Difficulties Facing Physician Mothers in Japan

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Despite recent increases in the number of female physicians graduating in Japan, their premature resignations after childbirth are contributing to the acute shortage of physicians. Previous Japanese studies have explored supportive measures in the workplace, but have rarely focused on the specific problems or concerns of physician-mothers. Therefore, this study explored the challenges facing Japanese physician-mothers in efforts to identify solutions for their retention. Open-ended questionnaires were mailed to 646 alumnae of Juntendo University School of Medicine. We asked subjects to describe their opinions about 'The challenges related to female physicians' resignations'. Comments gathered from alumnae who graduated between 6 and 30 years ago and have children were analyzed qualitatively. Overall, 249 physicians returned the questionnaire (response rate 38.5%), and 73 alumnae with children who graduated in the stated time period provided comments. The challenges facing physician-mothers mainly consisted of factors associated with Japanese society, family responsibilities, and work environment. Japanese society epitomized by traditional gender roles heightened stress related to family responsibilities and promoted gender discrimination at work environment. Additionally, changing Japanese society positively influenced working atmosphere and husband’s support. Moreover, the introduction of educational curriculums that alleviated traditional gender role was proposed for pre- and post- medical students. Traditional gender roles encourage discrimination by male physicians or work-family conflicts. The problems facing female physicians involve more than just family responsibilities: diminishing the notion of gender role is key to helping retain them in the workforce.

Keywords: gender role; Kawakita Jiro method; qualitative research; women physicians; work-life balance


The number of female physician graduating is increasing in many countries. In Japan, females account for approximately 30% of all medical students and nearly half of young physicians in some specialties, including obstetrics and gynecology and pediatrics (Nomura et al. 2010). In spite of recent increases in the number of female physicians, a marked decline in workforce participation has been recognized, particularly among those in their late 20s to 30s (Kaneto et al. 2009). Moreover, according to a government report, the employment rate of female physicians falls to 75% around 9 years after graduation (Ministry of Health and Welfare 2006), with the main factors contributing to this labor shortage being childbirth and childrearing (Kaneto et al. 2009; Japan Medical Association 2009). Japan has recently faced serious shortages of physicians in some specialties and in remote areas (Kaneto et al. 2009). The growing proportion of female physicians might be associated with these shortages, owing to their premature departure from the workforce (Tsukada et al. 2009; Ueda et al. 2010).

In Japan, domestic responsibilities fall on women’s shoulders much more heavily than on men’s, even when the wife is a physician (Tsukada et al. 2009). Research by the Japan Medical Association (2009) revealed that the most frequent problem faced by female physicians was “coping with both family and career” (64.1%). In efforts to identify solutions for the retention of female physicians, an increasing number of studies on the issue are being conducted in Japan. Survey studies have investigated gender differences in the self-perception of clinical confidence among residents (Nomura et al. 2010), gender differences in the professional and private lives of cardiologists as well as barriers to work for female cardiologists (Tsukada et al. 2009), the demand for after-school child care for physicians (Takenomiya et al. 2009; Kodama et al. 2010), the current situation regarding work and child-rearing (Norii et al. 2007), the current situation regarding work and family (Tanaka et al. 1997), and assistance measures for coping with career and child-rearing (Shimazaki 1996). However, studies focusing on the specific problems or concerns of female physicians during child-rearing have rarely been conducted. Western studies have reported that female phy-
Sicians feel guilty about their performance as both mothers and physicians (Parsons et al. 2009), that maternity leave is viewed with “silent disapproval” (Mobilos et al. 2008), and that female physicians report a higher level of psychological distress and more stressful life events than male physicians (De Koninck et al. 1995). Here, in efforts to explore the challenges that Japanese female physicians face in their professional and personal lives, we report on a qualitative study of female physicians who graduated from Juntendo University, Tokyo between 6 and 30 years ago and have children.

**Subjects and Methods**

**Subjects**

Juntendo University School of Medicine produces about 90 graduates every year. The first female physicians graduated in 1955 and numbered around 5 per year until 1975. After 1983, the numbers started to exceed 10 per year, from 1996 they exceeded 20 per year, and since 2002 the school has consistently produced around 30 female physician graduates per year. The graduate directory issued in November 2007 listed a total of 3,938 alumni from the class of 1949 through to the class of 2007. Of them, 673 were judged (by their names) to be female and 646 (95.9%) addresses were given. It was to these 646 female physicians that we sent survey questionnaires by mail.

