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Special Feature Article

Multidisciplinary Collaboration Care for Perinatal Mental Health in a General Hospital: The Report from a Perspective of a Psychiatrist

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Abstract

Due to the diversity of risk factors for peripartum mental health problems, it is necessary to engage multidisciplinary health care providers, such as psychiatrists, obstetricians, pediatricians, nurses, psychologists, pharmacologists, and social workers, and to connect with community welfare service to address the peripartum mental health problems. Although multidisciplinary health care providers are already available in a general hospital, systematic collaboration among them is not easy. The guideline for peripartum mental health is useful in building an effective team of multidisciplinary health care providers.

Meanwhile, perinatal women have limited access to necessary medical service due to various restrictions of migration and time caused by the state of being pregnant and holding newborn infants. Furthermore, in recent years, the COVID-19 pandemic has made it more complicated. Our previous research has shown that anxiety and thought of self-harm were aggravated among postpartum mothers in Japan during the COVID-19 pandemic. Possible barriers to the use of medical services preventing COVID-19 infections must be considered. Although leveraging technologies of the WEB system is thought to extend the reach of intervention, the scheme of support system is not enough. Enhancing the willingness of individuals and their families to use the service is thus

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necessary. This article describes an attempt of parenting support committee comprising multidisciplinary health care providers in our general hospital to address these issues.

Keywords: perinatal period, mental health, multidisciplinary collaboration, guideline

Introduction

The perinatal period is a time when mental disorders such as depression and anxiety are likely to develop. It is also a period when individuals with a history of mental disorders are susceptible to relapse or recurrence. The onset or recurrence of mental disorders during the perinatal period can sometimes result in outcomes such as suicide or child abuse, making early detection and intervention necessary. Factors contributing to perinatal mental health problems are diverse, including physiological changes associated with pregnancy and childbirth, reluctance to use medications, financial burdens, relationships with partners and family, the physical and psychological demands of childcare, changes in domestic roles upon becoming a mother, and challenges in balancing work and family responsibilities. To comprehensively address these factors and provide support, collaboration is essential not only with psychiatrists but also other medical departments, such as obstetrics and gynecology and pediatrics. Furthermore, collaboration is required with physicians but also nurses, midwives, licensed psychologists (hereafter referred to as psychologists), pharmacists, social workers, and other multidisciplinary professionals. Additionally, coordination is needed not only within hospitals but also with relevant local administrative agencies. Thus, collaboration across multiple departments, professions, and institutions is required. However, achieving smooth collaboration among such diverse professionals is difficult.

I. Barriers Hindering Multidisciplinary Collaboration

Watanabe et al.[16] identified three main factors that complicate multidisciplinary collaboration. First, differences in specialties, such as psychiatry versus obstetrics and gynecology or pediatrics, create disparities in expertise and perspectives, thereby making collaboration difficult. This is also true between medical institutions and administrative agencies, where differences in expertise and areas of specialization create

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similar challenges. While complementary expertise can have positive effects, it may also lead to negative consequences, such as the imposition of conflicting viewpoints. The second factor is the change in institutions involved during pregnancy, childbirth, and the postpartum period. Patients who received psychiatric treatment at their regular clinic before pregnancy may be referred to the psychiatric department of a general hospital with obstetrics and gynecology services upon pregnancy or childbirth, which can disrupt the continuity of care. Third, while “returning to one's hometown for childbirth” is common in Japan, relocating one's residence due to pregnancy or childbirth may result in a change in the responsible local government, potentially causing difficulties in transferring care from previously involved agencies.

In addition to these three barriers, it is important to note that the distance one can travel without difficulty and free time available become restricted during pregnancy and childbirth, particularly in the final month of pregnancy or when caring for a newborn. Furthermore, the spread of the novel coronavirus disease (COVID-19) made it even more difficult for pregnant women and new mothers to connect with the necessary support agencies themselves.

II. The COVID-19 Pandemic and Postpartum Anxiety

The COVID-19 pandemic significantly impacted the mental health of pregnant women and new mothers. For example, news reports described a case in which a pregnant woman infected with COVID-19, unable to find a hospital for admission while under home care, gave birth prematurely at home, and the infant died. The authors[14] compared Edinburgh Postnatal Depression Scale (EPDS) scores before and after the COVID-19 pandemic among women who attended their one-month postpartum checkup at Saiseikai Yokohamashi Tobu Hospital. The results showed that, compared with the pre-pandemic period (2017–2019), the post-pandemic period (2020) led to significantly higher scores for EPDS items related to anxiety and significantly lower scores for items related to anhedonia and depression (Figure 1). Initially, it was predicted that the spread of COVID-19 would worsen not only anxiety but also anhedonia and depression among postpartum women. However, contrary to this prediction, the scores for anhedonia and depression were significantly lower. The authors considered that heightened anxiety may have induced a state of psychological

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hyperarousal, which could have suppressed anhedonia and depression.

