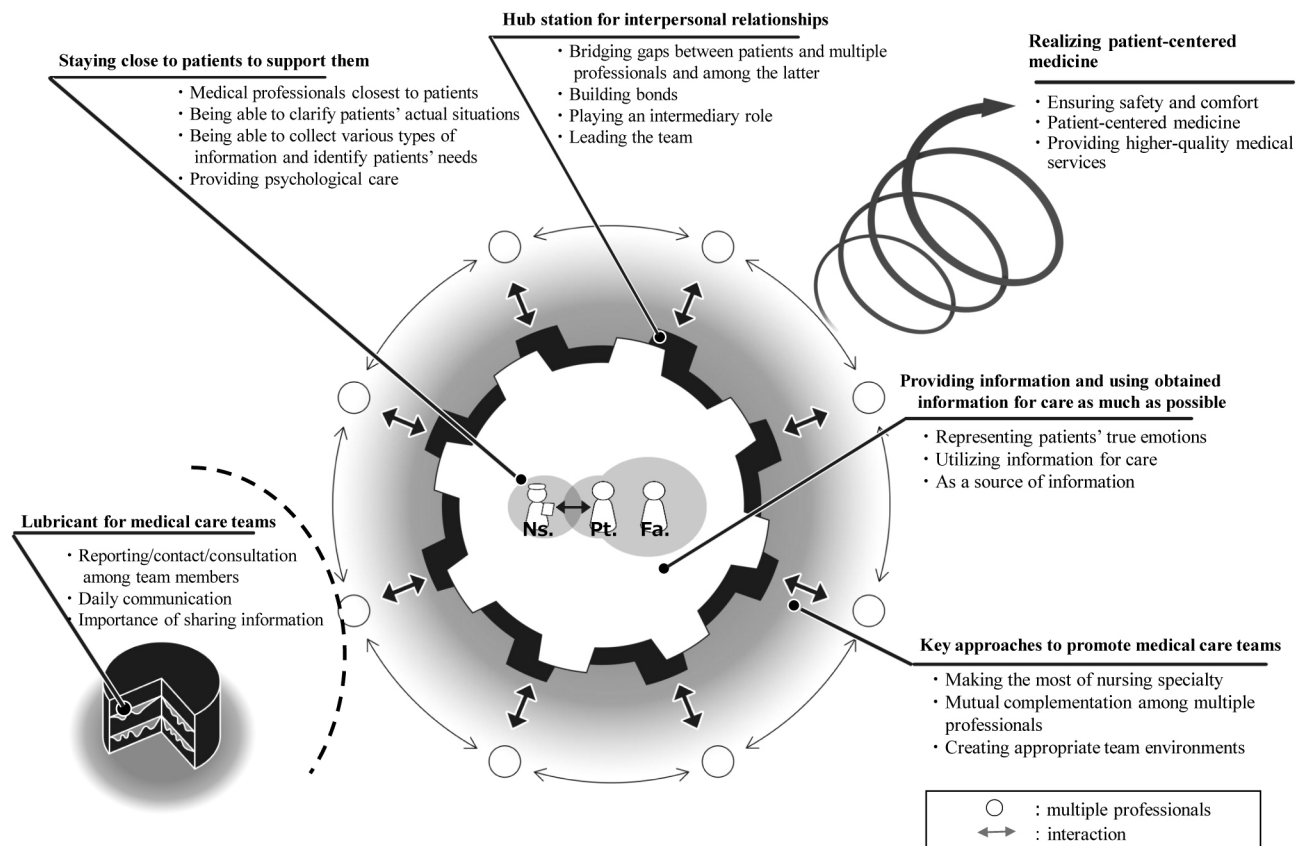| Sub-category	Category	Core-category
Medical professional closest to patients	Medical professionals closest to patients	
Caring for patients on a 24-hour basis		
Multifacetedly understanding patients	Being able to clarify patients' actual situations	
Clarifying patients' true emotions		
Developing overall perspectives		Staying close to patients to support them
Collecting various types of information from patients and their families	Being able to collect various types of information and identify patients' needs	
Promptly detecting changes and obtaining information		
Assessing the current status		
Assessing psychological aspects		
Providing psychological care	Providing psychological care	
Caring from the physically and psychologically closest standpoint		
Importance of establishing trust-based relationships with patients		
Bridging gaps between patients and doctors	Bridging gaps between patients and multiple professionals and among the latter	
Bridging gaps between among multiple professionals		
Bridging gaps between patients and multiple professionals		
Building bonds between patients and medical professionals	Building bonds	
Building bonds among medical professionals		Hub station for interpersonal relationships
Serving as a facilitator for diverse relationships		
Mediating between patients and doctors	Playing an intermediary role	
Mediating between patients and multiple professionals		
Leading the team	Leading the team	
Managing changes in team systems		
Explaining patients/families' emotions that are difficult to express	Representing patients' true emotions	Providing information and using obtained information for care as much as possible
Making explanations provided by multiple professionals more comprehensible		
Directly utilizing obtained information for patient care	Utilizing information for care	
Sharing information with multiple professionals	As a source of information	
Serving as a source of information from patients/multiple professionals		
Ensuring safety and comfort for patients/families	Ensuring safety and comfort	
Patient-centered medical care teams	Patient-centered medicine	Realizing patient-centered medicine
Supporting patients' autonomy		
Providing individualized nursing services		
Providing higher-quality medical services	Providing higher-quality medical services	
Maximizing multiple professionals' specialties and strengths	Making the most of nursing specialty	Key approaches to promote medical care teams
Mutual complementation among multiple professionals to resolve insufficiencies	Mutual complementation among multiple professionals	
Creating appropriate team environments to establish favorable relationships among all team members	Creating appropriate team environments	
Reporting/contact/consultation to share information regarding patients	Reporting/contact/consultation among team members	Lubricant for medical care teams
Promoting reporting/contact/consultation among multiple professionals		
Importance of communication among team members	Daily communication	
Importance of communication with patients/families		
Sharing information among multiple professionals	Importance of sharing information	
Sharing information among nurses		

