

ハガキのような記録用紙だった。30年代ぐらいからの記録ができてきた。訪問記録は、個別ではなく毎日の日誌に記録し課長と村長の印をもらっていた。個別の家庭訪問記録は最初は公式にはつくっていなかった。自分自身の記録として書き、場合によっては、上司に見せないこともあった（保健婦研修会などで相談して決めた）。結核は結婚話も反対される勢いであったため、患者や家族を守るためにそうした。

台帳

- ・ 患者のいる家ができるように地図を作製して「患家地図」を作製した。地図に落とすことで保健所の方にもそれをみながら廻ってもらうことができた。

大学や研究機関との連携

- ・ 1965年6月～1966年3月にかけてT地区の地区診断をT大学が協力し県衛生部指導の元で実施。
- ・ 1980年には健康づくり懇談会をK地区で実施。尿中塩分濃度などE大学第2内科の協力を得ておこなった。

給料・待遇

- ・ 給料は300～400円（役場の職員と同じぐらい）であった。男性はどんどん出世していったが女性は変わらなかった。時間外手当がでるようになったのは、昭和33年頃からである。

その他

- ・ 昭和30年合併直後の結核検診受診率90%以上で厚生大臣表彰を受けている。合併前の村（地区）は97%ぐらいの受診率だった。
- ・ 医師不在のためストレプトマイシオンの注射や予防注射など、「一人で何でも屋」であったが、村人の生活にとけ込み個々に問題の把握もでき、場合によっては昼夜なく働いた。

【Jさん】茨城県・県保健所保健婦・67歳

保健婦に係る資格・職歴など

- ・ 県立高校卒業後、恩師の先生の友人だった開業医のところに見習い看護婦として、住み込みで1年勤務。
- ・ 昭和31年国立病院の附属高等看護学院(3年間)で学ぶ。
- ・ 昭和34年病院に就職し、結婚の予定があり1年で退職。
- ・ 昭和35年保健婦学院(8か月)で学ぶ。
- ・ 昭和36年茨城県保健所に保健婦として就職(平成9年退職)

教育内容

- ・ 茨城大学の教育学部の講師や県保健所の部長、課長から教育を受けた。公衆衛生の基本や疫学、感染症の講義内容だった。実習は2~3週間あった。

保健婦になったきっかけ

- ・ 保健婦学院に入学した友人に、保健婦は結婚しても続けられる仕事だと聞き、免許取得を考えた。

県保健所での活動

- ・ 初めに担当した保健所管内は人口10万人位の山岳地域にある炭鉱の町。保健婦は5名いた。
- ・ 昭和36年ポリオの大流行があり、ロシアから緊急に生ワクチンを輸入し投与した。
- ・ 電話はなく、長屋1件訪問すると近所の住民が集まってきた。
- ・ 共同保健計画は、職位の上のひとたちが作成していた。
- ・ 昭和30年代に3歳児健診が始まった。
- ・ 「赤ちゃんコンクール」では、丸々と太っており(カウプ指数が20以上)、皮膚疾患もない子どもが健康優良児と言われていた。
- ・ 昭和52年国保保健婦と保健所保健婦が一緒になった。
- ・ 地区診断がブームだった。家庭訪問して個別の情報が明らかになり、保健婦独自の活動を展開していった。
- ・ 保健所保健婦は、訪問後必ず市町村保健婦に報告し、情報の共有を図った。
- ・ 勤務時間内での研修会も多かった。
- ・ 保健婦が「よろずや的」に重宝に使われていた時代だった。
- ・ 訪問活動を大切にしてきた。

家庭訪問の交通手段

- ・ 保健所に公用車が1台しかないのので、バイクかバスと徒歩で訪問した。
- ・ 訪問途中、営林署の車に乗せてもらったこともある。

給料

- ・ 昭和36年初任給1万円位。短大卒扱いで事務職よりも高かった。

後輩保健師に伝えたいこと

- ・ 3年間は訪問活動を。
- ・ 一歩先行く保健師活動をめざそう。
- ・ アンテナを高くしてニーズを素早くキャッチする。
- ・ 周りを巻き込んで、組織力で勝負する。
- ・ 異業種歓迎、発想の転換を
- ・ 施策化と予算確保
- ・ 住民が主体、支援者としての保健師、ヘルスプロモーションの再考。

資料 6

Application of Wisdom Gained from Past Experiences of Public Health Nurses in Japan to International Cooperation

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1. Purpose and background of research

Despite the poor infrastructure and the lack of resources, health promotion activities were conducted widely in rural areas from 1945 through the 1960s, which was the period of remarkable economic growth in Japan. There are many common factors between the current situation in developing countries and the situation in Japan at that time. Table 1 shows the change in the infant mortality rate (IMR) in Japan. The biggest decrease in IMR was from 1950 through 1955, and the second biggest decrease was from 1955 through the early 1960s.

