and responsibility should be clarifies in respective issue so that the function should be strengthened to take immediate action.

6. Ethical guideline

Balance between individual health and public benefit is controversial and needs value judgment. Ethical guidelines should be discussed and acquainted that human life should be put higher priority than economic activities. Also, preventive warning is important in the time when a case was found and if it is still doubtful.

7. Dissemination of lesson learned

The Japanese experiences show how epidemiologists were excluded or avoided the policy making process even though they produced the evidence that formed the basis for policy decisions. The consequence of political pressures on epidemiologists' behaviors and research conclusions should be informed as lessons learned so that these problems are not repeated.

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資料 9

Performance and motivation of Community Health Workers In Japan's Postwar Period Decentralization and community support

Emi Inaoka[3], Yasuhide Nakamura[4]

Abstract

Community health workers or front line health workers are cornerstone for health service provision, unfortunately motivation and performance have been difficult to control and no particular measures for improvement have been found. As the reason of rapid health improvements of the Japanese health system in Japan after the World War Second, public health nurses or community health workers were reviewed. Devotion and commitment were found and reasons were discussed for implications for applying to other countries. The national health strategy was embedded within the hierarchy of the existing health system. This promoted efficient use of time, budgets and human resources and expanded service coverage. Supportive supervision was provided by public health centers, and this helped with service provision and facilitated problem solving. Public health nurses had a strong sense of responsibility and played their role in the community. This was due to decentralized discretion that allowed them to make their own decisions and allowed them to voice the opinions. Workers had high motivation because they received recognition and appreciation from the community and they gained salaries and self confidence in line with the health system. Collaboration with other community agents increased the efficiency of the scale up of services. Meetings and workshops among the public health nurses improved their technical capacity. These mechanisms facilitated health system performance.

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1. Introduction

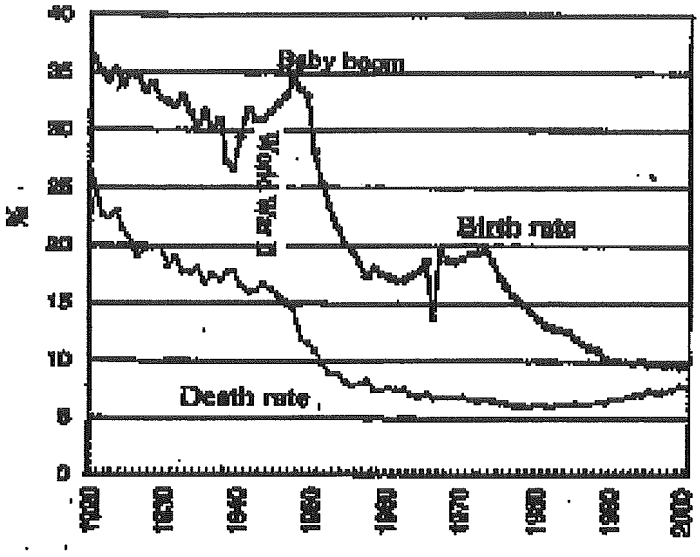
After the Second World War, the Japanese health system had collapsed and health status had deteriorated due to poverty and an epidemic of infections (Sugiya 1977). However, within ten years of the end of the war, health status improved. Why such rapid improvement was possible is unclear, but proposed reasons include socioeconomic development, increasing educational levels and improvement in medical services. Attention has been given to the role of these factors, but clear answers are lacking, likely due to the synergism of multiple factors. This article reviews the role of the health system and how it brought about health improvements. In particular, it looks at the role of community health workers, *Hokenfu,* and local health administrative offices, *Hokenjo*.

2. Health in Post-war

At the end of the war in 1945, there was a serious food shortage and poor hygiene abounded. Diseases like malnutrition, typhoid, tuberculosis, cholera, and sexually transmitted diseases were prevalent. Wounds and sequelae of the atomic bomb were a focus of the health agenda, and maternal and child health were a concern for all people. Under the chaos of the defeat, health service delivery did not work well, and there was a serious lack of both doctors and medicines. In terms of health indicators, the infant mortality rate was 76.7 per 1,000 births and the mortality rate from tuberculosis was 187.2 per 1,000 population in 1947 (Ministry of Health and Welfare, 1992). There were large demands for the health service.

