Public Health Nursing in Japan

Lessons from Past and Present

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Health Crises and Public Health Nursing in Japan

A health crisis can have a major impact on people’s lives. It can present health risks that are present but invisible to the eye, such as the radiation contamination after the Fukushima nuclear accident in 2011 and the COVID-19 virus. The consequences from these risks can vary from a non-detectable level of radiation in Fukushima to causing high rates of global mortality in the case of the COVID-19 pandemic. Evidence from disaster epidemiology research demonstrates that people respond differently depending on the nature and severity of the crisis. After Hurricane Hugo in South Carolina in 1989, marriage, birth, and divorce rates increased the following year in affected areas. In contrast, after Hurricane

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Katrina in New Orleans, which caused more damage than Hurricane Hugo, the number of births was considerably lower in severely affected counties.\(^2\) Furthermore, the severity of disaster exposure predicts mental health status in pregnant and postpartum women, which further influences child health.\(^3\) Similar results were reported from Japan about the influences of the Fukushima nuclear accident and COVID-19 cases on fertility, maternal mental health, and child health.\(^4\) In short, a health crisis affects both current and future generations in a community.

In Japan, public health nurses serve as the gatekeepers of community health by providing front-line services to people at all stages of life. Under Article 2 of Japan’s Act on Public Health Nurses, Midwives and Nurses, a public health nurse is defined as a person who engages in health guidance under the license of the Ministry of Health, Labour and Welfare.\(^5\) To become a public health nurse, three years of basic nursing education and one or more years of specialized education in public health are required to take the national board examination. If a four-year college/university education includes public health nursing training, graduates are qualified to take the national examination for both nurses and public health nurses. Currently, Japan has about 53,000 public health nurses: 97% are women and 74% work in the public health sector (18% at the prefecture level and 56% at the municipal level). Public health nurses diagnose a community’s health status, plan and implement health promotion

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activities, provide health education and advice to community members, and evaluate the outcomes of their activities in partnership with local resources and residents.

Right after the Great East Japan Earthquake and Fukushima nuclear accident in 2011, public health nurses worked at public shelters for displaced families, coordinated disaster support received through multiple resource channels, and responded in face-to-face encounters to evacuees’ health needs and radiation anxiety. These nurses saw the deterioration of community residents’ lives, faced difficulties obtaining reliable radiation-related information, and felt powerless to make things better, but through all of it, they exhibited a steadfast sense of mission as professionals.6 Similarly, during the ongoing COVID-19 crisis, public health nurses are the ones who respond to questions through telephone counseling, implement infection prevention education, perform contact tracing, and manage the admission of infected cases.7 They follow through with COVID-19 infected patients until the patient returns to normal daily living, and oversee personal care, including mental health support for the many patients suffering from stigma related to the crisis.8

Public health nurses themselves are residents of the communities that they serve, and they are in a unique position of sharing local values while performing their duties as health professionals for and within the communities. Recognizing nurses’ remarkable role in bridging community and medicine, the United Kingdom All-Party Parliamentary Group on Global Health (2016) identified the unique nature of nursing as intimate hands-on care, professional knowledge, and person-centered humanitarian values.9 In 2018, a three-year global campaign called Nursing Now was launched with the aim “to improve health globally by raising the profile and status of nursing, influencing

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https://www.nurse.or.jp/nursing/practice/covid_19/case/publichealth_nurse.html
policymakers and advocating for more nurses in leadership positions.” Nigel Crisp (2018), who is a co-founder of the campaign and a Member of the House of Lords, explained that this global effort combined with research and policy development should inspire fresh thinking about how nursing can contribute to health systems.10

In this paper, in the context of these recent movements, we review the history of Japanese public health nurses’ community activities, analyze their current work concerns, and draw lessons for global health with a focus on the international development of public health/community nursing.