Furthermore, when data from 2021 were included in the analysis,[15] the results for the anxiety, anhedonia, and depression items were consistent with those from 2020. However, regarding the score for suicidal ideation, one of the EPDS items, while there was no significant difference in 2020 compared with the pre-COVID-19 period (2017–2019), the score in 2021 was significantly higher than in the pre-pandemic period (Figure 2). These results suggest that the prolonged COVID-19 pandemic may have contributed to the worsening of suicidal ideation among postpartum women. Furthermore, because suicidal ideation is associated with risks of suicidal thoughts and suicide-related behaviors,[12] countermeasures from a suicide-prevention perspective are necessary. Particularly during the pandemic, constraints exist, such as the infection risk associated with prolonged face-to-face interviews with multiple support providers and inability to conduct face-to-face interviews if the individual or their family members become infected. Therefore, to improve access to necessary support for pregnant and postpartum women, the active use of web-based systems should be considered.

III. Facilitating Multidisciplinary Collaboration

Various measures have been implemented to overcome the barriers mentioned above and facilitate smooth multidisciplinary collaboration. For support providers from different professional backgrounds to determine treatment plans or continue existing ones, it is necessary to share essential knowledge about perinatal mental health, for which guidelines serve as a useful tool. In Japan, the Perinatal Mental Health Society published the "Perinatal Mental Health Consensus Guide 2017,"[10] and the Japanese Society of Psychiatry and Neurology together with the Japan Society of Obstetrics and Gynecology published the "Clinical Practice Guidelines for Pregnant Women and Women Who Have Given Birth with Comorbid Mental Disorders or at Risk of Comorbidity."[8] Of course, in daily clinical practice, it is not uncommon for something to deviate from the guidelines, and it is self-evident that each patient's individuality must be considered. However, from the patient's perspective, it is desirable to avoid situations where different hospitals or local institutions provide vastly different treatments or propose completely contradictory approaches.

Furthermore, the "Schizophrenia Pharmacotherapy Guideline 2022"[9]

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prepared by the Japanese Society of Neuropsychopharmacology and the Japanese Society of Clinical Psychopharmacology, and the "Treatment Guidelines for Major Depressive Disorder"[11] prepared by the Japanese Society of Mood Disorders, are being promoted through the "Effectiveness of GUIdeline for Dissemination and Education in psychiatric treatment (EGUIDE)" project,[4] which has been ongoing since 2016 and achieved significant results.[5] Similar dissemination and awareness efforts are anticipated for guidelines concerning perinatal mental health. Additionally, separate from guideline dissemination, the Japan Association of Obstetricians and Gynecologists has been holding the "Maternal and Child Mental Health Care Workshop"[7] nationwide since 2016. This workshop targets all professionals involved with pregnant and postpartum women, aiming to promote a shared understanding of perinatal mental health and enable participants to practice basic care. According to a systematic review by Byatt, N. et al.,[1] among women identified with depression through perinatal screening, only 22% sought psychiatric care without specific interventions. However, by systematically establishing treatment agreements with patients, conducting accurate assessments in clinical settings, and training healthcare professionals involved in perinatal care, the rate of care-seeking increased two- to fourfold. Thus, the Japan Association of Obstetricians and Gynecologists' initiatives are important not only for promoting multidisciplinary collaboration but also increasing treatment uptake.

Early intervention, before conditions worsen and become more complex, also increases the likelihood that fewer types of professionals will be required to manage cases. As an early detection initiative, in 2017, the Ministry of Health, Labour and Welfare established the "Maternal Health Examination Program" to prevent postpartum depression and child abuse. Under this program, municipalities act as implementing bodies and subsidize the costs of maternal health examinations conducted at two weeks and one month postpartum. Furthermore, to strengthen staffing, the 2018 revision of medical fees introduced the "High-Risk Pregnant Women Collaborative Guidance Fee." Also, to provide seamless, one-stop support from pregnancy through childcare, amendments to the Maternal and Child Health Act made it a duty of effort for each local government to establish "Comprehensive Support Centers for Child-Rearing Generations."