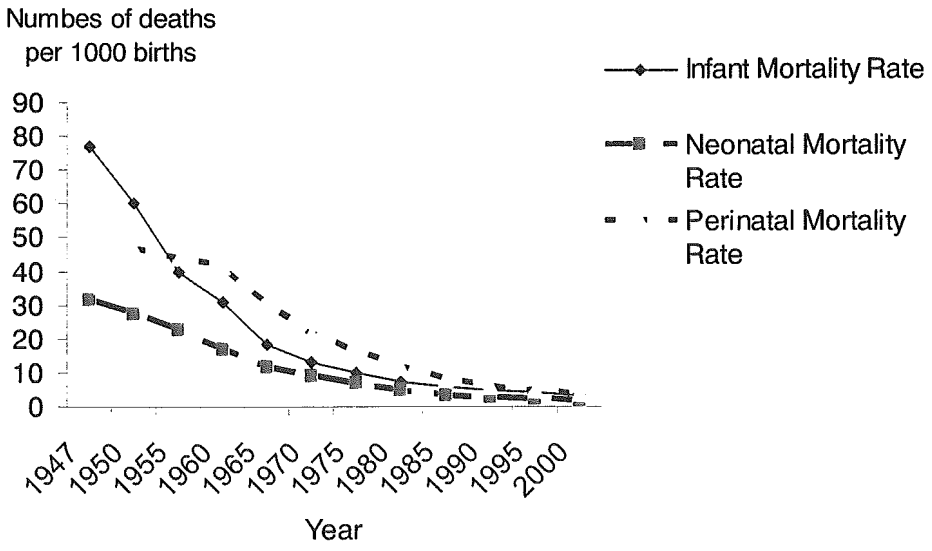
After the war, there were changes in health indicators. The overall death rate decreased immediately (Figure 1). Figure 2 shows the improvements infant, child and prenatal death rates in the twenty years after the War. The Infant Mortality Rate, in particular, showed improvement within ten years (Figure 2). Improvements in maternal deaths begin in 1956, ten years after the war (Figure 3). The birth rate increased with the return of the troops; the rate was 26 in 1000 women in 1940 and 35 in 1949 within the years between 1947 and 1949 called the *Baby Boom*. But in the 1950s the birth rate decreased and it reached 17 by 1959 (Figure 1). Due to the post-war economic difficulties and food shortages, the need for small families became apparent, and this caused a rapid increase in both unwanted pregnancy and illegal abortion, as contraceptive use was not prevalent. Improvement of Maternal Mortality Rates was brought about when safe abortion and contraceptives became available. Total fertility decreased from 4.5 in 1950 to 2.2 in 1960 (Figure 4).

Figure 1: Birth and Death Rate in Japan, 1920 - 2000



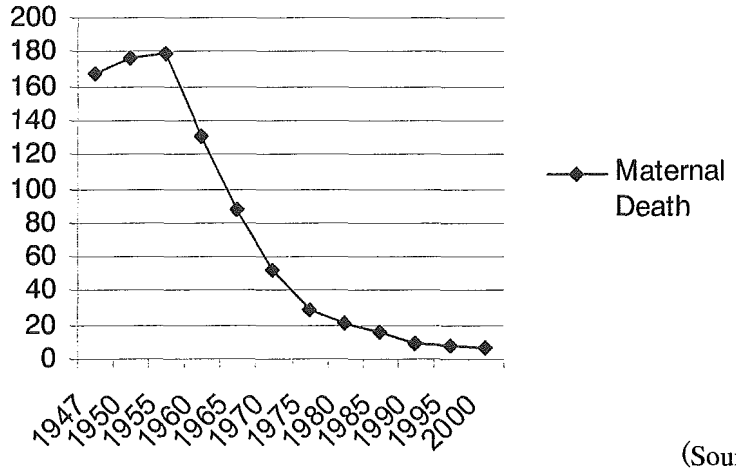
(Source)