Figure 1. Structure of nursing roles in improving medical care teams

[Hub station for interpersonal relationships] defines the patient–nurse relationship as the core of a medical care team. It explains nursing roles, such as playing an intermediary role in establishing favorable relationships between patients and other multiple professionals, bridging gaps between patients and multiple professionals and among the latter, including conflicting senses of value and opinions regarding treatment due to different specialties, and promoting closer relationships and building bonds among people. Team leadership is another role nurses should play so that the problem can be resolved through various coordinating efforts, thereby dealing with changes arising from patient's recovery processes or in connection with the problem.

> Patients sometimes have concerns which they cannot directly tell their physician. In such cases, the nurse working closest to the patients can listen to the patients and mediate their concerns to the attending physician. <Playing an intermediary role>

> Nurses should play the role of mediator of information between diverse healthcare professionals involved in the care of a given patient. <Bridging gaps between patients and multiple profes-

sionals and among the latter>

> I think it important that nurses play the role of connecting patients to multiple healthcare professionals and that all members of a medical care team providing care to a given patient can trust each other and express their views on an equal footing. <Building bond>

[Realizing patient-centered medicine] is a core category meaning the goal of favorable medical care teams. It comprises three categories that outline the goals of medical care teams as follows: ensuring safety and comfort for patients/families, realizing patient-centered medicine, and providing high-quality medical services while placing importance on individuality and autonomy.

[Key approaches to promote medical care teams] is a core category, indicating that utilizing of such approaches is expected to facilitate smooth work of the medical care team. It explains the effective use of each approach in promoting medical care teams , and it comprises three categories as follows: making the most of nursing specialty to provide specialized and useful intervention for patients, mutual complementation among multiple professionals required to resolve gaps

due to the advancement of specialties, and creating appropriate team environments to establish favorable relationships among multiple professionals.

