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Special Feature Article

Multi-professional Mental Health Care during the Perinatal Period Collaboration

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Abstract

Mental health problems, such as mood disorders, are common among women in their perinatal period, and can negatively affect their daily quality of life, and their relationship with the child, as well as the child's behavior and development. Many professionals are involved in maternal and child health services, but their collaborations can be complicated and difficult. In this paper, first, we introduce the results of our research that investigated the problems of multi-professional collaboration for maternal and child health services in Setagaya Ward, Tokyo, Japan. Second, we introduced our intervention programs for improving maternal mental health in Suzaka City, Japan. Third, we describe our dissemination of the intervention methods for maternal and child health service professionals. Further implementation of mental health care in maternal and child health services is needed.

Keywords: maternal and child health service, perinatal, mental health care, multi-professional collaboration

Introduction

Early and appropriate intervention for parents and children with mental health problems can lead to a healthy parent-child relationship and the healthy growth of the child. In maternal and child health services, many professions are involved from pregnancy onward, including obstetricians, midwives, public health nurses, pediatricians, and, in some cases, medical social workers, psychiatrists, clinical psychologists, physicians, and child guidance workers. However, because of this, collaboration among multiple professions and institutions is often difficult. In this paper, we first describe the issues of collaboration that emerged based on a questionnaire survey of maternal and child health service professionals in Setagaya Ward, Tokyo, regarding issues in medical care, health care, and welfare. In order to solve these problems, the "Suzaka Trial" was conducted in Suzaka City, Nagano Prefecture, by a scientific research team of the Ministry of Health, Labour and Welfare, to establish a seamless support system from the pregnancy stage through collaboration among medical, health, and welfare institutions. The results of the trial are presented below. In addition, a training program was developed to incorporate the findings of the "Suzaka Trial," and training

sessions were held for people involved in maternal and child health services. Issues in perinatal mental health care that emerged from the questionnaires before and after the workshop are also described.

I. Medical, Health, and Welfare Issues Revealed by the Survey in Setagaya Ward, Tokyo

In recent years, in order to promote early detection and treatment of depression, G-P Net (G: general physician, P: psychiatrist), a system to strengthen cooperation between general physicians and psychiatrists, has been developed in various areas, with local general physicians serving as gatekeepers for the detection of depression 1)2). In the "Research on the Promotion of the Construction of a Support System (Perinatal G-P Net) through Cooperation and Collaboration among Medical, Health, and Welfare Services for Pregnant and Postpartum Women with Depression" by the MHLW Science Research Group, we utilized this G-P Net system in the area of maternal and child health services, with maternal and child health professionals involved with pregnant women serving as gatekeepers and working in cooperation with related professionals to develop a community maternal and child health system to support parents and children. The maternal and child

health service and medical environment differ between urban and rural areas. Therefore, it was considered necessary to focus on both large metropolitan areas with sizeable populations and regional cities as model areas. First, Setagaya Ward, with a population of approximately 900,000, was selected as a metropolitan area. Local cities have various characteristics depending on the region, and Nagano City in Nagano Prefecture was selected as a model region because it contains various areas from urban to rural areas due to a wide-area merger of municipalities, which will serve as a reference for future equalization. Nagano City is the capital of Nagano Prefecture and has the largest population of any municipality in Nagano Prefecture, but it was also considered necessary to examine maternal and child health activities in terms of health center-based activities. In this regard, Suzaka City in Nagano Prefecture, which is adjacent to Nagano City, is covered by one health center for the entire city, and the role of the health center in the regional maternal and child health system is considered to be easy to grasp, so Suzaka City in Nagano Prefecture was also chosen as a model area. Based on the above, Setagaya Ward, Tokyo, and Nagano City and Suzaka City, Nagano Prefecture, were selected as model areas for this study.

In order to understand the needs of

maternal and child health service professionals, a questionnaire survey was conducted in 2013 among maternal and child health service professionals in Setagaya Ward. Approximately 80% of delivery facilities were aware of the existence of pregnant and postpartum women with problems, but methods for assessing and responding to high-risk pregnant and postpartum women with mental health problems varied, and the development of appropriate tools for this purpose was desired. In addition, the importance of not only the development of assessment tools but also community-oriented measures for maternal mental health became clear. It was also found that there are issues regarding how to determine and support high-risk pregnant and postpartum women. Furthermore, because there is no follow-up system after the one-month checkup in the obstetric field, support for high-risk pregnant and postpartum women stops after the one-month checkup, even if women were followed up as high-risk pregnant women in obstetrics. In the current medical, health, and welfare systems, public health nurses, obstetric staff, and pediatricians have information individually, but there is no way to share this information. As a challenge for maternal and child health services, it became clear that a medical policy needs to be established to promote a

system for sharing information on high-risk pregnant women from the time of pregnancy with maternal and child health service professionals.