**Looking Back**

**History of Japan’s Public Health Nursing System**

Japan’s first nurse-training institute was established in 1885 by a British-trained naval medical officer and a founder of the Jikei University School of Medicine, Kanehiro Takaki (1849–1920).11 Dr. Takaki was trained at St. Thomas’s Hospital Medical School in London, used an epidemiological approach to develop a dietary strategy to prevent beriberi (vitamin B1 deficiency), and promoted a patient-centered approach by establishing the first nursing school at his medical school. Half a century later, the name “public health nurse” first appeared officially in the Notice on Child Healthcare Centers issued in 1926 by the Ministry of the Interior as the health professional who would conduct a home visitation program for small children.12 It was many years later in 1941 that public health nursing professional qualifications were established under the Public Health Nurses Ordinance, which followed the Midwives Ordinance in 1899 and the Nurses Ordinance in 1915. These three ordinances were combined in 1948 as the Act on Public Health Nurses, Midwives and Nurses, which was based on the philosophy of integrated nursing.

Public health centers were launched in 1937 as public health nurses’ activity platforms, and they provided mostly face-to-face personalized health services.13 The centers were then reformed to include broader functions such as environmental health promotion. This broader reform took place after World War II in 1947 as the Public Health Center Act was revised while under the

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12 Japanese Nursing Association 2016
control of the General Headquarters, Supreme Commander for the Allied Powers (GHQ/SCAP). The fully revised Act specified that public health centers must oversee a wide range of health promotion tasks including workforce development, maternal and child health, vital statistics, clinical laboratory tests, dental health, nutrition improvement, health education, prevention of infectious diseases, and sanitation (Takemura, Ohmi and Sone 2020). Accordingly, the number of public health nurses increased from about 5,000 in 1950 to 14,000 in 1965, and to 53,000 nurses in 2018 (Figure 1).

Figure 1. Number of public health nurses, infant mortality, and maternal mortality

Nurses’ Past Community Activities

In this section, we revisit records of home visits reported in a nursing professional book published in 1954 (Figure 2, B). The book contains raw data that public health nursing students of Osaka Kosei Gakuin (currently, Osaka City University School of Nursing) collected through home visits as part of their practicum during the summer of 1941. This was just before the Imperial Japanese Navy launched a sudden attack at Pearl Harbor in Hawaii, so many fathers of

families that nursing students visited were away from home during the visitations. Public health nurses around that time routinely circulated through their communities on bicycles and communicated with residents on the street and at home (Figure 2, A). Four nursing students visited families with small children. They were under the supervision of Dr. Hiroshi Maruyama, a public-health-specialized physician who later became a Ministry of Health officer. The nursing students were assigned to different areas in Kishiwada City, Osaka. The author of this paper read the visit reports, extracted items that were commonly reported by the four students, and developed a dataset. Three nursing students in the book collected data on four-year-old children but the index child was not clearly represented in the records of one student. We thus analyzed data of a total of 103 families with four-year-old children.

Figure 2 (A): Public health nurse providing parenting counseling on the street

Figure 2 (B): Home visit records in the late 1930s reported in a book


Dr. Maruyama wrote that the aim of this community activity was to go beyond the routine data collection that was often too limited or robust in its content. Instead, he asked students to report freely about what they observed and heard in communities. He wanted to “value the first impression” of data collectors. Dr. Maruyama explained that this data collection was methodologically limited from a statistical point of view. Traditional statistics collect data according to a well-designed framework with selected indicators. The method he applied was a “jirei chosa” (a case study) through which he
believed that public health nurses and students could improve their social and statistical appraisal skills. He concluded his opening chapter by introducing the concept of social epidemiology, citing a work by Rene Sand, who was a professor of Social Medicine at Brussels University.\(^\text{15}\) He wrote that “Social medicine is being developed internationally...One of the basic components of it (“social medicine”) in Japan is the daily activities of public health nurses.”