Table 1 Change in infant mortality rate

Year	IMR	Birth rate/1000
1950	60.1	28.1
1955	39.8	19.4
1960	30.7	17.2
1965	18.5	18.6
1970	13.1	18.8
1975	10.1	17.1

Table 2 shows the annual changes in IMR among the areas where our interviewees worked as public health nurses (PHNs). Although the gap among the areas was wide in 1950, it started narrowing down in the early 1960s and became almost undistinguishable in 1970.

The purpose of this research was to determine the points that are applicable to the improvement of health and medical systems in developing countries, in particular, to reinforce practices on the frontline that is closest to people's daily lives. This research focused on the activities of PHNs after WW II in Japan.

Table 2 Differences in infant mortality rate among areas

Area (Pref.)	1950	1955	1960	1965	1970	1975
Iwate	89.9	64.7	48.3	28.5	18.3	13.2
Gunma	54.6	38.4	32.2	21.1	14.2	11.7
Shizuoka	57.5	37.0	26.6	15.7	11.6	9.3
Aichi	59.3	39.8	26.7	16.0	12.2	9.2
Gifu	60.2	42.3	32.1	20.9	16.3	10.8
Shimane	63.9	41.2	35.1	22.8	14.1	10.6
Ehime	57.3	41.0	33.3	19.7	14.5	10.7

2. Methods

2.1 Selection of interviewees

First, we gathered information from existing materials and PHN networks. Then, we acquired the help of public health offices (PHOs) in selected areas, which introduced us to retired PHNs.

2.2 Interviews

We sent letters to the retired PHNs, explaining the purpose of our research and asking permission for interviews.

We set up appointments and visited the PHNs who agreed to the interviews. Prior to the interviews, we explained again the purpose of the research and obtained letters of consent from them.

2.3. Interviewees

Ten PHNs cooperated in our research. A brief introduction of the interviewees is given in Table 3.

Table 3 Brief introduction of interviewees

	Area (Pref.)	Field type	Experience as PHN	Educational background as PHN	Age
A	Iwate	Mountain side	<ul style="list-style-type: none"> ● School nurse, hospital nurse ● PHN for settlers ● PHN in prefectural PHO 	Certificate in Nursing & Midwifery, one-year education at a PHN school (funded by the government, 1962)	86
B	Gunma	Rural area	<ul style="list-style-type: none"> ● PHN in municipality 	Graduated from a girls' high school, 2-month seminar for PHNs in rural areas, certification exam for PHNs	83

				(1942)	
C	Shizuoka	Rural area	<ul style="list-style-type: none"> ● Hospital nurse ● PHN in farmers' organization ● PHN in municipality 	Nursing school, Certificate in Midwifery, 1-month seminar for PHNs, certification exam for PHNs (1944)	84
D	Shizuoka	Mountain side	<ul style="list-style-type: none"> ● Hospital nurse ● Nurse in public clinic ● PHN in municipality 	Midwifery school, certification exam for higher level (Koshu) nurses after reeducation, 1-year education at a PHN school (1963)	82
E	Aichi	Rural area	<ul style="list-style-type: none"> ● PHN in prefectural PHO 	2-year education at a midwifery school, 5-month education for PHNs (1950)	73
F	Gifu	Rural area & town	<ul style="list-style-type: none"> ● Practicing midwife ● PHN in municipality 	2-year nursing education, 1-year midwifery education, certification exam for midwives, 5-month education and 1-month OJT for PHNs (1950)	83
G	Gifu	Rural area	<ul style="list-style-type: none"> ● Hospital nurse & midwife ● PHN residing in the village ● Instructor in a PHN school ● PHN in prefectural PHO ● PHN in municipality 	Experiences as a nurse, 3-week seminar for PHNs, certification exam (1942)	81
H	Shimane	Rural area	<ul style="list-style-type: none"> ● PHN in prefectural PHO ● PHN in municipality 	Graduation from a girls' high school, 3-year education at a nursing & midwifery school, 6-month education at a PHN school (1944)	84
I	Ehime	Rural area & town	<ul style="list-style-type: none"> ● Hospital nurse ● PHN in municipality ● PHN in prefectural office 	4-year education at a nursing school, 1-month seminar for PHNs, certification exam (1948), 3-month OJT	81

2.4. Contents of interviews

- ◆ Actual situation on the field in those days

- ◆ Viewpoints on life and health issues of the interviewees
- ◆ Practical activities and contents of the activities
- ◆ Priority in health support
- ◆ Daily research and application
- ◆ Cooperation among people from multi-sectors
- ◆ Support system from organizations
- ◆ PHN's discretion