> I think it desirable that each nurse manifests his/her expertise knowledge/skill sufficiently and share the information with the other team members to make up for the insufficient aspects of each nurse. <Making the most of nursing specialty>

> It is also important for nurses to serve as a mediator between patients and multiple professionals so that the medical care team can work in better atmosphere. <Creating appropriate team environments>

[Lubricant for medical care teams] is a core category indicating what is important for smooth functioning of a medical care team. It comprises three categories: importance of sharing information among the various types of professionals for the smooth functioning of medical care teams, reporting/contact/consultation among teams highlighting the necessity of reporting, contact, and consultation with the appropriate persons at appropriate times, and daily communication as a basis for interpersonal relationships.

4. DISCUSSION

This study analyzed the opinions of nursing students on the role of nursing in improving medical care teams, which were described following discussions at a conference adopting the World Café method, summarizing their learning during lectures during the second half of the second year. The study also analyzed the medical care team-related experiences of students and the feelings/awareness that were enhanced by supporting and committing to patients/families at a 2-week clinical training during the third year. The following section discusses the structure of nursing roles in improving medical care teams (see Figure 1), and the educational effect of the clinical training conference adopting the World Café method.

4.1 Structure of learning about nursing roles in improving medical care teams

The students regarded nurses as professionals who collect data and provide close support to patients, as explained by the following core-category outlining the most important nursing role in medical care teams: providing information and using obtained information for care as much as possible. They defined nursing in medical care teams as a hub station for interpersonal relationships and placed importance on playing the role of a lubricant for medical care teams

through key approaches to promote medical care teams, with the goal of realizing patient-centered medicine.

Through clinical training, the students realized that patient care and information are required throughout the day and night, even when staff is absent. Therefore, they regarded nurses who stay physically close to patients on a 24-hour basis as medical professionals with easier access to various types of information. The students realized the importance of assessing the patient's situations and psychological aspects based on obtained information and being able to clarify patients' actual situations through processes provided via a nursing role.

In medical care teams, nurses actively share obtained information to relevant professionals. When sharing this information, it is necessary for them to explain and simplify emotions that are difficult to express by the patients/families. Further, they should incorporate the outcomes of information-sharing into nursing care.

The students also focused on the relationship between nurses and patients/families, and regarded nurses staying close to patients as a hub station for interpersonal relationships. For nurses as a hub station, it is important to promote closer interpersonal relationships and coordinate among multiple professionals as facilitators and intermediates. The students considered building bonds among people and leading their teams to manage situations while staying close to patients as another nursing role.

From the students' viewpoint, the goals of medical care teams are to support patients' autonomy and to realize medicine that ensures individuality, safety, and comfort. Involving multiple professionals with different specialties as team members in medical care teams requires the maximization of their specialties and strengths, in addition to mutual complementation to resolve insufficiencies. Under these situations, the creation of appropriate team environments to establish favorable relationships among all team members is another nursing role.

In medical care teams requiring multiprofessional collaboration, patients' conditions and feelings, doctors' treatment policies, and professionals' instructions are subject to daily change. Therefore, information-sharing and reporting/contact/consultation among teams are important, and daily communication is indispensable.

Matsugi et al.[8] analyzed the contents of nursing textbooks, focusing on medical care teams, and classified them into 18 subcategories representing nursing roles in medical care teams, which were represented by "coordinating care teams" and "promoting information-sharing among team members".

They expected nurses as coordinators and medical professionals closest to patients to accurately explain their psychological aspects and emotional problems to other professionals. The students' opinions on nursing roles are consistent with this, thus indicating that daily experiences, enhanced awareness, and continuous learning during clinical training had enabled them to integrate and accurately describe their thoughts.

4.2 Educational effect of the clinical training conference

The World Café method was reported to be effective in creating new ideas.[9] Further, an analysis of the nursing roles in improving medical care teams described by the students revealed that they had participated in the clinical training conference adopting this method in a relaxed state. It was further revealed that they freely and enjoyably expressed their ideas and thoughts on a theme as if they were scribbling during each discussion round.

After the conference, the students described nursing roles in improving medical care teams from an overall perspective. Based on this, discussions in an amicable atmosphere based on flexible ideas with different members during each round may enabled them to freely expand their own thoughts. By describing their expanded thoughts on a draft sheet to visualize them and by listening to other students' presentations, they may have become able to integrate their thoughts as their own opinions.