**Table 1. Frequency of missing data in home visit records**

<table>
<thead>
<tr>
<th>Survey items</th>
<th>Missing data [N (%)]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total N=103</td>
</tr>
<tr>
<td>Outcome of an index child</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td>Father’s age</td>
<td>11 (11)</td>
</tr>
<tr>
<td>Mother’s age</td>
<td>9 (9)</td>
</tr>
<tr>
<td>Sex of an index child(^a)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Method of feeding</td>
<td>15 (15)</td>
</tr>
<tr>
<td>Number of live children in the family</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Number of deceased children, still births, and miscarriages</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Number of family members living together</td>
<td>1 (1)</td>
</tr>
<tr>
<td>Husband’s military service</td>
<td>4 (4)</td>
</tr>
<tr>
<td>Husband’s occupation</td>
<td>16 (16)</td>
</tr>
<tr>
<td>Household income</td>
<td>48 (47)</td>
</tr>
<tr>
<td>Household size</td>
<td>8 (8)</td>
</tr>
<tr>
<td>House ownership</td>
<td>4 (4)</td>
</tr>
<tr>
<td>Rent</td>
<td>0 (0)</td>
</tr>
</tbody>
</table>

\(^a\) Index Child is the subject of the reporting

Table 1 shows the proportion of missing data for each item. Since Dr. Maruyama did not instruct nursing students on what items to collect information, this table illustrates where student interests were and whether they succeeded or failed in data collection. Learning the social medicine perspective from their teacher, students tried multiple ways to assess the socioeconomic status of families. While the proportion of missing data was low for the rent and house size, the number was higher for income and father’s occupation. The proportion of missing data varied among three nursing students: 16%, 47%, and

\(^{15}\) Porter, Dorothy. 2006. "How did social medicine evolve, and where is it heading?" *PLoS Medicine* 3(10), e399.
88% for income and 9%, 11%, and 22% for father’s occupation. Furthermore, the number for the feeding method also varied (22%, 0%, 33%). This might be due to either differences of interest in assessment among the three students or peoples’ openness about the questions asked.

One student who visited a fishery area wrote in her note, “All were fishermen, and both parents and children were naked with a brownish skin as if they were wearing the same uniforms. I did not like the fishy smell. However, they answered my questions as much as possible including for the rent and income. I was scolded sometimes (for asking private questions) but, after careful thought, I felt happy about being able to visit the area.”

Another student wrote, “… after reviewing reports, I felt like wanting to revisit and revise my data. My assessment might not have been accurate because I did not have home visit experiences and I lacked skills in asking questions and observing. … As I visited families, I faced many difficulties including one case that contained problems requiring in-depth analysis, careful interpretation, and with many uncertainties.”

Public nursing education required students not only to perform accurate assessments, but also to understand community residents’ lives in depth and to have a sense of pride as a public health professional.
Despite wide disparities for data on income, house size, and rent, these items were not associated with the mortality of the index child in the survey as shown in Table 2. An exception is that father’s occupation was associated with a statistical significance of less than 0.1, and the deceased group included more farmers, fishermen, factory workers, and carriers. Only one item showed a statistically significant association, and that was the feeding method. The deceased group included higher proportions of mixed and formula feeding.