To solve these problems, a flowchart for a multidisciplinary response to pregnant and postpartum women with mental health problems was developed based on the opinions of maternal and child health service professionals in Setagaya Ward, Nagano City, and Suzaka City (Figure 1). This flowchart is designed to systematically assess the psychosocial risks of parents and children, paying attention to urgency, the family environment, and child safety, and to collaborate with other institutions as necessary. Even though systematic psychosocial risk assessment is common in psychiatry, this may not be so for other maternal and child health service professionals. One of the reasons that multidisciplinary collaboration in maternal and child health services is often difficult is that different professions have varying perspectives, and it is difficult to know which institutions to collaborate with and how to collaborate with them. This flowchart can serve as a platform for common understanding of how, when, and with which institutions to collaborate, and it can be shared with other concerned people in the community to deal with pregnant and postpartum women with

mental health problems, thereby facilitating multidisciplinary collaboration. This flowchart is the recommended content of CQ for multidisciplinary collaboration in the "Perinatal Mental Health Consensus Guide 2017," edited by the Japanese Society for Perinatal Mental Health 4)5).

II. The Community Maternal and Child Health System with Medical, Health, and Welfare Cooperation: Insights from the "Suzaka Trial"

The National Institute for Health and Care Excellence (NICE) guidelines for perinatal mental health care also call for the validation of effective local maternal and child health systems 3). With the aim of establishing an effective maternal and child health system that provides mental health care during the perinatal period, "Research on the Promotion of the Construction of a Support System (Perinatal G-P Net) through Cooperation and Collaboration among Medical, Health, and Welfare Services for Pregnant and Postpartum Women with Depression" by the FY2013-2015 MHLW Science Research Group 8) and the Suzaka City Public Health Center in Nagano Prefecture collaborated to develop an effective community maternal and child health system for perinatal mental health care, and conducted a community intervention study using this system to

verify its effectiveness 10).

This community maternal and child health system has the following three features:

(1) Public health nurses interview all pregnant women at the time of pregnancy notification to build relationships with them, and conduct psychosocial assessments.

(2) A clinical path for multidisciplinary collaboration on perinatal mental health care is shared among the community's maternal and child health service professionals to facilitate smooth multidisciplinary collaboration. Figure 1 mentioned above was used as the clinical path.

(3) For parents and children who are judged to be at psychosocial risk during pregnancy interviews and at medical institutions, case review meetings are held periodically at the Nagano Prefectural Suzaka Hospital (currently Shinshu Medical Center) for those involved in maternal and child health services in the community, and care plans are prepared reflecting the opinions of multiple professions for follow-up in collaboration with such numerous professions.

This approach has been implemented as a maternal and child health project of Suzaka City since fiscal 2014. We evaluated the effectiveness of the intervention program by comparing the results before (FY 2013: n=138) and

after (FY 2014: n=210) the start of the program. The primary endpoint was the total score of the Edinburgh Postnatal Depression Scale (EPDS), which was administered at the 3- or 4-month health examinations. Secondary endpoints were the number of cases followed up by public health nurses as "parents and children of concern," proportion of families who were able to conduct newborn visits, proportion of participants in parenting classes, utilization rate of parenting consultation at health centers, utilization rate of postpartum care, proportion of pregnant women receiving public health nurse consultations during pregnancy, and utilization rate of telephone consultation on parenting problems.

Results showed that the primary endpoint, the EPDS total score at 4 months postpartum, decreased significantly, indicating that the Suzaka Trial program improved the mental health of postpartum mothers throughout the entire community. Secondary endpoints revealed a significant increase in the number of cases of parents and children supported by multiple professionals as "parents and children of concern" in terms of psychosocial risk, suggesting that the program has the effect of intensifying maternal and child health services in the community. In addition, the

proportion of families that were able to conduct newborn visits, proportion of participants in parenting classes, rate of using parenting consultation at health centers, rate of using postpartum care, proportion of pregnant women receiving public health nurse consultations during pregnancy, and rate of using telephone consultation for parenting problems were all improved. These results indicate that the Suzaka Trial has the effect of deepening the relationship between parents and children and health centers, and improving the rate of receiving maternal and child health services.

