

committee was organized to allow referral persons in charge and doctors of each hospital to gather once a month and to discuss referral issues. These meetings help such personnel get to know each other better, which has led to smooth cooperation in cases of patient referral, etc. Furthermore, communication between the departmental health office and city health office—one is in charge of health personnel affairs and the other is in charge of health facilities and operational budget for health affairs—is also rehabilitated through their participation in this referral committee. On the other hand, the referral committee has not received formal approval from either Santa Cruz Department or Santa Cruz City, and therefore it is difficult to directly reflect discussions by the committee on the health policy of Santa Cruz Department. It is expected that, in the future, the referral committee will receive formal approval from the government and will come to cope with problems that include overcrowding at tertiary care facilities.

The integrative emergency care system (SISME) serves to provide patient referral and patient transport. The procedure used when a hospital requests an ambulance is specified, and training for the staff is also carried out. However, there are cases where a security guard of a hospital calls an ambulance for a patient who does not need emergency transport. Moreover, overcrowding at tertiary care hospitals results in situations in which a transported patient is bounced around from one hospital to the next because no hospitals can take him.

② “Improvement of accessibility to medical service of people in remote areas”

In health centers that provide primary medical care, the number of outpatients is increasing due to promotion activities for medical service through home visits. Citizens' participation in rural health care activity (called the “FORSA model”), which was introduced in the "Project for Strengthening Regional Health Network in Santa Cruz Department", tackles improvement of local health and helps increase the number of patients of health centers. And, in areas where access to health centers is difficult, mobile clinic activities by doctors are performed once every 1 or 2 weeks, and referral of patients to higher-level hospitals is carried out if needed. Moreover, health festivals involving citizens and antenatal clinics are held as disease-prevention activities at the community level.

③ “Transfer of information, knowledge, and technology”

Information concerning a referred patient is transferred via the referral form, telephone, FAX, or other means, depending on the case. And, when a misdiagnosis is

discovered in a low-level hospital, a higher-level hospital communicates this misdiagnosis and provides guidance. Case conferences are also held based on descriptions of referral forms in the referral committee, and technical guidance is provided there with information sharing. Moreover, doctors of Japan Hospital may bring patient lists containing information on counter referrals that were carried out from Japan Hospital to a low-level hospital directly to the conferences. On the technical side, doctors of Japan Hospital may go to lower-level hospitals to provide instruction when they receive requests for training from these hospitals. Moreover, in the "Project for Strengthening Regional Health Network in Santa Cruz Department", a training course centering on clinical practices during normal delivery was carried out for general practitioners and nurses at North Network of Santa Cruz City. As a result, normal deliveries can now be handled in low-level hospitals without referral to higher-level hospitals.

(3) Promoting/Inhibiting Factors to Appearance of Achievements

① The “patient referral system”

As opposed to the original referral form that was provided by SUMI, which was filled out with the same information three times—for the patient, the hospital, and the referral facility—the referral form that was created through JICA cooperation is filled out with necessary information only once, with duplicates made with carbon paper. As a result, users’ high opinion of the new referral form led to its being formally approved by the Ministry of Health and Sport. Moreover, this provided incentive in that patients learned that they would receive preference in medical examinations in Japan Hospital if they bring the referral form, and it contributed to the referral form’s being appropriately utilized in cases of patient referral.

Looking at the activities of the referral committee, efforts by JICA experts to promote awareness among referral officers in Japan Hospital, being the counterparts of the project, led to display of leadership by the counterparts in the committee and contributed to continuous activity of the committee after the end of cooperation. Moreover, because the committee is also functioning as a venue for exchange through discussion, it can be said that committee members are participating spontaneously. In addition, although it was confirmed in the field survey that the emergency system (SISME), which has responsibility for the important task of patient transport in the referral system, was not participating in the committee, SISME has since become a member due to urging from the evaluation team.

The JICA experts’ respect for ownership with the recipient country and their

devotion to their role as coordinators led to warming ties between the departmental health office and the city health office. The keys to this warming of ties can be found in the installation of the project office in a departmental health office, the building of a relation of trust between the department and the city, and JICA experts' mediation between the two sides as a third party.

The main causes behind SISME's inability to provide suitable emergency service included the fact that proper people were not stationed and ambulances were not fully maintained. Other causes included the fact that SISME officers did not participate in the referral committee when the evaluation team visited it, SISME cannot claim ambulance transport fees under SUMI insurance because of it lacks authorization as a public company, and information sharing was not practiced.