Table 2. Factors associated with mortality of index children

<table>
<thead>
<tr>
<th>Factor</th>
<th>Median (min, max) or N (%)</th>
<th>Total N=80</th>
<th>Alive N=68</th>
<th>Deceased N=12</th>
<th>P value*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurse student</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>32 (31)</td>
<td>24 (30)</td>
<td>8 (35)</td>
<td></td>
<td>0.42</td>
</tr>
<tr>
<td>Y</td>
<td>47 (46)</td>
<td>35 (44)</td>
<td>12 (52)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T</td>
<td>24 (23)</td>
<td>21 (26)</td>
<td>3 (13)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father’s age (years)</td>
<td>55 (24, 60)</td>
<td>55 (24, 56)</td>
<td>38 (23, 60)</td>
<td>0.24</td>
<td></td>
</tr>
<tr>
<td>Mother’s age (years)</td>
<td>33 (22, 49)</td>
<td>31 (22, 49)</td>
<td>35 (23, 44)</td>
<td>0.12</td>
<td></td>
</tr>
<tr>
<td>Sex of an index child</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boy</td>
<td>54 (52)</td>
<td>41 (51)</td>
<td>13 (57)</td>
<td></td>
<td>0.66</td>
</tr>
<tr>
<td>Girl</td>
<td>49 (48)</td>
<td>38 (49)</td>
<td>10 (43)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Method of feeding</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breast</td>
<td>60 (68)</td>
<td>51 (75)</td>
<td>9 (45)</td>
<td></td>
<td>0.04</td>
</tr>
<tr>
<td>Mixed</td>
<td>19 (22)</td>
<td>12 (18)</td>
<td>7 (35)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Formula</td>
<td>9 (10)</td>
<td>5 (7)</td>
<td>4 (20)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of live children</td>
<td>2 (0, 9)</td>
<td>1 (0, 8)</td>
<td>3 (0, 7)</td>
<td></td>
<td>0.25</td>
</tr>
<tr>
<td>Number of deceased children,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>still births, and miscarriages</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of family members</td>
<td>5 (2, 11)</td>
<td>5 (2, 11)</td>
<td>5 (2, 9)</td>
<td></td>
<td>0.29</td>
</tr>
<tr>
<td>living together</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Husband’s military service</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>11 (11)</td>
<td>9 (12)</td>
<td>2 (9)</td>
<td></td>
<td>0.73</td>
</tr>
<tr>
<td>No</td>
<td>88 (89)</td>
<td>68 (88)</td>
<td>20 (91)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Husband’s occupation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-employed</td>
<td>32 (37)</td>
<td>27 (40)</td>
<td>5 (25)</td>
<td></td>
<td>0.08</td>
</tr>
<tr>
<td>Employee</td>
<td>20 (23)</td>
<td>18 (27)</td>
<td>2 (10)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farmer, fisherman</td>
<td>11 (13)</td>
<td>7 (10)</td>
<td>4 (20)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factory worker, carrier</td>
<td>24 (28)</td>
<td>15 (22)</td>
<td>9 (45)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Household income (yen)</td>
<td>80 (0, 7900)</td>
<td>85 (10, 7900)</td>
<td>100 (0, 160)</td>
<td>0.86</td>
<td></td>
</tr>
<tr>
<td>House size (No. of tatami mats)</td>
<td>12 (4, 63)</td>
<td>12 (4, 63)</td>
<td>14 (6, 22)</td>
<td>0.78</td>
<td></td>
</tr>
<tr>
<td>House ownership</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Owned</td>
<td>26 (26)</td>
<td>19 (25)</td>
<td>7 (32)</td>
<td></td>
<td>0.50</td>
</tr>
<tr>
<td>Rented</td>
<td>73 (74)</td>
<td>58 (75)</td>
<td>15 (68)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rent</td>
<td>7.5 (0.5, 50)</td>
<td>7 (0.5, 50)</td>
<td>7.5 (1.2, 34)</td>
<td>0.49</td>
<td></td>
</tr>
</tbody>
</table>

a. Chi-square test was used for categorical variables and Wilcoxon-Mann Whitney U test for continuous variable.
One nursing student who was particularly interested in the feeding method wrote, “The areas I visited, compared to other students’ areas, were with a very high birth rate. But at the same time with a high mortality rate. … there must have been many children whose lives could have been saved with a little more care. I strongly urge mothers to learn more about parenting. Even for those without formal education or not thinking about their children at all, they can understand a picture story (kamishibai). In such an area, we should perform a picture story.” She also wrote, “If I speak the local language, they will feel familiar and communicate openly. Anyone who hears a different language will reply only after thinking for a moment.” Based on the assessment results, the student suggested community-tailored health education strategies.

Her notes illustrate that the central factors exhibited through the work ethic of Japanese public health nurses are identifying the real needs of residents, responding appropriately and promptly, and establishing trusting relationships. Dr. Maruyama wrote in his book that practicing public health nurses in the field are recommended to closely study and actively discuss data collected in a community just like these students.

Looking Ahead
The Current Public Health Nursing System

Health conditions of people in Japan have significantly changed since the 1950s because of changes in lifestyles and living environments associated with rapid socioeconomic growth. There has been a drastic decrease in mortality from tuberculosis and various infectious diseases, while there has been a contrasting increase in mortality from chronic diseases such as cancers and cardiovascular diseases. The roles of public health centers also shifted to respond to the changing health needs of communities. Widely promoted mass health examinations for preventing tuberculosis were replaced with health checkups for non-communicable diseases. Health and medical services in collaboration with welfare services started paying attention to peoples’ quality of life, palliative care, and comprehensive care.