The interviews conducted by the maternal and child health coordinators (public health nurses in the case of Suzaka City) with all pregnant women at the time of pregnancy notification established a relationship between the public health nurses and mothers, which may have had a positive effect on subsequent support for the parents and children. In this Suzaka City project, the timing of the population approach unique to the perinatal period is utilized to provide intervention for all pregnant women. In the perinatal period, there are a number of times when it is easy to adopt a population approach, such as at the time of pregnancy notification, prenatal checkups, postpartum checkups, and newborn visits, and it is important for such a community

intervention program to take advantage of these times. On the other hand, the Suzaka approach also has the characteristics of a high-risk approach. Parents and children who are judged to be psychosocially at risk are intensively supported by a multidisciplinary team. The care plan is not decided by one profession alone, but rather at a meeting of multiple professions. By bringing all professionals involved together to discuss cases in this way, a face-to-face collaboration system in the community is facilitated. It would be desirable to incorporate regular meetings that promote "face-to-face collaboration" between maternal and child health service professionals into the local maternal and child health system.

III. Lessons Learned from Training Workshops for Equalization of Multi-Professional Collaboration

Next, we will discuss the issues that emerged from the training workshops for equalization of the maternal and child health system, which were shown to be effective in the aforementioned Suzaka City project.

1. Contents of the training program

The above-mentioned MHLW research group prepared a manual on perinatal mental health care for maternal and child health service professionals 7)9)

and developed a training program. The training workshop was held in the form of a lecture and included the following topics: (1) Collaboration among medical, public health, and welfare services and social resources in mental health care for parents and children; (2) Identification of mental health problems of mothers that are likely to occur during pregnancy, postpartum, and child-rearing, and key points of response; (3) Introduction of collaboration between local government public health nurses and medical institutions (small-scale areas); (4) Introduction of collaboration between local government public health nurses and medical institutions (wide areas); (5) Examples of packages for holding workshops on mental health care for parents and children in the community; (6) The concept of formulating a community maternal and child health plan and PDCA cycle for "seamless support from the pregnancy period" is explained. In addition, group work is conducted to organize issues and formulate an action plan for building a system of collaboration for mental health care in community maternal and child health services. In this workshop, we asked those in leadership positions at maternal and child health facilities to participate, and after the training, to share the program contents with their colleagues at their own facilities.

In order to intervene early in cases of mental health problems among pregnant and postpartum women, this training covered risk factors that predispose patients to mental health problems, as well as screening for EPDS and psychosocial risk factors. Without screening for mental health problems, they are often overlooked in busy perinatal clinical settings and health checkups, and the introduction of screening is desirable.

2. Methods of survey on training

The "Parent and Child Health Mental Health Care Instructor Training" was conducted on December 4, 2016, based on the contents of the above program, and its effectiveness was verified. The participants were asked to complete a questionnaire about their awareness and behavior toward mental health care related to the training before the actual training, and to answer the same questions in a mail survey three months after the training. By comparing the questionnaire results before and after the training, we examined changes in attitudes and behaviors toward perinatal mental health care as a result of the training.

3. Training participants

Health and medical personnel (midwives, nurses, obstetricians, pediatricians, psychiatrists, medical

social workers, etc.) involved in maternal and child health in the community were targeted.

4. Results

There were 62 participants in the training workshop. Of these, 60 responded to the pre- and post-training survey, including 18 midwives, 6 nurses, 1 obstetrician, 26 public health nurses, 1 pediatrician, 1 psychiatrist, 6 medical social workers, and 1 dietitian. The results of the responses to each question are shown in Figures 2 through 5.

5. Discussion

There was a significant increase in the number of cases in which pregnant and postpartum women with mental health problems were dealt with, number of cases in which maternal and child health service professionals, who had not had much experience with pregnant and postpartum women, dealt with pregnant and postpartum women, and number of cases in which specified expectant mothers were dealt with. These results suggest that the training workshop improved the participants' awareness of the care of pregnant and postpartum women with mental health problems, as the number of cases of dealing with "concerned" pregnant and postpartum women with mental health problems increased significantly after the training.