3. Results

3.1 Characteristics of the interviewees

3.1.1 Background for assignment as PHN

- ◆ Educational background for receipt of Certificate in Public Health Nursing varies with age: receipt of certificate after passing an examination after a 1- or 2-month seminar (PHN.B, C, G, and I) , attending a 5- or 6-month PHN school (PHN.E, F, and H), and attending a 1-year PHN school (PHN.A).
- ◆ PHN.A (Iwate Pref.) lost her husband and child during the war, and left for a remote area that had no doctor thereafter. She was asked to come and work as a school nurse. She was from an urban area in another prefecture.
- ◆ PHN.C (Shizuoka Pref.) worked as a nurse in a mother and child (MC) clinic at an urban area at the beginning. After she became a war widow, she was asked to work in a rural area for just 1 year, which was adjacent to the town where she was born.
- ◆ PHN.B (Gunma Pref.) came from the same prefecture as that of her assigned village. While she was a nursing student, she was motivated to work for disadvantaged rural people. Upon the suggestion of her relatives and acquaintances, she left for a different village as a PHN.

3.1.2 Armed with professional knowledge and skills on health, PHNs were regarded as “a superior presence” in the community.

- ◆ PHN.A (Iwate Pref.) was introduced to school children by the principal as “a person who can be thought of as a medical doctor and whom you can ask anything.” Two days later, she was requested to assist in a delivery. As she was able to successfully perform the delivery, she was also requested to treat dental cavities. It took no time for her to become familiar with the villagers because she was an all-round useful person.
- ◆ PHN.C (Shizuoka Pref.) was respected by the village head and village officials. In those days, her name was called with the honorific “-sama” at the village

office.

- ◆ PHN.B (Gunma Pref.) was a vital person at her community. She was counted on and well loved. After the war, because the National Insurance Union suffered severe financial losses, it could not carry on the business of sending PHNs. However, the community people wanted to retain her so much that she decided to stay on.

3.1.3 Transportation for PHN's exclusive use

- ◆ PHN.A (Iwate Pref.) was offered a motorcycle in 1960. She only paid for gasoline.
- ◆ The town office bought a car for PHN.C (Shizuoka Pref.).
- ◆ PHN.B was offered a car early on, which was a special treatment at that time.
- ◆ PHN.F and G (Gifu Pref.) received motorized scooters in 1960, which facilitated their visits to villagers' homes. They were encouraged to get a driver's license, with the expenses shouldered by public funds. The local government also paid for the gasoline.

3.2 Characteristics of activities

3.2.1 Playing the role of an adviser of general aspects of life day and night

- ◆ PHN.A (Iwate Pref.) conducted everything, including delivery, first aid, and treatment of dental cavities. She was always dealing with the people's day-to-day difficulties.
- ◆ PHN.C (Shizuoka Pref.) conducted everything she could, including the disinfection of infectious diseases. She thought as if she was a tinker. At times, she would deliver a baby at midnight and be back to carry out her routine work the next morning.
- ◆ PHN.D also worked hard to help solve the difficulties besetting the villagers. Everyone knew her, and people went to see her when she visited them. In the late 1960s, she worked even on Saturdays and Sundays, involved in mental health promotion activities.
- ◆ PHN.H (Shimane Pref.) gave advice to people regarding various day-to-day difficulties. She worked late into the night and sometimes even on Sundays. She gave advice on the phone at night in her house, and sometimes even the police would call for advice.
- ◆ PHN.B (Gunma Pref.) started her day at 5 or 6 a.m. and continued working until 7 or 8 p.m. She often worked on Saturdays or Sundays as well.
- ◆ PHN.I (Ehime Pref.) worked overnight when dysentery was widespread in 1953.

Because she worked so hard, the support of the villagers came naturally.

3.2.2 Beginning of activities ---Dealing with health issues, delivery or simple medical treatment

- ◆ PHN.A (Iwate Pref.) was requested to deal with various health issues by the villagers, including delivery, incision of boils, first aid, acupuncture, dental cavity treatment, etc.
- ◆ In her village were 1 clinic and 3 midwives. However, PHN.C (Shizuoka Pref.) was also called to assist when the deliveries overlapped. At times, PHN.C had to assist delivery at night.
- ◆ Because there was no doctor in her village, PHN.B (Gunma Pref.) was always called for first aid at night and was asked to judge whether a patient needed to be seen by a medical doctor or not. She also attended on patients until morning. Although there was a midwife in her village, she was also asked to assist in deliveries.

3.2.3 Grasping health needs via home visits

- ◆ PHN.A (Iwate Pref.) visited the households of settlers after collecting information from union leaders or group leaders. She had a good grasp of how the settlers lived, and made records of every household. Through her visits to the households, she understood the issues that needed to be resolved.
- ◆ PHN.C (Shizuoka Pref.) visited all the households in the village except two. She was always called by the villagers she met on the way, so she was able to have a good grasp of the living situation and the health conditions of the villagers.
- ◆ PHN.G (Gifu Pref.) tried to meet with the villagers as much as she could because no one in the village knew what a PHN was. When she visited the houses of the villagers, she warmed herself in a kotatsu and talked with the family members. She visited 4 houses a day. During the farmers' busiest seasons, the children were left to the care of the village temple, so she went there to help and play with them. As time went by, the villagers began to accept her.