Overseeing this health transition, the Ministry of Health and Welfare abolished the Health Center Law and enacted the Community Health Act in 1994. The Community Health Act tasked the prefectural health centers to provide specialized services (e.g., home visits for low-birth-weight infants) and

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18 Aoyama 1996
to supervise municipal health centers that provided more common services (e.g.,
child health checkups).19 Along with this change, nurses were allocated sparsely
in a variety of sections depending on assigned duties and in order to collaborate
with administrative staff.

More recently, the autonomy of municipalities was strengthened by the
Omnibus Decentralization Act in 2000, and even the home visit program for low-
birth-weight infants was transferred to the municipal level in 2012. Although
public health nurses prioritize provision of direct services to community
residents, many of these public services are outsourced to medical facilities and
private companies due to increasing responsibilities of the municipal health
center.20 Therefore, the roles of nurses have changed from face-to-face support of
individuals to service coordination requiring not only public health professional
skills, but also administrative management skills.

Around the same time, regional rather than task-specific allocation of
nurses was once again recommended so they can identify community needs and
coordinate community resources better. Furthermore, in 2016, the Ministry of
Health, Labour and Welfare developed two variations of the standardized career
ladder for public health nurses in all positions and those taking a managerial
position in the public sector.21 Nurses in the managerial positions are called
“supervising public health nurses (Tokatu Hokenshi),” and their cross-
organizational duties play a key role during a health crisis.22 According to the
the lives of the targeted individuals, families, and communities” and “builds
systems to support the health of individuals, families, and communities through
cooperation that targets the related organizations by creating and organizing
social resources.”23 Public health nurses are required to strike a balance between
individual/community-tailored approach and health systems approach, and their
training needs to include individual care, community care, and system
development skills.24

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19 Hirano, Michiyo, and Kazuko Saeki. 2011. “Awareness of the importance of public health nursing
activities in Japan.” Journal of Community Health 36, 765–771.
20 Hirano and Saeki 2011
21 The Ministry of Health, Labor and Welfare. “Summary of meetings on public health nurses’
nurses and the necessary abilities.” Journal of the National Institute of Public Health 67(4), 413–421.
24 Suenaga, Katsuko, Kouko Takahashi, Ayumi Kurimoto, Atsuko Taguchi, and Junko Omori. 2015.
Nurses’ Current Community Activities and Their Concerns

As mentioned above, public health nurses in Fukushima had difficulty explaining health risks related to radiation exposure after the nuclear accident in 2011 (Kayama et al. 2014). To help them, the authors of this paper developed and implemented health literacy training workshops for nurses in Fukushima to improve their communication skills. Its evaluation in 2017 revealed that about one in five among about 600 nursing respondents had attended the workshop, and they were more willing to accept feedback about their community activities from residents. Such active collaboration with residents is important and it affects both nurse performance and the health outcomes of residents. In this paper, by using the 2017 training evaluation dataset, we extracted and analyzed the qualitative data about nurses’ opinions about their work environment. The collected data included nurses’ feedback acceptance, work environment, basic characteristics, and health literacy levels, as well as free written opinions. As for the last item in the questionnaire, we asked, “Please write your opinions about your current work duties.” The study was approved by the ethics committee of Fukushima Medical University (No. 29116). Data were analyzed by text mining using the KH Coder, a software program developed by K. Higuchi at Ritsumeikan University in Japan. The sub-graph analysis of a co-occurrence network was conducted to classify these words into major topics. The Jaccard coefficients were calculated to determine the edge strength in the co-occurrence network.

“The establishment of the public health nurse master’s course, Tohoku University Graduate School of Medicine (II): Type of human resource training in the public health nurse master’s course.” Bulletin of School of Health Sciences Tohoku University 24(1), 7–13.

25 Kayama et al. 2014


network. Those with top 60 strength were drawn in the diagram, and closely associated words were color-coded.