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IV. For Individuals and Families to Actively Connect with Support Organizations

In addition to establishing a multidisciplinary collaboration system for perinatal mental health, it is also necessary to empower individuals and their families to ensure that this system is effectively utilized.

According to an analysis using the database from the National Health and Nutrition Examination Survey (NHANES) in the United States,[2] the prevalence of depression during pregnancy was 8.2%, but only 12% of those affected received mental health care, representing a very low proportion. Meanwhile, a study[13] reporting that suicide is the leading cause of death during the perinatal period in Japan showed that among women not diagnosed with a mental disorder postpartum, approximately 48% refused psychiatric consultation despite struggling with childcare, resulting in missed or inaccurate diagnoses. These findings highlight that, in Japan as well, individuals are not being appropriately connected to the mental health care they need.

Dennis, C.L. et al.[3] listed the reasons why individuals suffering from postpartum depression do not seek help, as shown in the table. The issues presented here, including stigma and the difficulty of accessing psychiatric care due to long waiting times for outpatient appointments, represent urgent challenges that must be addressed not only during the perinatal period but across the entire field of mental health care. Furthermore, due to insufficient knowledge about mental health, in daily clinical practice, we may encounter situations in which individuals and their families are unable to organize their problems and consult appropriate agencies for each specific issue.

V. Initiatives at Saiseikai Yokohamashi Tobu Hospital

Saiseikai Yokohamashi Tobu Hospital (hereinafter, "our hospital") has been working since 2007 through its "Patient Safety Measures Committee" on the early detection of, and early support for, child abuse. However, as these efforts proved insufficient, a volunteer-based "Parenting Support Team" was launched in 2009. After its activities were acknowledged within the hospital, it formally became the "Parenting Support Committee" in 2011. Its core members consist of psychiatrists, obstetricians, neonatologists, social workers, pharmacists, psychologists, nurses, and midwives. Members meet monthly for case conferences. In addition, twice a year the hospital hosts regional liaison meetings where staff from relevant administrative agencies,

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local clinics, and midwifery centers share their activities and topics. Through these meetings, including case conferences, the hospital promotes face-to-face collaboration. The hospital manages approximately 1,000 deliveries annually, with the Parenting Support Committee intervening in about 15% of these cases. The intervention period primarily spans from pregnancy through one month postpartum. At the one-month postpartum checkup, the Committee distributes a "Psychological Counseling Card" listing the phone numbers and email addresses of the relevant departments and provides support upon request. However, these activities have revealed that pregnant and postpartum women and their families often lack an accurate understanding of mental health issues and are unable to identify the appropriate agency for their specific concerns. Therefore, as part of the research project: "Development of Methods and Implementation Systems for Early Consultation and Intervention in Mental Health Services Adapted to Regional Characteristics" (Principal Investigator: Takahiro Nemoto),[6] funded by the Ministry of Health, Labour and Welfare's Scientific Research Grant for Comprehensive Research on Disability Policy, the committee compiled a list of local perinatal mental health consultation agencies (Figure 3) and published it online to enable individuals to easily identify and access regional resources. Furthermore, for mothers who delivered at our hospital, the committee developed the "Parenting Support Web System." In this system, mothers self-administer EPDS, and the results are analyzed by an AI-powered chatbot that automatically identifies their needs and suggests appropriate support services. The effectiveness of this system is currently being evaluated.

Conclusion

Thus far, we have discussed multidisciplinary collaboration in perinatal mental health. However, such collaboration is not limited to this field and is essential across the entire spectrum of mental healthcare. In Japan's super-aged society, individuals with mental disorders are aging as well, often developing multiple co-occurring physical illnesses, which will require even closer collaboration with relevant medical specialties in the future. The strengths of so-called general hospitals include the ability for highly specialized multidisciplinary teams to collaborate within a single facility while aligning policies; capacity to provide inpatient care for severe cases; and ability to intervene through multiple "entry points," not only in obstetrics but also psychiatry, pediatrics, and other

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relevant departments. However, concentrating cases in general hospitals may increase their burden and make it difficult to provide high-quality care. Therefore, it is considered essential to proactively establish relationships with regional medical institutions beyond general hospitals, such as through "hospital-clinic" and "hospital-hospital" collaborations with local clinics and hospitals.