3.2.4 Resolving living issues before health education

- ◆ According to PHN.A (Iwate Pref.), most of the settlers were young and had young children and infants. Because of their difficult lives, the babies were kept in baskets called "Egiko" while the parents worked in the field. The babies were fed only 3 times a day. PHN.A was able to convince the parents to take the babies out

of the baskets, expose them to sunlight, and breastfeed them. She initiated visits with livelihood improvement extension officers around 1963 and held lectures on raising chicken for eggs and goats for milk, processing fish (saury), and making bedclothes.

- ◆ According to PHN.B (Gunma Pref.), the babies were left on footpaths between rice fields in 1945 so that their bottoms were drenched with urine until they became sore. PHN.B asked for the cooperation of the school principal and housewives who fled the city, and opened a nursery.
- ◆ After PHN.I (Ehime Pref.) arrived at her village, she spent most of her time dealing with trachoma. She went to a school with other midwives every morning to disinfect the sick and educate parents. In the first 2 to 3 years, she was frustrated because she could not use her knowledge fully as a PHN. However, as the living conditions improved, the number of trachoma patients decreased, giving her time to do something else besides treating trachoma.

Table 5 Examples of living improvement projects conducted by PHNs

Household economy project	Debt advice, household financial improvement project (Encouraged "Egg Savings"= small chicken farming by which women could sell eggs and save small amount of money.), cooperative purchase, capital for purchase of small domestic animals by women
Nutrition improvement project	Encouraged domestic animal farming as the source of protein and fat, kept food for the farmers' busiest season, collaborated in cooking, prepared school lunch
Environmental health project	Toilet project, well project, cleaning the area under the floor
Hygiene health project	Prepared bath in drums, petitioned for water supply, water safety examination, made and hung out bedclothes
Nursery project	Educated husbands and mothers-in-law, encouraged consumption of goat milk, set up a nursery during the farmers' busiest season, recreation
Family planning project	Educated husbands and mothers-in-law, held family planning classes at night or during rainy days

3.2.5 Change from individual activities to organizational approach

- ◆ After a number of individual efforts, most PHNs arrived at the conclusion that their individual activities had limitations. Thus, they began conducting health education and encouraged community activities based on information that they grasped at the early stage.
- ◆ In the community where PHN.D (Shizuoka Pref.) worked, female group activities and adult education activities flourished at the community center, so the people

involved the PHN in their activities.

- ◆ PHN.B (Gunma Pref.) trained maternal and child health promoters. She gathered female leaders and trained them every month for one year. The maternal and child health promoters visited the people and their activities contributed to community health.

3.2.6 Advantages of community activities visible to the people and central roles of female members in group activities

- ◆ PHN.A (Iwate Pref.) organized a female group that was responsible for making purchases. She conducted the meetings until the members could hold the meetings on their own. As one of their activities, the members collected 100 yen from the people and bought commodities at a discounted price from stores. The profits became the capital of the female group. They sold condoms that had been distributed by the PHN before. They also conducted a study trip using their savings.
- ◆ PHN.C (Shizuoka Pref.) organized a female group and conducted family planning classes at night. She sent formal letters from the town office to each householder to enable daughters in-law to attend, considering their subordinate position in the household.

3.2.7 Utilization of human and organizational resources

- ◆ PHN.A (Iwate Pref.) said that she came to know who the key persons were in the community by conducting visits ever so often. She talked to the key persons or male leaders before she organized the female group, making sure that there would be no opposition by the males.
- ◆ PHN.C (Shizuoka Pref.) asked the village head to encourage male villagers to attend family planning classes.
- ◆ PHN.H (Shimane Pref.) prepared statistical data for planning annual activities, and gathered the director of the public health center, local practitioners, school teachers, community representatives and members of the local university. She worked in cooperation with those human resources.

In order to improve nutrition for school children, she conducted an investigation of their lunch boxes. She presented the results of the investigation to the board of education, and this led to the introduction of school lunch. She was always given important information by school teachers, nursery school teachers or livelihood improvement extension workers.

3.2.8 Utilization of human resources outside the community (e.g., University)

- ◆ PHN.A (Iwate Pref.) planned and carried out a summer medical camp with doctors and medical students from the University in Tokyo from 1965. She used the results of the medical camp and suggested the establishment of a mobile clinic or a delivery station. At the beginning, the summer medical camp was held at the request of the university. However, PHN.A strongly advocated the application of the project at the settlement area as a model area, and realized this.
- ◆ There was a research institute managed by a university from the Kanto area in PHN.C's (Shizuoka Pref.) area. The doctor from the university discussed preventive medicine enthusiastically and the PHNs worked together actively.
- ◆ PHN.H (Shimane Pref.) planned and carried out health check-ups for infants and adults with members of public health at a local university from 1962. These were epoch-making projects.
- ◆ PHN.B (Gunma Pref.) planned and carried out TB and intestinal parasite examination, as well as health check-ups for pregnant women and infants, and held mothers' classes with university doctors or medical students of the Kanto area from 1944.