Figure 3: Public Health nurses’ opinions about their work

The total number of sentences written by the 55 public health nurses was 102. The top five frequently used words (limited to nouns, excluding verbs, adjectives, and adverbs) were “work” (used 27 times), “public health nurse” (27 times), “assigned task or duties” (21 times), “understanding” (9 times), and “system” (8 times). The sub-graph analysis of a co-occurrence network (Figure 3) among words used four or more times showed five major topics: 01 “system reform,” 02 “supervisors’ understanding,” 03 “high administrative workload,” 04 “lost sense of being rewarded,” and 05 “role ambiguity.” All five topics point out issues needing to be resolved. Shown below are example opinions for each category.

At the system level, a recent reform seemed to add pressure on nurses. An example opinion was, “We must work individually because of “Bunsan haichi” (sparse allocation of public health nurses in different sections). Teamwork is difficult because close colleagues are administrative staffs.”
Another nurse mentioned a workforce shortage, “Workload of each nurse is increasing because of shortage of public health nurses. Each duty must be completed by one nurse.”

At the individual level, the difficulty expressed by many was about “high administrative workload.” Nurses wrote “We are busy with administrative and paper work rather than going to the community” and “I was employed as a public health nurse, but I do administrative work and do not have opportunities to spend time with residents.” This led to a “lost sense of being rewarded,” which was the category with the highest frequency.

One nurse wrote, “When I do professional work as a public health nurse such as face-to-face individual care, I feel confident and fulfilled. But, when I have to do a large amount of office work due to a shortage of manpower, I don’t feel rewarded.”

“Role ambiguity” was voiced by nurses in different positions. One part-time nurse wrote that “It is difficult for me to express my opinions because of my part-time position. On the other hand, there are many younger nurses and they ask me to take a supervising role. I often become confused where I stand.”

One supervising nurse wrote, “The position of supervising public health nurse is not clear in the organization. After moving to my current section, I had to take on the role of supervising nurse, and therefore faced difficulties because I was not used to the role and its duties.”

Another issue was about liaison with other professionals, which was shown as the “supervisors’ understanding.” For example, “A supervisor (often, not a nurse) does not understand the work of public health nurses and is not collaborative. This leads to overwork.”

Similarly, another one wrote, “Duties ordered by a senior nurse and other duties ordered by a supervisor who is an administrative officer are all important, but different. It is impossible to do both.”

Public health nurses were allocated sparsely at health centers and faced difficulties working with administrative staff. Some nurses were not sure about their position within the organization and what their roles were. Many were concerned and feeling less satisfaction due to the reduction in direct communication with community residents in their daily practice. Our analysis of the nurses’ view of their work illustrates how the work of public health nurses was greatly affected by public health reforms.29 The enforcement of the

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Community Health Act in 1994 and decentralization in the 2000s transformed the public health nurses’ function from face-to-face service provision to overall service coordination. Of concern was a previous study that showed more than 85% of nurses regarded outsourcing of health services negatively (Hirano and Saeki 2011). Working in and identifying the needs of a community create the public health nurses’ sense of professionalism. Within the current system, capacity building is needed to enhance the autonomy of public health nurses to promote “community-based” health policy that resolves community health issues. These health policies are identified through collaboration with a community, and the identification will happen more frequently when there is greater recognition of public health nurses’ role as a gatekeeper of community health.

**Lessons Learned**

**Public Health Nursing in Global Health**

In order to understand how public health nursing is defined and recognized globally, we reviewed documents reported from the Southeast Asian region and by the World Health Organization (WHO). We found that Thailand has a uniquely long history of nursing starting from the establishment of the first nursing school in 1896. Even before Japan, Thailand started a 3-year diploma program for General Nursing and Public Health offered at Mahidol University in 1935. This initiative was led by His Royal Highness Prince Mahidol of Songkla, widely referred to as “The Father of Modern Medicine and Public Health” in Thailand (Muangman 1987).

Prince Mahidol had worked as a naval officer and after an inspirational visit to a local hospital, he studied public health in the Certificate in Public Health program offered by Harvard University and Massachusetts Institute of Technology. He then earned a medical degree at Harvard Medical School. His public health and modern medical training led him

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30 Hirano and Saeki 2011


to upgrade the medical and nursing schools in Thailand using financial support from the Rockefeller Foundation, and with technical support from U.S. nurses. Since then, Thailand has led in the capacity building of nurses in the region.