The establishment of a medical equipment center (IME) as an organization that can respond to all medical facilities promoted effective medical equipment maintenance.

② “Improvement of accessibility to medical service of people in remote areas”

Aiming to ensure preventive care for residents, the FORSA project promoted sustainability through awareness-building by developing public-participatory activities. Moreover, such activities fostered a sense of closeness with medical facilities, and led to improved access to primary medical care facilities as an entry point. Activities that involved people in health care administration and the medical education field, such as health festivals, also raised awareness of people's health.

③ “Transfer of information, knowledge, and technology”

As was previously mentioned, the fact that benefits that include the strengthening of cooperation between medical facilities by establishing the referral committee, and through this cooperation, the spontaneous sending of information on technical guidance or counter referral patients were induced is largely attributable to JICA cooperation that was firmly focused on its role of coordinating persons concerned and that led to a continuing favorable relationship among hospitals even after the end of cooperation. Moreover, the work of making obstetrics and childcare guidelines has strengthened cooperation among health staffs. Furthermore, requests for technical support from low-level hospitals to higher-level hospitals through this good relationship point to the concerted realization of both a strong desire among hospitals themselves to enhance their functions and the need for improved fundamental medical-examination functions in primary medical facilities.

<Vietnam>

(1) Referral System

In Vietnam, a country that stretches north and south, base hospitals (such as Bach Mai Hospital in the north, Hue Central hospital in the central region, and Cho Ray Hospital in the south), medical research institutions, and medical colleges are providing quaternary medical care while also advising and supplying technical support to their own lower-level organizations. Provincial hospitals provide tertiary medical care, county hospitals provide secondary level medical care, and CHCs (commune health centers) at the commune level provide primary medical care.

Fundamentally, health and medical service in Vietnam are categorized into hospital function and prevention function. For example, CHCs mainly carry out prevention/health promotion activities while also carrying out simple medical examinations as the medical facilities nearest to residents. In 1998, the Department of Health in Vietnam issued decisions related to the Regional Medical Support Department (DOHA) as another structure connected with the referral system, and it obligated higher-level medical facilities to provide technical support to low-level medical facilities. The above-mentioned three base hospitals (Bach Mai Hospital, Hue Central Hospital, and Cho Ray Hospital) have the duty to instruct each provincial hospital in the north, central region, and south respectively, and the provincial hospitals have the duty to provide medical guidance to county hospitals in the same areas. In 1998, an educational research department to coordinate training was founded in Cho Ray Hospital as well. After that, a training center was established in Bach Mai Hospital in 2004 and in Hue Central Hospital in 2006, and the educational research department in Cho Ray Hospital was renamed as a training center. Thus, these research centers of the base hospitals are currently taking the lead in training and education. Meanwhile, the "115" emergency system in each region is playing the main role in patient transport.

(2) Cooperation by JICA

Cooperation concerning referral system improvement from the viewpoint of (1) "establishment of a patient referral system" includes technical cooperation that is entitled "Project for Strengthening Healthcare Provision Services in Hoa Binh Province", which is being carried out in Hoa Binh Province in northern Vietnam. The main objective of the project is improved communication of information about the referral system between the provincial hospital and county hospitals by the Hoa Binh health office. Other cooperation in Hoa Binh Province centers on support for resource maintenance and involves support for the functional enhancement of the base hospitals

of urban areas where population concentrates and low-level medical facilities below the provincial level. Moreover, ambulances of the Hanoi 115 emergency center were installed through grant aid in 1993, and these ambulances are still being suitably utilized in medical-examination/transport activities. From the viewpoint of (2) "improvement of accessibility to medical service of people in remote areas", JICA provides support down to the county hospital level and indirectly supports improved patient access to CHCs through the "Project for Strengthening Healthcare Provision Services in Hoa Binh Province". And, from the viewpoint of (3) "transfer of information, knowledge, and technology", JICA is carrying out support for training and instruction from the higher levels to low levels to improve medical service of every region through the structure of DOHA and the training centers in Bach Mai Hospital, Hue Central Hospital and Cho Ray Hospital. It is also providing cooperation to strengthen the community health system of an entire province, using Hoa Binh Province as a model province.

Present conditions and transitions are summarized below from three evaluation viewpoints that consider the institution-based referral system (1) and cooperation by JICA (2).