**Data collection**

Questionnaires were anonymous, and were distributed and collected by mail. Upon receipt, completed questionnaires were immediately labeled with an identification number and then processed in a delinked anonymous manner. The study was conducted in February 2008. The protocol was approved by the Institutional Review Board at Juntendo University School of Medicine.

**Contents of the questionnaire**

The questionnaire combined quantitative questions with a qualitative question that asked the respondents to provide their thoughts on ‘The challenges related to female physicians’ resignations’, using space given in a free-form comments section.

**Analysis method**

The free-form comments gathered from the alumnae who stated they graduated between 6 and 30 years ago and who responded that they have children were analyzed qualitatively based on the KJ (Kawakita Jiro) method. The KJ method was developed by Jiro Kawakita as a tool for creating new ideas (Kawakita 2008). Briefly, first, we divided up the respondents’ descriptions onto cards, where each card had only one meaning. Second, we spread out all the cards generated on a table and grouped them according to the content written on them. We then named each group to represent its content. In this process, we started by making smaller groups, then moved on to grouping them together to make larger groups. The grouping process was completed when the minimum number of groups was reached. Third, we made structural drawings, examining which spatial layout best explained the logical interrelations between the largest groups. Finally, we confirmed if the layout readily explained the content.

To minimize bias and eliminate any preconceived notions that could result from a single author performing the analysis, four coauthors with prior experience of the KJ method differing in gender, job, and parental status undertook the analysis. In addition, we carried out the analysis paying the utmost attention to the meaning of the descriptions, words, and terms used. The analysis was completed when the coauthors obtained consensus.

**Results**

Overall, 249 physicians returned the questionnaire (response rate 38.5%), 150 of whom provided a free-form comment. Of these 150, 73 alumnae with children who graduated between 6 and 30 years ago gave a free-form comment (including one who was pregnant at the time). Those not practicing medicine accounted for 5 of the 73 respondents.

An analysis of the descriptions provided by these 73 female physician-parents involved dividing their descriptions into 809 fragments. For grouping, first, we made 18 small groups from the 809 fragments, and then connected these initial groups to produce 7 medium-sized groups associated with problems and solutions involving society, family, and the work environment. Finally, from the 7 medium-sized groups we could produce two large groups we named ‘Challenges’ and ‘Solutions’. We presented each of the two groups in diagram form, shown in Fig. 1 and Fig. 2, respectively. The main groups are shown below in square brackets, the factors identified within them are shown in curly brackets, and the sub-factors within those are shown in parentheses.

1) ‘Challenges specific to female physicians’

Problems were divided into 3 main groups associated with [Japanese Society], [Family Responsibilities], and [Work Environment]. Additionally, [Japanese Society] epitomized by [Traditional gender roles] had a strong negative impact on other problems. First of all, [Lack of childcare provision] and [Traditional gender roles] heightened stress related to [Child rearing]. Second, [Traditional gender roles] promoted [Gender discrimination] such as (Not welcoming females) and (Sexual harassment) in the workplace.

Other problems at work other than those connected with [Japanese Society] were [Lack of understanding of pregnancy and child care] and [female physicians’ own feelings of guilt]. These problems were negatively affected by [Japanese Medical Practice], another main group although not one associated with challenges specific to female physicians, in the context of a labor shortage.

2) ‘Strategies for female physicians to continue working’

Strategies were divided into three main groups associated with [Changing Japanese Society], [Improvement of Work Environment], and [Familial Support]. [Changing Japanese Society] was seen to be an essential factor allowing female physicians to continue working after childbirth, and was divided into [Diminishing traditional gender roles], [Enriching childcare provision], and [Adjustment
Fig. 1. Structural drawing of the challenges facing female physicians.
Fig. 2. Structural drawing of strategies for female physicians to continue working.

**Improvement of Work Environment**

- A modified working atmosphere:
  - Understanding the situation of pregnant/postpartum physicians and physicians during child care
  - Male bosses' understanding of women at work and male colleagues' cooperation

- Support for male physicians:
  - Work environment where male physicians also can maintain a balanced lifestyle and take childcare leave

**Educational curriculum for pre- and post-graduate medical students:**

- Thinking of one's role as a physician
  - Never forget we cannot become physicians without others' help
  - Female students should manage to continue working even after childbirth
  - Thinking about one's role as a husband of a working female
  - Never forget we became a physician with support from citizens' tax