Figure 2: Infant and Perinatal Mortality Rates in Japan, 1947-2000



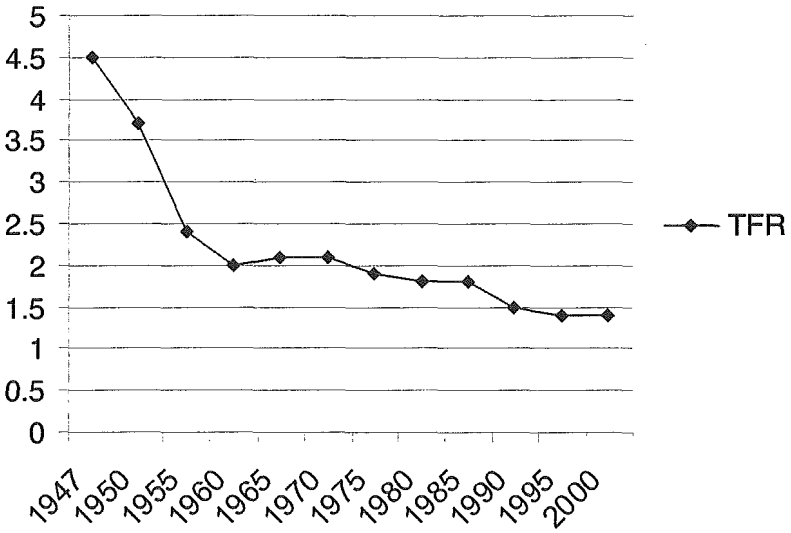
(Source) Boshihoken eiseikenkyuukai,
Boshiohokenno Omonaru Toukei (2001)

Figure 3: Maternal Mortality Rates, 1947-2000



(Source) Boshihoken eiseikenkyuukai,
Boshiohokenno Omonaru Toukei (2001)

Figure 4: Total Fertility Rates in Japan, 1947-2000



(Source) Boshihoken eiseikenkyuukai,
Boshiohokenno Omonaru Toukei (2001)

3. National Health Service Provision at Postwar Period

3-1 Health Service System Laws

After the war, during the occupation of the United States, the General Head Quarter (GHQ) USA established the basis of the health service system. Democratization and public health policy reforms were started. In the Ministry of Health and Welfare, three departments: hygiene, treatment and prevention, were established to address the major areas for intervention. In 1947, *Kaisei Hokenjo Hou* or the Revised Public Health Law, which was built upon the existing public health law but strengthened its function, was enacted and provided a basic strategy for the health service system. This law gave more attention to maternal and child health, instead of troops' health as had been done previously. This change led to programs in the maternal and child health handbook, family planning counseling, mothers' classes and health education campaigns. In the same year, *Jido-Fukushi-Ho* or the Child Welfare Law was enacted and the Department of Maternal and Child Health was established at the Ministry. The law on maternal and child health was followed by laws on: Immunization (1948), Eugenic Protection (1948), School Health (1958), Tuberculosis Protection (1951). Medical Law or *the Iryou-hou* for standardization of health facility and health personnel (1948) was enacted and formed the basis for the health system and administration (Ministry of Health and Welfare).

3-2 *Hokenjo* - Public Health Service Offices

One of the functions that was strengthened was that of the *Hokenjo*, or local public health administration offices[5]. With both health administration and curative functions, *Hokenjo* were first established before the war in 1937 with *Hokenjo-Hou* or Public Health Law. Their areas of activity were: raising public health awareness, nutrition improvement, environmental hygiene, maternal and child health, tuberculosis, parasite control, and infectious diseases. Service was free of charge. Doctor, nurses and medical supplies were provided to each *Hokenjo,* and the local government provided half of the budget. At the beginning, it was planned that one *Hokenjo* would be established for 12,000 people. During the war, the number increased to 700 in 1944 compared with 40 in 1937. In 1948, the law was revised and the number and function of *Hokenjo* was strengthened with the *Hokenjo* becoming front line service providers. The GHQ provided teaching materials and facilitated sharing lessons learned within *Hokenjo* to improve

[5] Other type of health facilities, Maternal and Child Health Centers, were also established upon the Child Welfare Law emphasizing health service provision in the community level

capacity and performance. The GHQ also stressed their role in reflecting community needs. (Japanese Pubic Health Association).

3-3 Public Health Nurses as Community Health Service Providers

The role of *Hokenfu* or Public Health Nurses, first defined in *Hokenfu-Kisoku* or the Public Health Nurse Law in 1941, was also strengthened to that of front line health provider. Their major activities on the document were disease prevention, maternal and child health education, and heath education for wounded people. They were supposed to be supervised by *Hokenjo* or public health centers, and three nurses were allocated to each *Hokenjo* on average. Although providers with similar functions to *Hokenfu* had existed in some communities since the 1920s, *Hokenfu* were innovative in that they were integrated into the public health system and crystallized the national strategy of service provision, demand working at and worked at the community level. Given the lack of doctors and health facilities and the increasing demand, public health nurses were driving force in providing public health services that respond to people's health needs[6].