3.3 Organizational support for PHN activities

The prefectural PHOs were mainly in charge of conducting continuing education for the PHNs. In each area, seminars were held regularly where the PHNs exchanged knowledge and experiences. The seminars served as a tool for delivering information and knowledge from cities to local villages. Presentations were frequent at the seminars. In some areas, the PHNs held self-study groups actively.

3.3.1 Continuing Education

- ◆ According to PHN.A (Iwate Pref.), the prefectural agricultural department held seminars for PHNs in the settlement 2 or 3 times a year.
- ◆ PHN.E (Aichi Pref.) attended seminars at her workplace regularly. From 1958, her workplace started case studies and sleepover programs.
- ◆ PHN.B (Gunma Pref.) organized monthly seminars on a voluntary basis.
- ◆ PHN.C, D (Shizuoka Pref.) attended seminars held by PHOs. The PHOs held seminars regularly, enabling PHNs to exchange knowledge and ideas about working in an effective manner.

- ◆ An institution that was managed by a university in the Kanto area was located in PHN.D's field (Shizuoka Pref.). The university understood and supported the work of PHNs. In 1965 and 1980, doctors, PHNs, and nurses held conferences or monthly presentations.

3.3.2 Re-education after WW II

- ◆ After WW II, seminars for re-education were frequently held. PHN.B was able to attend a 4-day sleepover seminar courtesy of public funds.
- ◆ In 1948, The Public Health School (Koshu-eisei-in) began re-education for PHNs. Two PHNs from Gifu Prefecture attended every year. The Gifu prefectural local government began conducting re-education from 1949. The PHNs' Association held seminars independently and together with the Associations of Midwives and Nurses.
- ◆ In 1952, the annual prefectural conference of PHNs (Gifu Pref.) was started where PHNs reported their home visiting experiences via presentations. The seminars for public health officers and PHNs continued until 1955.
- ◆ The Ehime prefectural office conducted meetings where PHNs could exchange information and opinions. Joint seminars with another PHO of the same county were held 3 times a year. PHNs from the prefectural PHO went to the center (Tokyo) frequently, which helped PHNs in the municipality and the National Insurance Unions to obtain up-to-date information.

4. Discussion

The first regulation for PHNs in Japan was "The Public Health Nurses Regulation" in 1941. Health promotion activities were conducted from the late Taisho period, although only a few private institutions provided education for health promoters. After the Public Health Center Law was enacted in 1937, PHN schools were established in several areas. These schools, however, had different acceptance requirements as well as lengths and contents of education. The education of those who already possessed a Certificate in Nursing or Midwifery was generally conducted in a very short period (from 5 days at the shortest to 6 months at the longest).

The new law for PHNs, midwives and nurses was enacted in 1948, which standardized the certificatory system for PHNs. The Certificate in Public Health Nursing could be received after finishing a 1-year course that follows the 3-year education for nurses. At that time, re-education was conducted for PHNs who had received certification via the old regulation. (See Appendix 1)

The standardization of the certification process and the frequent continuing education at the PHOs improved the quality of PHNs nationwide. It was the key to building the foundation for nationwide health promotion activities by the PHNs.

The different educational backgrounds of the interviewees in this research show the variety of education at that time.

In rural areas, PHNs were regarded as very important and highly competent persons who possessed professional knowledge and skills on health, because rural areas suffered from the absence of human resources. The communities provided certain incentives in the form of salary and transportation, which were special treatments considering the poor financial state of the communities at that time. It is clear that the PHNs were very much respected. Under such a condition, the PHNs actively conducted health promotion activities in accordance with their individual capabilities and motivation.

That the PHNs were fully responsible for the activities was one of the major reasons why the PHNs could carry out innovative activities that were driven by their free ideas, thereby meeting the needs of the community.

The activities evolved from individual approaches that dealt with such immediate health issues as delivery and first aid.

It was common practice for a PHN to visit her community very often at first to enable recognition by villagers, understand how the villagers really lived, and finally gain their trust.

Then, based on experiences gained from individual activities with the villagers, the PHN shifted such individual activities to organizational activities. The trigger of such a shift was the villagers' will and efforts to improve their lives. Female groups, in particular, were instrumental for the shift to organizational activities. The PHN took approaches by which villagers could see the improvement in their living and health conditions.

Through their work, the PHNs became well informed of the human and organizational resources in the community. When the PHNs visited the community, they found persons who were willing to cooperate with them. Nevertheless, the PHNs were careful about getting agreements from stakeholders of organizational activities. Thus, their network included a wide range of people, such as teachers, child care staff members, midwives, doctors, livelihood improvement extension workers, mothers, and

community leaders. In addition, the PHNs also utilized resources outside the community. Oftentimes, the PHNs involved researchers and students of universities from their regions or Tokyo as the trigger of the activities.