① The "patient referral system"

In the health referral system of Vietnam, patient referral is in order of the county hospital level, the provincial level, and the National level Hospitals (base hospitals in the north, central region, and south; a specialized hospital; etc.) after a patient receives a medical examination at a CHC first. A referral form is used for the patient's first referral, and later counter referral is conducted using the same form. When a public insurance holder was referred to a higher level hospital, he/she was required to bring his/her referral form, and patient information exchange using the referral form was properly carried out among the hospitals. However, because there is a law stating that a patient can freely chose medical facilities, there are cases in which patients receive their referral forms from a lower medical that which is an insurance standard institution without examination so that they can go to a higher level hospital, as they wish to receive better medical examinations even when they are not necessary,

In addition to the conventional insurance system for government officials and large businesses, these days, public health insurance is applied to the poor, remote-area residents, and children aged six and below. Although no doctor's fees are charged for these people, all other members of the general population must pay their medical expenses. Moreover, because public insurance does not cover visits to CHCs, there are

many patients who bypass CHCs if they are in a region in which they have easy access to upper level medical facilities. On the other hand, because, in remote areas, transportation expenses, food expenses, etc., are required to visit higher level medical facilities, patients wish to receive their medical examinations in a CHC and tend to be unwilling to go to higher level medical facilities even if referral is necessary.

In quaternary-level base hospitals, facilities and medical equipment are appropriately maintained. Also, the clinical level of doctors and nurses is improving through training so that they can now provide high-quality medical service. However, the number of patients in base hospitals is continuing to grow. This growth is induced by changes in behavior as pertains to medical examinations (based on a desire to receive high-level care by the moderately wealthy) and increasing health demand based on improvement of national economic conditions, infrastructure building, etc.

As a result, many higher-level medical facilities have bed occupancy rates reaching about 150%, and their medical staffs are anxious that their quality of medical service may deteriorate due to patient concentration. Although provincial hospitals and county hospitals tend to face the same situation, CHCs are in a quite different situation. The fact that insurance is not applied to CHCs, shortages of medical equipment, and lack of skilled medical personnel are accelerating bypass of CHCs to higher level medical facilities.

Efforts are underway to build a system that aims to improve medical worker skills in low-level medical facilities through training activities. This system is centered on low-level DOHA hospitals and the training centers established in three National Hospitals, and it seeks to solve overcrowding in higher-level hospitals. The functions of the training centers focus on training activities in the base hospitals; in other words, planning, implementation, and evaluation of training. On the other hand, DOHA activities focus on training, treatment, and clinical guidance at lower-level hospitals.

In addition, it appears that referral standards established by the Department of Health are not followed at each hospital in Vietnam, as health resources and diseases trends differ in the north and south.

In Vietnam, with the exception of Hoa Binh Province, regular meetings specializing in referral are not held. However, there is a system in which higher-level organizations teach low-level organizations, and cooperation with the health offices of local governments and medical facilities exists to some extent. Autonomous referral activity is carried out in every region. For example, in Thua Tien Hue Province of the central region, the only hospitals are county hospitals, which are secondary medical

facilities, and Hue Central Hospital, which is the National Hospital of the central region. Because there is no tertiary-level hospital, such as a provincial hospital, the Thua Tien Hue Province health office is responsible for coordination with medical facilities. In the south, Cho Ray Hospital is tackling relief of patient overcrowding and managing the referral system in cooperation with low-level hospitals. Through the dispatch Cho Ray Hospital medical specialists to county hospitals, the hospital is establishing "satellite hospitals" that provide medical treatment and perform operations in county hospitals. Although each organization is gathering and analyzing patient information and referral data, there is no information on how to use the data practically. Even though the formats of the referral form and referral statistics were developed through JICA support and information is shared between local health offices and health facilities in Hoa Binh Province, data mismatches and other problems still exist at the present time.

Concerning the patient transport system, the system's structure and transport means are not established, especially in rural areas, and patients arrange transport themselves. In Vietnam, efforts are underway to strengthen the "115" emergency system to cope with the country's many traffic accidents. In Hanoi of the north, the system provides emergency service from the spot (patient's house or scene of an accident) to hospitals as well as transport to higher-level hospitals from low-levels using ambulances in each medical facility. In addition, ambulances provided through grant aid from the government of Japan in 1993 are still being utilized and contributing to emergency patient transport. Hue of the central region is striving to improve its emergency transport functions with cooperation from Hanoi and NGOs of the United States. In Quang-tri Province, a private emergency-service company has been established that is expected to receive approval soon; this company will serve as a provincial health office. The 115 emergency system in Ho Chi Minh City of the south is unique in that it is established in Trung Vong Hospital, which is secondary-level medical care institution, and its medical facilities and emergency transport organization are under the same management. Similarly, in Tien Giang province of the south, emergency activity is carried out under the management of the Tien Giang Provincial Hospital as well as Ho Chi Minh City.