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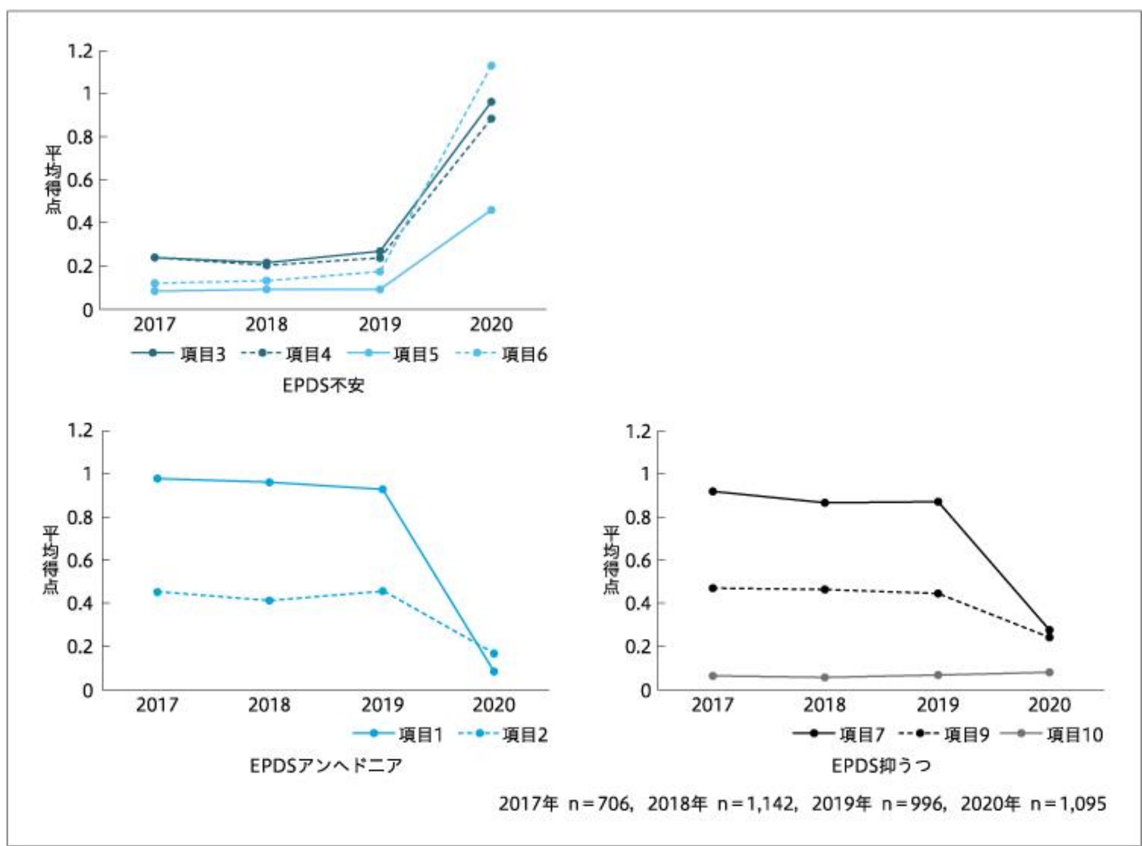

図1　COVID-19 流行前（2017～2019 年）と流行後（2020 年）における EPDS の各項目の推移
（文献 14 より改変して引用）

Figure 1: Changes in EPDS subscale scores before (2017–2019) and after (2020) the COVID-19 pandemic
(Adapted from Reference 14)

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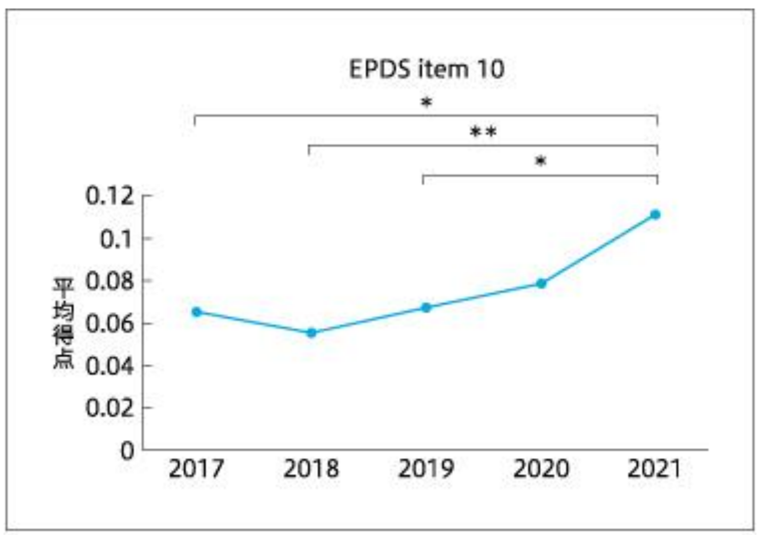