We should not forget to mention that the PHOs played an important role as the organizational support for PHN activities. In general, most of the PHOs held seminars regularly, which provided the opportunity for PHNs to deepen their understanding and exchange information. The PHNs actively made presentations of their activities at the seminars. On the other hand, a representative PHN attended seminars at the center (Tokyo) and delivered the contents by holding seminars in each area. This delivery system was very efficient and effective. In some areas, the PHNs voluntarily held seminars by themselves besides participating in PHO-sponsored seminars.

The health promotion activities of PHNs in Japan after WW II and the ongoing activities in developing countries have common characteristics even though the current issues surrounding developing countries are more complex compared to those of Japan after the war. The activities of PHNs after the war in Japan are applicable to the developing countries, particularly for reinforcing the roles and functions of PHNs at the frontline.

First of all, it was necessary to guarantee health workers minimum income in order for them to sustain their lives as specialists and provide tools for their activities. This was essential for keeping valuable health workers in the villages to conduct grass-roots activities with villagers

Second, the roles of PHNs at the frontline were not restricted to only health issues and their approaches were not limited to individual treatments. The PHNs dealt with numerous problems faced by villagers in their daily lives. The PHNs grasped living and health problems comprehensively and worked in both individual and organizational approaches. In order to deal with the numerous problems, the PHNs utilized human and organizational resources thoroughly inside and outside the communities.

Finally, the importance of educational support systems for a PHN working in a village alone should not be discounted. Seminars conducted by PHOs gave ample opportunities for PHNs who usually work alone to obtain the necessary information and share their experiences. Such educational support systems contributed to building up a store of knowledge and standardizing the quality of PHNs nationwide.

The living conditions in Japan changed drastically by the end of the 1960s,

producing new health problems that could not be dealt with by the PHNs in the conventional manner, and thus the PHNs were required to change their way of work thoroughly. Further investigation should be conducted to determine which of the PHNs' experiences in Japan are useful for resolving the current health issues in developing countries.

Appendix 1 Changes in PHN education

Period/Regulation	Changes in PHN education
<p>【Latter part of Taisho period (1920 or thereabout)】 Beginning of PHNs' activities</p>	<p>【Pioneering education for PHNs】</p> <ul style="list-style-type: none"> • Short-term education for midwives or nurses ranging from 1 week to 1 month <p>【Starting formal education for PHNs】</p> <ul style="list-style-type: none"> • Certificate in Midwifery or Nursing + knowledge in rearing children • Graduate of women's college + 1-month OJT at hospital • Graduate of girls' high school or nurses + 1-year education <p>Differences in requirements and length of education</p>
<p>【1937】 The Public Health Center Law: Educational institutions were established nationwide.</p> <p>【1940】 “The Public Health Nurses Regulation” was enacted (First regulation to define PHNs) Private PHN Schools Regulation</p>	<ul style="list-style-type: none"> • Each school has its own requirements and there were gaps in the educational contents among schools. Taking the actual conditions and the level of female education by area into consideration the schools selected appropriate persons. <p>【Certification system】</p> <ul style="list-style-type: none"> • Certificate offered to those who had already received a Certificate in Nursing and promoted public health activities • Certificate offered to those who graduated from registered schools or passed the certification exams and finished a 3-month OJT at PHO • Certificate offered to those who finished a 5-month educational course and passed the certification exams
<p>【1942】 Certification exams were held in each prefecture.</p>	<p>【Requirements & length of education】</p> <ul style="list-style-type: none"> • 1944: Requirement: graduate of girls' high school 1.5-year education for PHNs, 10-month education for midwives, 6-month education for nurses + 3-month OJT • 1945: Requirement: graduate of girls' high school 2 or 3-year education for PHNs, 1.5-year education for midwives, 1-year education for nurses, 3-month OJT at PHO, 1-month OJT at hospital, and 1-month OJT at MC clinic
<p>After WW II, PHN schools were closed down or restarted by prefectural local governments.</p> <p>【1948】 Midwives, and Nurses Law</p> <p>【1949】 Requirements for certification exams</p> <p>【1951】 Shortening length of education by revision of The PHNs, Midwives, and Nurses Law</p> <p>【1955 to 1975】</p>	<ul style="list-style-type: none"> • 【Changes in length of education】 • The new law defines education for PHNs as 1-year education after finishing the 3-year education for nurses • 1946: Re-education for PHNs certified by the old regulation + frequent seminars • 1949: Certificate in Nursing + at least 1-year education, 3-month OJT (2 months at PHO) • 1951: Certificate in Nursing + at least 6 months' education • Efforts to fulfill the contents of education (Joint education with Custodial Care Teachers & Midwives)
<p>【1971】</p>	<p>【Revision of curricula】</p> <ul style="list-style-type: none"> • At least 6 months' education, 180 hours' placement