**Support for physicians with children:**

- Flexible work arrangements depending on lifestyle
  - Career services in universities
  - Hiring them as temporary staff
  - Shorter or more predetermined working hours at lower income than colleagues
  - Retraining systems, work-sharing, rotating shift systems
  - Daycare and nighttime services in hospitals
  - Backup support systems preparing for unscheduled absences
  - Releasing pregnant physicians and physicians with infants from night duties

**Changing Japanese Society**

- Diminishing traditional gender roles:
  - Creating a society where women can work while caring for their children and share domestic duties with husbands equally

- Enriching childcare provisions:
  - Sufficient provision of daycare services for sick children, babysitters, housekeepers, reliable daycare centers, and after-school child care

- Adjusting the Japanese way of working:
  - Reducing males' work hours
  - Introducing flexi-time system
  - Work environments where males can take childcare leave from their work

**Familial Support**

- Support from husband
- Receptive attitude of husband
the Japanese way of working). These three factors of [Changing Japanese Society] promoted (Support from husbands) and positively influenced {A modified working atmosphere}, especially (Male bosses’ understanding of women at work). Moreover, {Support for male physicians} to start sharing domestic duties was affected by [Changing Japanese Society]. To bring more positive changes through {A modified working atmosphere} and by {Diminishing traditional gender roles}, an {Educational curriculum} should be adopted that encourages pre- and post-graduate medical students to think about their role as a physician and/or as a husband of a working female in order to help alleviate gender role problems. Lastly, in the workplace, {Support for physicians with children} such as (Flexible work arrangements), (Work-sharing), and (Daycare services in hospitals) were presented by the respondents.

Discussion

Female physicians struggle to balance their career and families (Parson et al. 2009). Although child support programs have been introduced in some Japanese hospitals (Kono et al. 2009; Kawase 2010; Ueda et al. 2010), other problems in addition to those concerning child-rearing may be at play. Indeed, some studies report that female physicians with children tend to feel more aware of sexual inequality than childless female physicians (Nori et al. 2007), or significantly less satisfied with their work than males (Tsukada et al. 2009).

The overall response rate in this study was not high, although it is similar to that of a study focusing on alumni of Juntendo University (response rate 40.6%) (Kagami et al. 2010). In addition, contrary to a previous report by the Ministry of Health and Welfare (2011), only a small number of respondents with children (57/33) had left medicine in the present study. Our respondents might have a strong will to continue work or perhaps those respondents who struggled with career and childrearing chose to respond in greater numbers than those who resigned, because they might perceive our survey as a mechanism for venting their frustrations and as a tool for effecting change.

In this study we conducted a qualitative survey on the challenges facing physician mothers. We found that [Japanese Society] epitomized by {traditional gender roles} is a powerful social barrier for female physicians who wish to continue working after they get married and have children. The present results support that a change in this traditional view is essential to retain them in the work force.

Female health professionals are stressed about family responsibilities in other countries as well as in Japan (Mobilos et al. 2008; McEwan 2010; Parsons et al. 2009). However, the labor force participation rates of Japanese women classed by age falls in their 30s (Ministry of Internal Affairs and Communications 2005). Such a phenomenon is not apparent in Western countries (Ministry of Internal Affairs and Communications 2005), which suggests that marital and parental roles might fall more heavily on Japanese women’s shoulders than on those in the West. Diminishing {traditional gender roles} is therefore essential for females working while raising children. Nomura et al. (2010) reported that a greater proportion of female residents than male residents choose “family” (70% versus 54% for men) as “the most important thing in life”. It is important to note, however, that a change of consciousness is necessary not only among men but also among women: a survey conducted in 2006 focusing on medical female students from Tokyo Women’s Medical College reported that senior students were less likely to want a future husband to take childcare leave (Ueda et al. 2010) as they did not want to feel they were a burden to their husband (Ueda et al. 2010).

Japanese female workers have few options for childcare (Tsukada et al. 2009). Employment costs for caregivers are extremely high in Japan compared with other countries and it is impossible to have a live-in caregiver in the typically small Japanese house (Tsukada et al. 2009), so mothers have no choice but to depend on relatives or daycare and after-school childcare centers. It is thus important to establish sufficient childcare facilities for Japanese physician parents, especially those that offer extended daycare and services for sick children (Kaneto et al. 2009). Onsite, quality daycare centers in medical universities, schools, and teaching hospitals are also extremely valuable (Rubin 2006; Mobilos et al. 2008; McEwan 2010). According to a report from the Japan Medical Association, however, only about 50% of hospitals were equipped with onsite daycare centers as of 2009 (Japan Medical Association 2009).