Each group conducted discussion rounds on "learning through medical care teams in the clinical setting," "nursing functions and tasks," and "nursing roles in improving medical care teams." These themes may have been effective in leading their thoughts to expand and converge from a concrete level merely based on their actual experiences during clinical training to a more abstract level, in order to finally consider nursing roles with enhanced awareness.

Concerning the World Café method, Katori[10] recommended that initial group members should meet again in the final round for further discussions, as follows: "Participants thoughts may simply diverge, rather than converging, if they only continue to make rounds. Therefore, it is more effective for initial members to meet again, with developed thoughts, in the final round, and deepen their discussions on the initial theme." Further discussions among the students in the final round and their expanded thoughts described as their own opinions regarding nursing roles in improving medical care teams in the present study suggest that they appropriately converged their ideas after initial divergence, thus supporting the effectiveness of the conference adopting the World Café method.

Matsugi et al.,[8] who analyzed the medical care team-related contents of nursing textbooks, noted a scarcity of detailed descriptions of practice and challenges, as importance tended to be attached to explaining general and idealistic issues in these textbooks. In our study, the students were able to concretely understand their experiences during clinical training after learning about general and idealistic issues through lectures. In this respect, their thoughts may have deepened through the experience of recording their learning through medical care teams in the clinical setting, being provided with feedback by faculty members and clinical supervisors, answering questions (such as "Why did you think so?"), reflecting upon their own viewpoints, and describing their thoughts during clinical training on a daily basis.

Negishi[11] emphasized the necessity of nursing education from global perspectives to lead students to expand their viewpoints from "patient-centered nursing" to "patient-centered medicine." The core-category [Hub station for interpersonal relationships] created in the present study represents the students' recognition of patient-centered medical care teams where other team members also function as a hub station, and nurses play their most important role as medical professionals who provide close support to patients. Thus, they may have considered not only medical care teams, but also patient-centered nursing at the conference.

Clinical training aims to provide opportunities for students to integrate the knowledge they have obtained through lectures and simulation-based learning through preclinical training, acquire skills, learn about patients' and families' emotions, and practice nursing in the actual setting. Supportive guidance, such as enhancing the students' attention to and interest in medical care teams while recalling the contents of their previous learning and providing them with feedback to deepen their thoughts, may also have enhanced the educational effect of the clinical training conference adopting the World Café method for conversations in a free atmosphere.

5. CONCLUSIONS

After discussions on nursing roles in improving medical care teams at a conference adopting the World Café method, students regarded nurses as professionals who provide close support to patients and obtain accurate information, as explained by the following core-category outlining the most important nursing role in medical care teams: providing information and using obtained information for care as much as possible. They defined nursing in medical care teams as a hub station for interpersonal relationships and placed importance on playing the role of a lubricant for medical care teams through key approaches to promote medical care teams, with the goal of realizing patient-centered medicine.

The adoption of the World Café method for a clinical training conference enabled students to discuss their own experiences through nursing practice, in order to freely expand their thoughts. By describing their expanded thoughts on draft sheets to visualize them and listening to other students' presentations, they were able to integrate their thoughts as their own opinions.

Supportive guidance, such as recalling the contents of their previous learning, enhancing their attention to and interest in medical care teams during daily training, and providing them with feedback to deepen their thoughts, was also helpful for them to develop more flexible and deeper thoughts.

Study limitations and future challenges

As this study analyzed the contents of students' descriptions after a conference adopting the World Café method, their thoughts during the three discussion rounds remained unclear. In future studies, the details of each round and their associations with the final outcomes should be analyzed to consider more effective clinical practicum adopting the World Café method.

A medical care team is characterized by substantial changes in team structure according to patients' process of recovery. As learning of such a characteristic may have been insufficient, it is necessary to review the method of adoption and themes for discussion rounds as another future challenge.

CONFLICTS OF INTEREST DISCLOSURE
The authors do not have any conflicts of interest to declare.

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