② "Improvement of accessibility to medical service of people in remote areas"

In CHCs, which are entry points for medical services, infectious diseases such as malaria, HIV, and diarrhea (diseases specified under the national health program) are treated, and prevention services against these diseases that utilize home visits are provided through village health workers in remote areas. However, in urban areas,

there are many patients who do not wish to receive medical examinations in CHCs and who therefore bypass them to visit higher-level medical facilities. Conversely, because, in remote areas, transportation expenses and food expenses are required to visit higher-level medical facilities, patients in remote areas desire to receive medical examinations in CHCs. Moreover, local interviews suggest a tendency in which such patients are unwilling to go to higher-level medical facilities, even if higher-level treatment is necessary.

③ “Transfer of information, knowledge, and technology”

With the exception of its cooperation in Hoa Binh Province, JICA cooperation to Bach Mai Hospital in the north, Hue Central Hospital in the central region, and Cho Ray Hospital in the south has been mainly focused on training activities that transfer knowledge and technology to the medical staffs of low-level hospitals, such as provincial hospitals. The aim of this cooperation is to make every hospital capable of providing proper medical services that are required based on their particular level by improving medical examination skills in rural medical facilities (such as provincial hospitals), and by reducing the number of unsuitable referral cases from tertiary-level to quaternary-level hospitals (National Hospitals) by extending the capability and the range of medical examinations that can be carried out on this level. In its Bach Mai Hospital project, JICA mainly supports DOHA activity; in Hue Central Hospital, it is strengthening the training function of the hospital’s training center in cooperation with DOHA; and in Cho Ray Hospital, it is providing in-country training courses for medical staff of all provincial hospitals in the south. Furthermore, these in-country training courses are strengthening not only provincial hospitals but also county hospitals. And transfer of referral information is being carried out through practical use of referral forms. Moreover, when a misdiagnosis in a low-level hospital is discovered, a “Two-way Information System” is in place to transfer information and provide guidance concerning the misdiagnosis from a higher-level hospital. Regular meetings between governmental health agencies and medical facilities are held. And case conferences are also carried out in some in-country training courses held in Cho Ray hospital.

(3) Promoting/Inhibiting Factors to Appearance of Achievements

① The “patient referral system”

The fact that patients’ information is properly conveyed between hospitals is an indirect effect of establishing a training system between hospitals. The training system that is described in next section resulted from the establishment of a good trusting

relationship among medical personnel that facilitates patient referrals.

② “Improvement of accessibility to medical service of people in remote area”

JICA’s projects are aimed at strengthening hospitals down to the secondary-care level. On the other hand, another donor organization is implementing a project at the community level that provides health services at the primary-care level. Coordinating with this organization would connect the primary level and the secondary level, and it is expected that such coordination would establish a referral system from the community level to higher levels.

③ “Transfer of information, knowledge, and technology”

The administrative system of Vietnam has a strong tendency toward top-down communication. Even after JICA support for DOHA activities and the in-country training courses, the approach of propagating knowledge from higher-level medical facilities to low-level medical facilities is continuing, partly due to the continuation of training on the Vietnamese side.

JICA’s projects created guidelines and manuals on clinical practices, and audiovisual aids were utilized during training. Guidelines and manuals are very effective because they can be utilized in actual practice and also in training to other medical personnel.

<Bangladesh>

(1) Referral System

In Bangladesh, there are two systems in the Ministry of Health and Family Welfare (MOHFW): the Department of Family Planning (DFP), which is responsible for "reproductive health and family planning", and the Department of Health (DH), which is responsible for other services, such as "public health services, including clinical health and prevention"; both function independently with regard to the health referral system. Among the medical facilities of the DH system, there are community health centers, county hospitals, and district hospitals. In the DFP system, the Family Welfare Center (FWC), which is an activity base for Family Welfare Visitors (FWV) and Family Welfare Assistants (FWA), is a primary-level institution. And a Maternal and Child Welfare Center (MCWC) is installed in every district as a secondary-level institution. Moreover, the Maternal and Child Health Training Institute (MCHTI) and Institute of Maternal and Child Health (IMCH), which are institutions specializing in maternal and child health, are regarded as the top referral institutions of the metropolitan area of

both DH and DFP. Also, in health care administration, DH and DFP have each installed local offices in divisions, which are constituted from several districts, districts, and counties; these offices work in cooperation with medical facilities.