[6] There were other kinds of community health workers who worked as frontline service providers such as trained midwifes (Karitakuzyosanfu), maternal health promoters (Boshikenkoufukyuuin), family planning educators (Zyutaityousetusidouin), and community midwives, and they also contributed to improvements in safe motherhood, infant mortality, and family planning. This article focused on public health nurses because numbers of workers and impact of the activities were larger than others, and they were the major community heatlh workers.

4. Case Study of Public Health Nurses in one district, Yashiro City

4-1 Survey setting

This article describes the case of public health nurses in Yashiro, a rural municipality of Hyogo-prefecture during 1940-1960. It shows how the national system developed at the community level.

Yashiro is situated in the southern part of Japan 80 kilometers from Osaka. The main industry in the post-war era was rice agriculture, and the population was 19,740 (1950). This district was selected because the researcher's human network and local knowledge at the district it provided access to local people and information with.

Existing documents are quite limited due to the personnel changes and disposal of documents. Little description of health in those days was found in the local library and the prefecture health office. The most relevant data collection method was, therefore, hearing from people who worked as public health nurses and the people who received their services. It was, however, difficult to find such people and to conduct interviews due to their lack of memory and senility. The interviews used open-ended questions about their activities, the responses of the community, and the relationship with the health system[7]. Interviews were conducted several times to ensure consistency of information.

4-2 Overview of Health and Health Service

Before the War, common diseases in Yashiro were cholera, dysentery, typhus, measles, influenza, and hydrophobia. Major activities of public health nurses were immunization and quarantine, although some started home visits voluntarily. After the War, the major heath concern was infectious disease prevention, and efforts were made in both tuberculosis and sexually transmitted diseases.

The first *Hokenjo* was started in Yashiro in 1948 with the rental of a private house. It covered the surrounding five municipalities in 1948 and responsibilities of the center were defined in nine areas: 1) public health awareness, 2) population estimation, 3) nutrition and food hygiene,

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[7] Interviewees were two former public health nurses, current manager of Yashiro Health and Welfare Office, former manager of Yashiro City Office, and women who received service at that time.

4) environmental hygiene, 5) hygiene of mothers, children and the elderly, 6) dental hygiene, 7) mental hygiene, 8) laboratories, and 9) prevention of infection. Unfortunately, due to limited capacity the center did not meet the health needs of the community.

In addition to the *Hokenjo*, three hospitals were established: an isolation hospital for infectious diseases in 1912, mental illness hospital in 1952, and the general hospital in 1956. Despite growing needs, the general hospital became a clinic after 10 years due to the lack of doctors and funds. There was also a small private sector with five private clinics in the district.

4-3 Public Health Nurse and Their Activities in Post-war

Two public health nurses worked in Yashiro city. One worked for *Hokenjo*, the public health center at the district, and the other worked for the municipality health office in the health system hierarchy. The municipality nurse was originally established in 1940 to substitute for doctors who had been sent to the battlefield. The function was strengthened with the Public Health Nurse Law in 1948 and the role gained recognition and social status. It seems that people considered the public health nurse an essential health provider and she worked closely with the community and the health facility. From the interview, it was notable that two nurses worked in collaboration. The interviewees explained that this was possible because the two offices had the same objectives, and the community people did not care by whom the services were provided as long as they provide consistent service.

Former public health nurse, Ms. Fujii, who was 86 years old in 2003, worked as a public health nurse for 26 years, from 1945 to 1971. After graduated from nursing school she started work at an army hospital, and late became a public health nurse responsible for 20,000 people. She worked along with one other public health nurse and provided home visits. They averaged three or four home visits each per day. Due to the lack of health providers in the community, they provided the whole range of services including education and care of pregnancy and delivery, regular check ups and immunization for children, family planning counseling, care for disabilities, and blood pressure monitoring for old people. Ms. Fujii said that she frequently made home visits at night for emergency, because there were many women in distress due to malnutrition who needed first aid care. They also worked as assistants to doctors for health check ups at community centers, schools, and the public health center.