In the WHO Regional Office for South-East Asia report on community health nursing education (2010), community health nursing is defined as “a population-focused, community-oriented approach aimed at health promotion of an entire population, and prevention of disease, disability, and premature death.” The four core functions listed were recognizing community social capital, assessment of community health conditions, design and implementation of community health interventions, and development of health policies for actions. These core functions were based upon Thailand’s experiences and they also describe the work of public health nurses in Japan. While Thailand’s role as a public health nursing leader in the Asia-Pacific region is undisputed, the International Affairs Committee of the Japan Academy of Public Health Nursing is in the process of exploring their roles in a global health community.

Internationally, the WHO Expert Committee on Nursing was established in response to the World Health Assembly resolution of 1949. The fourth committee in 1958 researched public health nursing and the fifth committee in 1966 stated that research is “one of the factors that can help to keep nursing practices in tune with community needs.” Subsequently, the worldwide campaign of primary health care in the 1970s shed light on the roles of health care workers in communities. For example, in 1980 the Pan American Health Organization listed practical strategies for enhancing the future roles of nurses. These strategies included logistical, technical, and administrative supports to work in the community, bringing nurses into the interdisciplinary health groups responsible for planning and decision-making, and strengthening nursing education in epidemiology, social sciences, community health, and primary care. Along the same line, our recent case study comparing professional community workers in two countries (teachers in Zambia and public health nurses in Japan) recommended that professional community workers’ leadership capacity be improved through skills development and professional networking to enhance professional confidence, and their responsibilities be authorized and framed within government policy to enhance their autonomy, which in turn strengthens

community governance.\textsuperscript{38} Thailand’s Prince Mahidol said, “When you practice medicine, do not think that you can practice alone without cooperation. Please think that each one of you is a part of the whole medical profession.”\textsuperscript{39} His strategy to improve public health focused on interprofessional collaboration and education of physicians, nurses, and various health professionals as a team.

\textbf{Lessons Learned from Public Health Nursing in Japan}

Listed below are the main findings from the review of public health nursing history in Japan:

- The public health nursing system was legitimatized in 1941, two decades before universal health coverage (\textit{kokumin kai hoken}) was established in 1961.
- The training of nurses aimed to promote patient-centered care and that of public health nurses to promote social medicine.
- The central features of the work of Japanese public health nurses are identifying and responding to the real needs of residents and establishing trusting relationships within a community.
- Public health nursing education trained students to perform accurate health assessments and understand community residents’ lives, and they are proud of being public health professionals.

The main findings from the analysis of recent public health nurses’ opinions are listed below:

- Modern public health nursing requires both community health practice skills and administrative management skills.
- Recent public health reform has increased the workload of public health nurses and left their positions and roles within the health system ambiguous.
- A recognizable career ladder system is needed for public health nurses in all positions. Nurses in managerial positions should have leadership capacity, and they need to be properly positioned in an organization.

The public health system has changed, but nurses’ professionalism has not, and it remains focused on the community. Historically, public health nursing featured health promotion activities and health policies that reflected

\textsuperscript{39} Muangman 1987
community needs adapted to local culture, which continues till now. As indicated in Box 1, a public health nurse’s professional role in a community needs greater recognition by health policy leaders in order to establish the public health nurse at the center of the public health system. For nurses, skills improvement is required to respond effectively to community needs such as the provision of community-tailored care through interprofessional collaboration. Additionally, to meet the organizational expectations, skills to lead community-based health policy are needed, and this requires improved education and post-graduate training.