The increase in the number of pregnant and postpartum women involving participants other than obstetric staff suggested that many of them became involved in perinatal mental health care after the training, which they had not been involved in before. For participants other than obstetrics staff, question 2 after training examined the changes before and after training by dividing them into public health nurses and other medical staff, revealing that both increased the number of cases in which pregnant and postpartum women were dealt with after training. The increase in the number of cases involving public health nurses suggests that many of the participants' municipalities began implementing mental health care measures for pregnant and postpartum women after the training. The increase in the number of cases of medical staff other than obstetricians dealing with pregnant and postpartum women suggests that many of the participants' medical institutions started dealing with the mental health care of pregnant and postpartum women after the training. At the time this workshop was held, the maternity health checkup program had not yet started, and many medical and public health institutions did not provide mental health care for pregnant and postpartum women. The implementation of a training package

for perinatal mental health care, such as this training workshop, was effective as a start-up for such medical and public health institutions. Even today, there is still much need for skill improvement in perinatal mental health care in the field, and since medical and health care institutions have staff who are newly involved in perinatal mental health care due to transfer or employment, this training package is meaningful in order to maintain a certain level of skills in the field.

The increase in the number of cases of specified expectant mothers suggests that this training was effective for improving the skills of participants in dealing with specified expectant mothers. This training introduced "Indices for Responding to Pregnant Women and Families in Need of Support from the Pregnancy Period" developed by Setagaya Ward, which were included in CQ6 of the Practice Guide 6) by the Japanese Society of Perinatal Mental Health, and explained when, the collaborating organizations, and how to respond to pregnant women at high psychosocial risk, using flowcharts. The response to specified expectant mothers involves various professions, and it is thought that a common understanding of how each profession should collaborate and respond will facilitate the collaboration.

As described above, it was suggested

that the training workshop was effective in raising participants' awareness of perinatal mental health care, starting with perinatal mental health care, and improving their skills in dealing with specified expectant mothers, and that such a workshop was meaningful in promoting perinatal mental health care.

IV. Future Issues

In maternal and child health services, various professions are involved with parents and children, but due to the vertical system of specialization, many people involved are not familiar with maternal mental health care or feel intimidated by it, and there is a marked need for a place to learn about maternal mental health care. It is desirable to provide various opportunities for learning and promote the skills of mental care. As one form of such training, there is a transferable training system in which training is provided to those in leadership positions in the community, and those who have received training disseminate it in their own communities, and this would be beneficial by enabling many people to acquire skills efficiently. The holding of training workshops by local governments, core medical institutions, medical associations, etc., for people in multiple professions in the community, will not only provide opportunities to

learn about maternal mental health care, but will also help to nurture face-to-face collaboration. It is also hoped that maternal mental health care will be firmly incorporated into the educational curriculum for those involved in maternal and child health.

Conclusion

This paper describes the results of a regional survey on mental health care in the perinatal period in which medical care, public health, and welfare collaborated, regional intervention studies based on the survey results, and dissemination of the findings. In the perinatal period, there are difficulties in collaboration because of the many professions involved, but it is important to have a common understanding and cooperate with people involved in face-to-face collaboration to deal with cases. In recent years, a platform for common understanding of response skills among multiple professions has been established in Japan, such as the publication of a medical guide to perinatal mental health care, and it is hoped that this will be further disseminated and implemented among those involved in maternal and child health.