Figure 5 History of health program

	Yashiro District	National
1937	Hokenjo-Hou was established by the Law	Maternal and Child Health Protection Law enacted Hokenjo (Public Heath Center) Law enacted
1940		National Insurance Public health Nurse Started (Municipality public health nurse)
1941		Public Health Nurse Law
1942	Public health nurse group formed	
1943	The first medical facility (Hokenjo) established Two public health nurse training institutes established in Hyogo prefecture	Public health nurse, midwife nursing law (Municipality public health nurse)
1946	Hygiene department established	
1947		Maternal and child health division established at the Ministry Revised Hokenjo Law (the public health center law) Child welfare Law
1948		Eugenic Law
1948		Life Improvement Program
1952		Family Planning Counselor Program
1953	District mental illness hospital established	
1954		Maternal Child Hygiene Community Group Training Guideline published
1956	District hospital established	
1965		Maternal and Child Health Law enacted
1968		Maternal and Child Health Promotion Program

4-4 Community Perceptions of Public Health Nurses

The nurses were the only source of health services and health information that promoted the high perception of public health nurses among the community. Old women who received the service at that time explained that the nurses made home visit and provided health education and service to community people. In terms of the service, they mentioned public health nurses provided service with kindness, and tried their best to help people. Nurses were further appreciated because of their considerate manner of talking family planning and sexual health issue by they paid attention to time and place so that community members would not face unnecessary embarrassment. Old women mentioned that they appreciated that the community information on agriculture, education and life skills were provided as well as health information during home visits. The nurses were appreciated as there are the lack of other means for communications and they were one of the very few female community agent because.

4-5 High Motivation of Public Health Nurses

It was clear from the interviews that they were highly motivated to fulfill their duties. This was made evident when explained many times that they initiated activities independently and conducted their work with willingness and a sense of ownership. In terms of the reasons for their high motivation and devotion, the former nurse explained:
"Not a single nurse idled away the work. Very few thought about individual benefit or credit. We tried our best to improve community and people. Every day work was very hard and busy, but we ourselves made us busy, as we would like to respond to the large demanded from the community. We were happy as we were delighted and appreciated by the people, which were our motivation". A collection of essays of the public health nurses at that time visualize how much public health put into their passion and efforts, and tried to improve their skill and knowledge to provide better service to the community.

4-6 Relationship with the Health System

Public health nurses reported to either the prefecture or municipal health offices, for which they worked and had strong ties with the health system. Office managers supervised with paying attention to the public health nurses' activities, and supported them when they faced difficulties or problems. Interviewees emphasized that their supervisors talked to them every day about their daily work, and respected their opinion and decisions. This promoted loyalty to the health system and responsibility for community health. Although they were given only a bicycle and a

few emergency drugs, the nurses made use of available equipment and substituted with daily goods because they knew that funds and equipment for meeting community health needs were limited. Link was also found from the newsletter circulated within health providers mainly targeted health offices in those days there were a lot of information about public health nurses and supervision of them.

4-7 Capacity Building

Meetings and workshops improved capacity and motivation through the exchange of information and the opportunity to obtain new information. Interviews and material showed that nurses had high motivation for learning new skill and knowledge. Reason of the high motivation was explained that they wanted to be wider knowledge to meet the various needs from the people. They were originally trained at prefecture training institutes, and study hard to obtain the national license as nurses. Although no specialized training or manuals were provided to work as community workers, they utilized materials at the institute and updated information various occasions and individual networks such as monthly meetings of the public health workers.

4-8 Collaboration with Other Community Agents

There was a lot of collaboration with other community-based workers. The importance of collaboration and difficulties of collaboration have been shown in articles from many countries, but it seems to have been rather in the surveyed area. Interviewees explained this resulted from having the same purpose, the development of the community and from strong support from local leaders. Agriculture Promotion Workers had a large influence in the community. Because most of the population was employed in agriculture, these workers understood the community very well, and helped public health workers to work with ease such as communication with community and logistics of conducting duties. Health was a major issue for agricultural outcomes, as agriculture needs manual labor and perpetual activities. The Livelihood Improvement Extension Worker (*Seikatu-kairyou-fukyuuin*) initiated by the Ministry of Agriculture in 1949 also worked for social development in the community and promoted better life styles. Their work included public health and hygiene promotion efforts such as safe water, nutrition, and extermination of vermin. They also collaborated with other community workers, social workers who provided information and counseling on life: *Kenkou Soudan Iin* and *Minsei Iin.* The other community agents respected public health nurses, did not compete with them in the community, and they supported the nurses. In fact, collaboration with public health nurses

was encouraged in the working code which facilitated collaboration.