	<ul style="list-style-type: none"> • Systematization of subjects, drafts of teaching guide
<p>【1989】</p>	<p>【Revision of curricula】</p> <ul style="list-style-type: none"> • At least 6 months' education, 180 hours' placement • Revision of standards for schools in order to meet the increasing need for nurses in the changing society
<p>【1996】 Rapid increase in the number of nursing colleges</p>	<p>【Changes in PHN schools】</p> <ul style="list-style-type: none"> • Rapid increase in the number of colleges: 1952 As the first school in a college, Kochi women's college was established. There were six colleges until 1960. • At least 6 months' education, 3 units' placement • Educational goals: Fundamental education for nurses, practical skills based on scientific thinking, wide views and perspectives, acquiring broad culture and formation of well-rounded characters • Prefectural PHN schools no longer had predominant positions in PHN education. Various facilities such as universities, 1-year colleges, vocational schools, and schools that have joint curricula with nursing and midwifery, provide PHN education.

資料 7

日本の母子保健医療システムの途上国への応用可能性の検討： 英文先行研究のレビュー

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背景

日本では戦後の経済成長とともに保健衛生水準が著しく向上し、母子保健分野の諸指標が急速に改善した。妊産婦死亡率（出生 10 万対）は 1950 年の 176.1 から 2001 年には 6.5 に、周産期死亡率（出生千対）は 1952 年の 56.6 から 2001 年には 3.6 に、乳児死亡率（出生千対）は 1950 年の 60.1 から 2001 年には 3.1 に¹、そして中絶（15 才以上 50 歳未満女子人口千対）は 1955 年の 50.2 から 2002 年には 11.8 に低下した²。

一方で、社会の変化にともない少子化や児童虐待、10 代の中絶の増加など、新たな課題が出てきている。合計特殊出生率は 1950 年に 28.1 であったが、1956 年には人口置換水準を下回り、2001 年には 9.3 まで低下した¹。少子化の中、生まれた子どもについては全国児童相談所における児童虐待相談処理数が 1990 年の 1101 件から 2000 年には 17725 件に急増している³。また、10 代の中絶率は 1995 年から上昇に転じ、1995 年の 6.2 から 2001 年には 13.0 に達した²。

非欧米圏で途上国から短期間に先進国の仲間入りを果たした日本の急激な健康水準の改善は、特にアジア諸国の保健医療政策立案上、参考になると考えられる。しかし当然ながら、文化、宗教、社会経済状況などが異なる環境に、日本の経験をそのまま応用できるわけではない。また、上記のように日本でも依然保健医療分野で多くの課題が残されており、途上国に同様の保健医療政策を導入する際、同じ結果を招かぬよう改善が必要である。国外に応用可能な普遍性のある保健医療政策の提案は、日本の保健医療の軌跡を科学的に分析することによりはじめて可能となる⁴。本報告は、日本の母子保健医療システムの歴史的経過に関して検討した英文先行研究を収集し、途上国への応用を検討する上で必要となる基礎的資料の作成を最終目的とする。今回は大まかな文献検索を試み、今後資料収集を進める上での方向性を検討した。

方法

文献の検索には MEDLINE を用いた。対象年は限定せず MEDLINE に登録されている 1966 年以降全ての文献を対象とした。言語は英語で、要約のあるもののみを抽出対象とした。検索分野は、中絶・家族計画、人口・出生、死亡（母子関連の指標）、母子保健サービ

ス、そして地域保健に加えて、研究班での討議により岩手県沢内村と感染症を追加した。検索式および検索日を表1に示す。抽出文献からさらに、疫学、公衆衛生学、人口学、社会学、人類学的視点で、主に日本の母子保健医療の経過および今後の課題について記述しているものを選択した。ただし、感染症は班会議で挙げられたキーワードを入れた検索式“Japan AND (Communicable diseases OR Diarrhea OR Pneumonia OR Tuberculosis OR Immunization OR Vaccination)”にて抽出数が15万件を超えたため、検索式に“AND (Public health OR Epidemiology)”を加えて絞込んだ。沢内村についてはMEDLINEで抽出数が0であったため、対象雑誌のより広いPubMedを用いて追加検索を行った。中絶・家族計画と人口・出生の分野については、先行研究^{5, 6}の際に収集した文献も追加した。なお、日本語文献は医学中央雑誌を用いて担当の研究協力者が検索を行っている。以上の手順で抽出した文献は、ファイルメーカーのデータベースに入力し、内容別に分類した。

結果および考察

重複を除きデータベースに入力した文献総数は83件となった(表1、文献リスト)。研究内容により8分野に分類したところ、乳幼児に関する文献がMEDLINEからの抽出数24件と一番多かった(表2)。これに対して、妊産婦関連の文献は6件のみであった。研究方法については、いずれの分野でも論説または二次データを用いた記述分析が多い傾向にあった。二次データとして用いられていた主なデータは、人口動態統計、出生動向調査、毎日新聞社全国家族計画世論調査、母体保護統計、国民栄養調査などであった。