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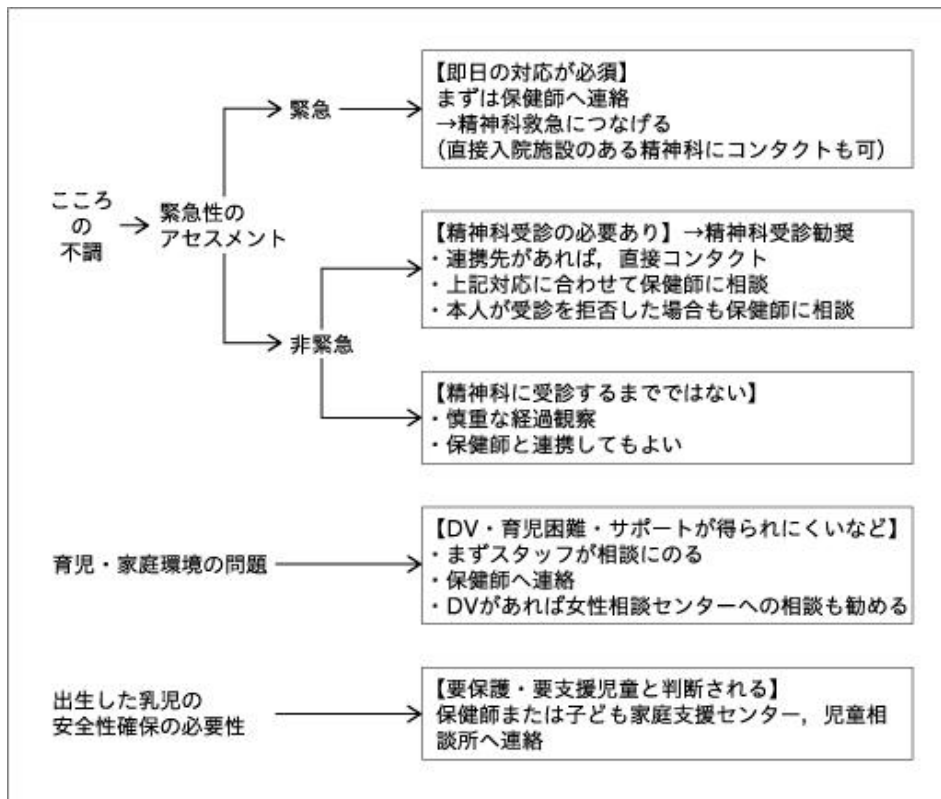


図1 メンタルヘルス不調の妊産婦に対する多職種が連携した対応のフローチャート
(文献9より引用)

Figure 1: Flowchart of a multidisciplinary coordinated response to pregnant and postpartum women with mental health problems
(Adapted from Reference 9)

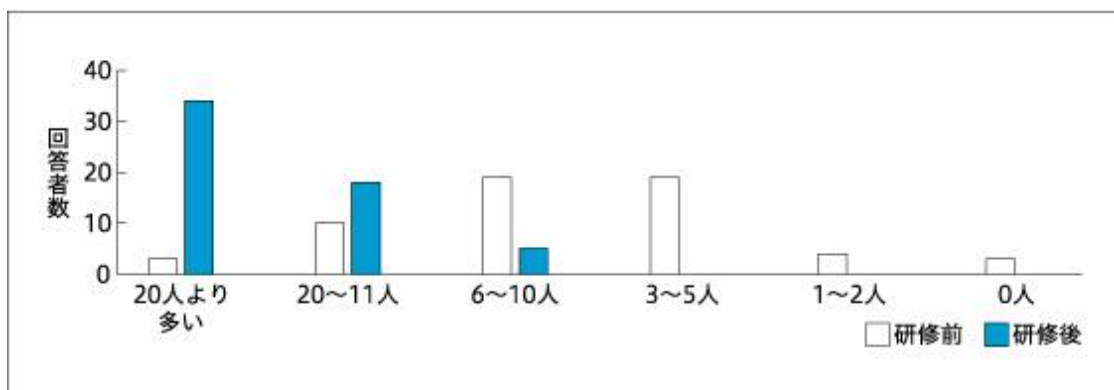


図2 研修会アンケート質問1：最近3カ月間でおよそ何人の心の問題で「気になる」妊産婦に対応しましたか？

Figure 2: Training workshop questionnaire question 1: Approximately how many pregnant and postpartum women with "concerns" about mental health issues have you dealt with in the last 3 months?

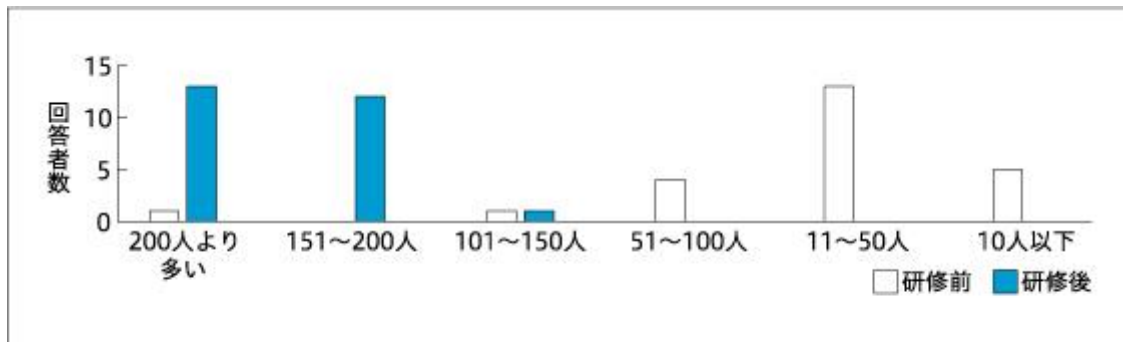


図3 研修会アンケート質問2：最近3ヵ月間にかかわった妊産婦の総数はおよそ何人ですか？（保健師回答）

Figure 3: Training workshop questionnaire question 2: Approximately how many pregnant and postpartum women have you dealt with in the last 3 months? (public health nurse responses)