4. Discussion

Information from historical documents and interviews shows that public health nurses were the major public health service providers at the district level during the postwar period and that they had both performance and motivation. The reasons for high performance and motivation are analyzed according to five factors below.

1) Common Strategies and Supportive Supervision

The objectives and activities of public health nurses were defined by the government and shared within the hierarchy of the national health system. They were well accepted because they were relevant to the local situation. With the agreed strategy and structured health system, the central government provided resources and supervision. Local health administrative offices and public health centers were instructed to play monitoring roles. Supportive supervision and problem solving were provided to public health nurses by workers in public health offices.

2) Discretion to Public Health Nurses

Public health nurses worked with ownership and responsibility. This was encouraged by the discretion provided to them. They were allowed to make decisions in consultation with the health offices, and accomplished their work under their own initiative. This facilitated not only the pursuit of their job descriptions but to identify and meet the needs of the community.

3) Capacity Building through Meetings

Monthly and annual meetings of the public health nurses helped to increase their capacity and motivation. The meetings included presentations and discussions by public health workers, which allowed them to share the experiences, discuss lessons learned to improve their work, and raise their knowledge and technical skills. Open meetings and discussions facilitated common understanding of their work and ethics. High quality works and initiatives were recognized by awards and testimonials, and this encouraged emulation of such work by others as well as the expansion of successful changes to other districts. This facilitates to have common understanding of goal and model of their work, and this lead to objective performance evaluation.

4) Collaboration with Other Community Based Workers

Other community agents such as local leaders and social development workers collaborated with public health workers. This brought wider service coverage and improved efficiency by reducing duplication, and in this way, public health nurses fit into existing community mechanism. Interviewees stressed that the collaboration was developed by local needs and their idea. Collaboration was also directed as their norm in the job description of the official document.

5) High Motivation for Health Improvements both Public Health Nurses and Community

There was strong motivation for social and health improvement by both workers and communities. Both groups sought to return to the standard of living common before the war and this encouraged participation in community activities geared to the improvement of living conditions and economics. This led to rapid responses to support for government health programs, and communities adjusted them to their needs and realities. Traditional community values including appreciation of community service and a custom of reciprocal help, promoted collaboration between public health nurses and communities, and increased the efficiency of community activities. Social ethics of diligence and featured such efforts.

5. Conclusion

The success of the *Hokenfu* in Japan providing health services at the community level is likely to have had an important role in the improvements in health in post-war Japan. This paper details some of the reasons for their success and providing a model for implementing health care provision at the community level in modern settings lacking both resources and manpower. Possible reasons of effectiveness of Japanese community health worker program were: built on existing health structure, decentralization, collaboration and recognition by the community.

Goals and activities of the local health administrative offices were consistent within the hierarchy of the health system and shared within the stakeholders. To put this in the different way, public health nurse, municipality, provincial and national government had the same scope. The program was implemented with integration to the existing heath structure, and existing hierarchy made strong leadership and frequent communication possible. The cultural norm was existed that local needs were reflected with this system and reflected to the strategy. This coordination avoided waste of resources in planning, and local health human resources were utilized for service provision in the field.

Decentralization was found In terms of performance, some decision-making authority was provided, and discretion in daily service provision promoted problem solving by public health nurses and a sense of responsibility for people's health. Supportive supervision was provided by public health offices, and this facilitated their work and prevented unnecessary difficulties. Regarding motivation, public health nurses seemed quite committed to their work. Social recognition and appreciation from the community contributed to their motivation. Community people appreciated the health services provided by public health nurses, who understood the community situation and people's needs, and were accessible. Their work was supervised and evaluated by the health office, and they received a salary. This worked as essential motivation. Collaboration was found with other community agents. Those agents facilitated the provision of services and disseminate information by the nurses. Opportunities for public health nurses to exchange information further improved their capacity and motivation.

This implies that performance and motivation of community health workers in general could be made more effective by answering consistency and coordination within the health system, as well as decentralized management supported by delegation and supportive monitoring. Some psychological aspect could raise performance by coordination and communication within the community.

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