戦後日本の母子保健について歴史的に、または記述統計を用いて論じた論文は決して少なくない。しかし、日本の戦後母子保健について網羅的に文献を収集し、国外の読者に向けて解説した総説は見当たらず、本研究班で収集した文献資料のレビューは、日本の保健医療政策を途上国で応用する際の貴重な基礎的資料となりうる。文献抽出数が一番多い乳幼児に関して、記述されている乳幼児死亡率の関連要因を表3にまとめた。医療技術の向上のみに言及する文献が多い中、LeppertやNishidaは総括的に日本の母子保健医療について述べ^{(35), (39)}、今回の検索では抽出されなかったが、Cashらはユニセフの委託研究でまとめたdiscussion paperで保健政策、保健サービス、教育、栄養、地域組織など多角的視点から、1915-1965年の母子保健の向上について論述している^{7, 8}。かつての優生保護法において「胎児が母体外において生命を保持することの出来ない時期」が22週未満に改められ、超低出生体重児に対する積極的な医療が行われるようになり生存率が向上したことから、医療の*decision making*が新生児の生存率に影響を及ぼすことを示した研究^{(50), (51)}や、政策決定者の保健医療への*commitment*が地域住民の健康に大きな影響を及ぼすことを示唆した岩手県沢内村の事例^{(62), (63)}は、単に医療技術の進歩だけでは人々の健康増進につながらない事を示している。さらに、Leppertの論説⁽³⁵⁾や死亡原因の動向を分析したNakamuraらの研究⁽⁴¹⁾では、乳幼児死亡率低下におけ

る計画外妊娠予防の重要性について記述があり興味深い。

日本の保健医療政策を途上国で応用することを念頭においた場合、より具体的な指針を明記する形のレビューが望まれる^{7,8}。そのためには、今回検索した文献などを基に、戦後の健康水準向上に特に寄与したと推察される母子保健医療政策・活動につき、その効果を検証した先行研究に検索対象を絞ることが望ましい。しかし、保健事業評価は健康日本 21 および健やか親子 21 計画立案にともないようやくその重要性が広く認知されるようになったところであり、それまでは健診受診率や事業参加者数など手段の評価のみに限られることが多く⁹、戦直後の時期に介入研究に準ずる形で事業評価をした実証研究が多く残されているとは考えにくい。そのため、特定の母子保健医療事業の有用性を検証した近年の研究や、日本に限らず他国における同様の事業についての研究も検討することが必要である。また、Takayanagi らは母子健康手帳の有用性を手帳配布数と母子保健指標の記述分析から検証しており⁽³⁶⁾、このように今回検索した文献を参考に入手可能な二次データを用い、明確化したリサーチクエッションに基づいた既存資料の再分析を文献レビューとあわせて行うことも必要である。多田羅らは日本の健康づくり分野における地域保健の到達水準について、研究業績や調査報告書を収集して検討したが⁸、資料の多くは日本語文献であった。医学中央雑誌を用いた日本語文献の検索結果とあわせた考察が今後の課題である。

日本の母子保健医療について述べる場合、「影」の部分から学べる事を考察することも大切であると前述した。家族計画の推進により中絶は急激に減少し、経済発展を目的とした出生率の抑制には成功したが、これは近年一転して少子化問題として取り上げられている⁽⁷⁾。また、コンドームを主に既婚者対象に推進した家族計画政策は、戦後の中絶総数の減少には成功したものの、近年は若年層の計画外妊娠の増加が問題となっている⁽¹⁾。今回の検索で乳幼児関連の文献が妊産婦関連の文献より多く抽出されたことに象徴されるように、乳幼児死亡率の低下と比較して妊産婦死亡率の低下は遅く、その原因を探るべく妊産婦の人口動態死亡票を見直した研究が発表されたのは2000年である⁽³¹⁾。日本の戦後の保健医療政策をより良い形で他国に提案するために検討すべき課題は多い。

検索方法の改善点として、以下の3点が挙げられる。第一に、検索エンジンをより登録雑誌数の多いPubMedに変更し、リプロダクティブヘルス関連の文献検索に優れているPoplineを用いた追加検索も必要である。第二に、上記したとおり今回の検索結果を元にリサーチクエッションを明確化し、検索式を再検討する必要がある。第三に、検索エンジンで抽出した文献から、日本の母子保健・医療の経過および今後の課題について記述しているものを選択する際に、漏れや偏りを少なくするため、複数人で選択作業を行い、選択結果の照らし合わせが必要である。

本報告書では、大まかな検索分野を設定しての文献検索に留まり、内容の詳細な検討は行わなかった。今後上記の点を踏まえて再度検索を行い収集した文献の内容を充分検