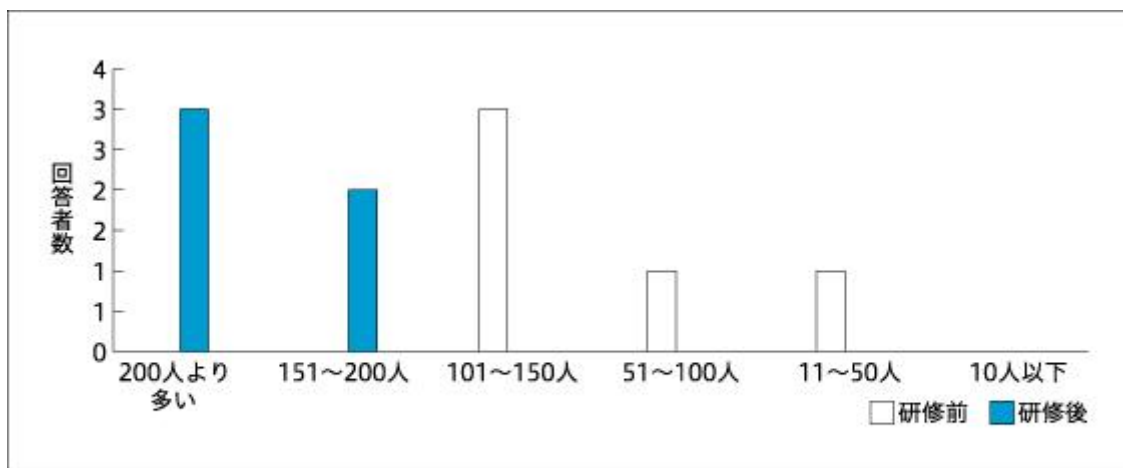


図4 研修会アンケート質問3：最近3ヵ月間にかかわった妊産婦の総数はおよそ何人ですか？（産科以外の医療機関スタッフ回答）

Figure 4: Training workshop questionnaire question 3: Approximately how many pregnant and postpartum women have you dealt with in the last 3 months? (answered by staff from medical institutions other than obstetricians)

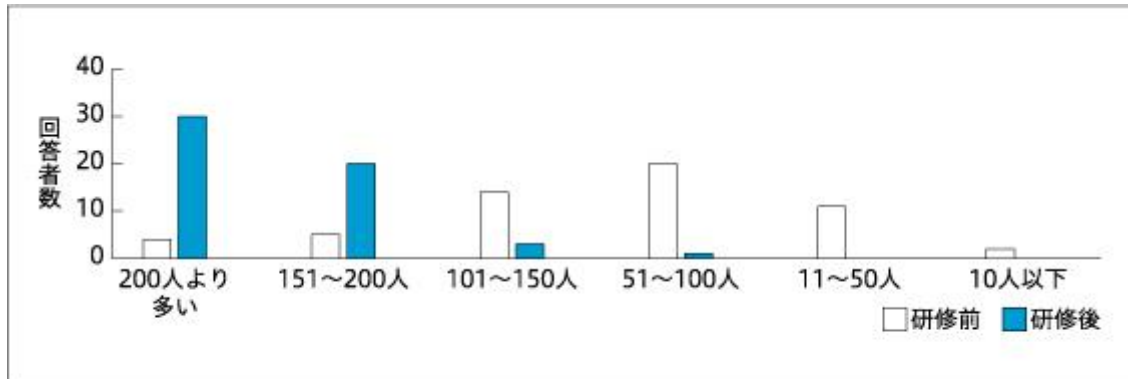


図5 研修会アンケート質問4：最近3カ月間でおよそ何人の特定妊婦に対応しましたか？

Figure 5: Training workshop questionnaire question 4: Approximately how many specified expectant mothers have you dealt with in the last 3 months?