Box 1. Key conditions to leverage public health nurses’ abilities

<table>
<thead>
<tr>
<th>At the system level</th>
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<tr>
<td>▪ Recognition of nurses’ professional roles at a workplace</td>
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<td>▪ Legitimacy to properly position nurses in a public health system</td>
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<tr>
<th>At the individual level</th>
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<tr>
<td>▪ Skills to provide patient-centered care and individualized health support</td>
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<tr>
<td>▪ Skills to provide community-tailored health promotion activities incorporating a perspective of social medicine</td>
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<tr>
<td>▪ Skills to lead community-based health policy</td>
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<table>
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<tr>
<th>Education and training</th>
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<tbody>
<tr>
<td>▪ Community health practice skills</td>
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<tr>
<td>▪ Managerial skills</td>
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<tr>
<td>▪ Teamwork skills to collaborate with different professions</td>
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Our recommendations (Box 1) are in concert with the core functions of community nursing listed by the WHO Regional Office for South-East Asia (2010): Implementing health promotion activities while responding to identified community health needs and resources, and developing appropriate health policies for actions. Public health nursing education and training should enable the next generation of nurses to assume these multilayered roles gradually and in accordance with their career development. During the process, they also need to learn trans-professional teamwork, including working with non-professional health workers.\(^{40}\) Interestingly, in the case of both Japan and Thailand, there was

a visionary historical leader who was devoted to capacity building of health care teams recognizing important roles that nurses play at a hospital and in a community.

Relating to the beginning of this paper where we discussed confronting a health crisis, the lead author interviewed three public health nurses working at a municipal health center in Fukushima City (capital of Fukushima prefecture) in September 2020. When asked about their work connected to COVID-19, they said that they were extremely busy from March to May and it was difficult accomplishing their regular work. They repeatedly emphasized that the phone started ringing soon after they finished a call. The pictures in Figure 2 (C and D) were taken at the time of the interview, showing a nurse calling and a cabinet full of files with written records of their calls.

![Figure 2 (C) and Figure 2 (D)](image)

Figure 2 (C): Public health nurse providing COVID-19 telephone consultation at a health center

Figure 2 (D): Detailed COVID-19 consultation records kept in files

Nurses talked to residents about their symptoms and worries over the phone, referred them to testing, did contact tracing for positive cases, and provided support to patients until they returned to normal daily life. On a

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positive note, nurses told me that the Japanese unique system of pregnancy registration presented a good communication opportunity for mothers to share their anxiety toward COVID-19. Another point that a nurse excitedly made was that they first conducted an infection prevention workshop for women education instructors in June and it was later expanded due to requests from other citizen groups. They organized 26 sessions and a total of 632 residents had participated at the time of our interview. These public health nurses wisely incorporated activities for this new crisis into their existing framework. With regard to how public health nurses applied the lessons learned from the nuclear accident a decade ago, the first thing they mentioned was Fukushima City’s “Response Policies for a New Crisis.” This was developed in 2014 after the nuclear accident and it recommends that different sectors collaborate to enable all nurses to work together regardless of their personnel allocation. The definition of “new crisis” included the spread of an infectious disease, so the policies were applied and they helped nurses come together as a team to fight the new crisis.

Recent history of public health nursing showed that nurse work output was influenced by health system reform and how nurses were utilized, as well as by the shortage of nurses. In an emergency, ensuring the autonomy of nurses to organize themselves and identify a community’s immediate needs for rapid response must be officially supported. This requires legitimacy to fully integrate autonomous nurses into the health system in places they can make decisions for the communities they serve and to ensure their voices are valued (Henning, et al. 2015).42 This highlights the importance of improving education and training that help to increase nursing’s status and encourage bright young people to begin a nursing career. The year 2020 was designated by the WHO as the International Year of the Nurse and the Midwife. Williams and Ferguson (2021) state that “policymakers must develop nursing leadership capacity, invest in nursing and nursing leadership education, and promote mid-career skill-building and advancement opportunities.”43 She started the Global Nursing Leadership Program co-operated by the Harvard T. H. Chan School of Public Health and the Africa Centres for Disease Control and Prevention. Similarly in Japan, the National Institute of Public Health recently upgraded their public health nurses’ training to “cultivate top expert health nurses.”44 Such training is expected to

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42 Henning, et al. 2015
include expertise for public health nurses in Japan to take a leadership role not only domestically, but also globally.

When public health nurses are properly positioned in a public health system and provided training and the autonomy to work as a team responding to community needs, they can be a powerful force that relies on their past experiences to help the health system and community adapt to crisis strategies to the existing system and culture. Lessons learned from a long history of Japanese public health nursing can go beyond borders.
Acknowledgments

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