図 2　COVID-19 流行前と流行後における EPDS 自傷念慮の点数推移

*P<0.05,　**P<0.001

（文献 15 より改変して引用）

Figure 2: Changes in EPDS suicidal ideation scores before and after the COVID-19 pandemic

*P< 0.05, **P< 0.001

(Modified and adapted from Reference 15)

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表　産後うつ病における援助希求の障壁となる要因

・自身の精神的不調に気づかない（身体的不調として理解してしまう）
・産後うつ病の知識不足
・子どもを失うのではないかという恐怖
・恥やスティグマ，ラベリングへの恐怖
・文化的背景
・治療提供側の要因（アクセスの問題，非専門医のアセスメント不足など）
・薬物療法への抵抗感

（文献 3 をもとに作成）

Table: Factors Limiting Help-seeking in Postpartum Depression

・Unawareness of one's own mental distress (misinterpreting it as physical discomfort)
・Lack of knowledge about postpartum depression
・Fear of losing the child
・Fear of shame, stigma, or labeling
・Cultural background
・Provider-related factors (access issues, inadequate assessment by non-specialists, etc.)
・Resistance to pharmacotherapy

(Created based on Reference 3)

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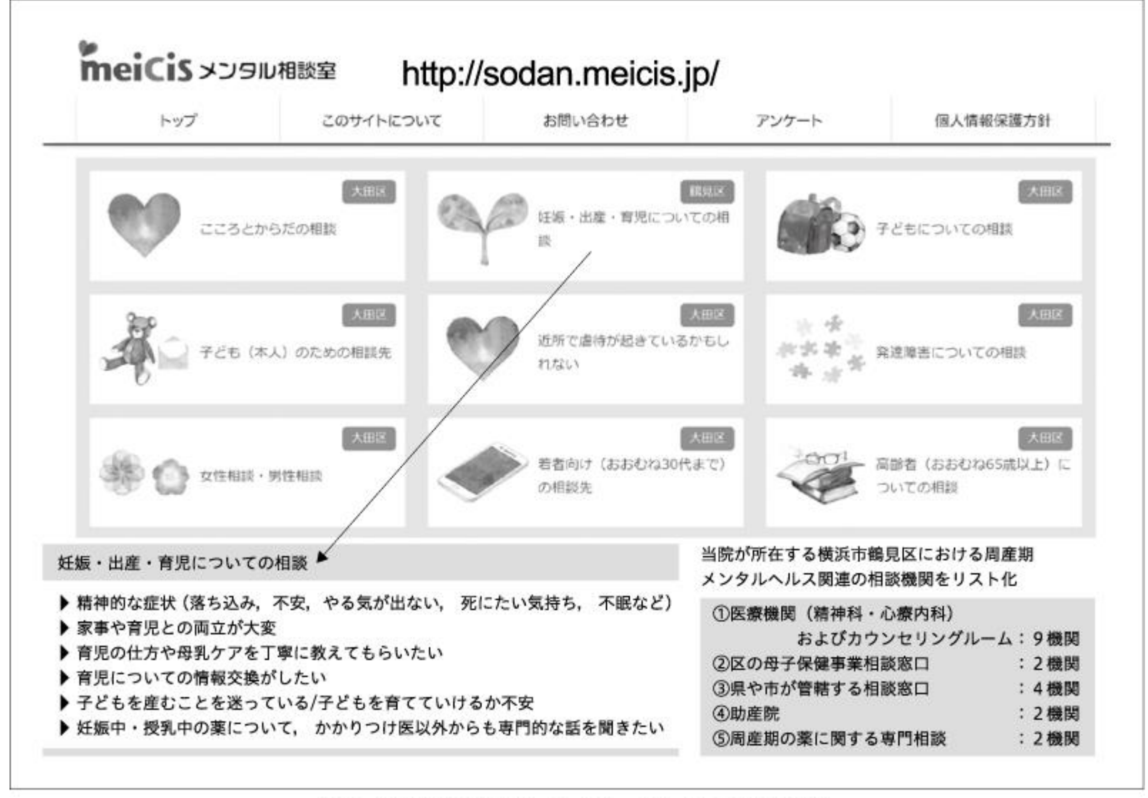

図 3　地域資源 WEB サイト（@meicis メンタル相談室）
（文献 6 より改変して引用）

Figure 3: Regional Resource Website (@meicis Mental Consultation Room)
(Modified and adapted from Reference 6)

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