In relation to [Family Responsibilities], caring for sick children, feeling guilty about their performance as mothers, and school issues were the main challenges reported by our female physician respondents, similar to reports from overseas (Rubin 2006; Parsons et al. 2009). Support from their husbands is necessary to overcome such domestic challenges.

As to the third major factor of [Work Environment], the medical community in Japan is recognized to be a male-dominant one (Nomura et al. 2010). Previous studies in other countries suggested that gender discrimination became a barrier to the career advancement of female physicians (Ferris et al. 1996; Sidhu et al. 2009). In Japan, gender discrimination in regard to career choice seems likely to remain an invisible barrier for female physicians in the current climate, and sexual harassment is still a common problem (Kobayashi et al. 2009). Some male physicians, especially those who are older, are not likely to be pleased with working females because of {traditional gender roles}. However, unless they change their unwelcome attitude toward working females, the shortage of physicians will accelerate with more female graduates entering the workforce. Efforts should be started to help male physicians understand this situation and the changes that are occurring in modern society.

It would appear that the common circumstance whereby pregnant physicians are assigned night duties is
contrary to Japanese gender roles, but it is caused by the heavy clinical load that is placed on physicians in general (McEwan 2010). If pregnant physicians are permitted to do less clinical work, male and childless female physicians alike must accept an unwelcome increased burden, which is why it remains difficult for them to accept working alongside female physicians with children or those who are pregnant. In fact, female physicians understand these circumstances too well, as it is reported that pregnant physicians start to feel guilty about carrying a lighter workload (Parsons et al. 2009). To avoid engendering feelings of injustice among colleagues and guilt among female physicians, effective strategies for balancing career and family should be adopted for both sexes; for example, consideration should be given to part-time work, flexibility on the job, and job-sharing (Parsons et al. 2009).

It is important to note that around 80% of female physicians are married to male physicians in Japan (Tsukada et al. 2009). To alleviate the burden of housework on female physicians, it is important that husbands share the domestic duties. To that end, a [Work Environment] where male physicians can share [Family Responsibilities] is desirable (e.g., by taking childcare leave). Those male physicians who have stay-at-home spouses may come to understand the difficulties involved in child-rearing and the work atmosphere may be changed as a consequence. Additionally, healthcare policy makers need to improve the working conditions for physicians in general, in order to reduce the challenges associated with overwork (Wada et al. 2008; Tokuda et al. 2009). Remote areas in particular have been suffering from the shortage of physicians, and this stems from many factors (Nakazawa 2010). This shortage tends to result in heavy workloads in rural areas, and female physicians are increasing leaving remote areas (Elley 2001). Improving this situation requires not only the of support parent-physicians (Nakazawa 2010), but also providing them with sufficient economic opportunities to continue working (Ricketts and Randolph 2007), developing programs which encourage medical students to practice in rural areas (Nakazawa 2010), and creating special institutions which cultivate primary-care specialists. As additional considerations, female physicians are less likely to enter surgical fields (Tomizawa, et al. 2009) and young male physicians have recently become less likely to choose surgical fields as they value their private life more (Twenge 2009). It is therefore also important to create work environments that male physicians are satisfied with, especially in male-dominated specialties.

Lastly, the educational curriculum needs to address the issues of gender stereotyping among students and residents. Thinking about one’s role as a physician and/or as a husband of a working female could help to prevent female physicians resigning and improve the work environment (Kawase 2010). We need to create a society where it is not considered special for female physicians to have both a satisfying career and a happy family life.

The present study has some limitations. First, the generalization of the results was not confirmed as this study was conducted among alumnae from only one medical school in Japan. Various studies including quantitative studies are necessary to ascertain more comprehensively the challenges faced by physician mothers. Second, most respondents of this study continued to work; to explore challenges concerning resignations more accurately, it is necessary to conduct a study focusing on female physicians who are no longer practicing. We are now conducting interviews with such physicians.

**Conclusion**

The results of this study found three main challenges facing Japanese physician mothers, that is, those associated with Japanese society, family responsibilities, and work environment. Moreover, Japanese society is epitomized by traditional gender roles which negatively affect both family responsibilities and work environment. Diminishing the still strong gender roles is essential for the retention of female physicians, by improving gender discrimination from male physicians and promoting husband’s participation in child-rearing and household affairs. The introduction of educational curriculums that alleviate traditional gender roles is necessary for pre- and post-graduate medical students.

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**Conflict of Interest**

The authors have no conflict of interest to declare in relation to this article.

**References**


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