(2) Cooperation by JICA

Direct support for (1) "establishment of a patient referral system" in Bangladesh involves improvement of the referral system concerning maternal and child health in the target area, mainly through resource improvement and service delivery. The content of JICA cooperation focuses on improvement of cesarean sections in county hospitals and primary health care in such areas as antenatal care and normal delivery by improving the capability of field workers, such as FWC, FWA, and CHP. However, cooperation for physical condition of medical facilities is carried out in the Department of Health system, and technical cooperation is carried out with focus on the Department of Family Planning. In the "front line maternal and child-health activity planned project", the referral system of MCH services is supported by using the Maternal and Child Health Handbook. Furthermore, in this project, inter-regional association, such as improving local health information, is also supported. In the future, cooperation among regional MCH activities is expected through local meetings held by the "protection-of-mothers service strengthening project".

Looking at (2) "improvement of accessibility", improved access to maternal and child health care in target areas is supported through improvement in the capabilities of FWAs, FWVs, and CHPs, which are the main actors as an entry point for antenatal care. This approach contributes to improvement in access to maternal-and-child health care and family planning services by improving the capability of FWV at training conducted in MCHTI through the "Project for Human Resources Development in Reproductive Health", and training of CHP in the "Participatory Integrated Rural Development Project-Family Planning".

And looking at (3) "transfer of information, knowledge, and technology", such activity leading to a referral system is not being conducted within the health system of Bangladesh, and JICA cooperation in this area has only just started through the "Safe Motherhood Promotion Project".

① The "patient referral system"

Due to social customs, there is a tendency to see women's leaving the home to receive consultation at medical facilities as undesirable. Thus, in services at the primary medical level that concern maternal-and-child health, FWVs and FWAs carry

out family planning and maternal and child health activities through home visits. Moreover, these activities are also identifying patients that need referral to upper-level care. In medical service at the secondary level, although county hospitals and the MCWC are carrying out emergency obstetrics care (EOC), EOC cannot be carried out in all areas due to a shortage of skilled people and materials. Moreover, although more referral cases can be identified now due to improvement in the capabilities of FWVs, FWAs, and Community Health Promoters (CHP) that are working as volunteers, it seems that patients do not actually go to higher-level medical facilities in many cases because means of transport are limited or traffic infrastructure, such as roads, are not properly maintained. Although in some cases discharge cards may be used as referral forms between the secondary level (county hospital) and tertiary level (prefecture hospital), such cards are not necessary. It seems that, moreover, many patients take it upon themselves to go to a higher-level hospital directly, and in many such cases they do not bring this card. Although various guidelines and referral forms that are used for family planning activities were developed with support from UNFPA, they were not being used at the time of the survey.

Although, in principle, medical expenses are not charged in Bangladesh, medicine (drug) costs, clinical testing charges, etc. are paid by patients individually. Moreover, expenses for transportation to medical facilities have become a significant burden. And, because informal payment is customary, receiving medical service places a considerable burden on the poor, who make up a large part of the national population. Furthermore, in some cases, the traditional healer of a village or doctor of a private clinic pays rebates to influential people in the region so that these people will introduce patients to their services. And there are cases where the cost of medical treatment is more than what would be paid at a public medical facility.¹

② “Improvement of accessibility to medical service of people in remote area”

People in Bangladesh first come into contact with medical care through health workers, such as HAs, FWVs, FWAs. FWVs and FWAs carry out home visits as well as family-planning and maternal-and-child health activities (antenatal care and normal delivery support), while HAs carry out public health activities, such as the Expanded Program on Immunization (EPI) and other public health activities. Through JICA cooperation, FMVs and FWAs have come to be able to perform normal deliveries as suitable neighborhood patrol health pursuers, and this has led to improved access to

¹ It appears that, despite being higher in terms of total cost, private medical services are sometimes useful for the public because they offer more flexible payment options, such as deferred payment and payment in installments, compared to public institutions,

safe delivery. Due to the abovementioned tendency to see women's leaving the home to receive consultation at medical facilities as undesirable according to social custom, neighborhood care makes up the majority of primary health care service.

Although most residents of remote and rural areas, in particular, receive health and medical services through neighborhood care but will go to FWC or a county hospital if necessary, there are also many people who receive medical services from traditional healers or traditional midwives. In urban areas, people go directly to county hospitals, prefecture hospitals, etc. in many cases. Because public health and medical services are not sufficient in remote areas, there are many districts in which NGOs are providing community medicine through contracts with the government. Therefore, there is an area-to-area gap in access to public health and medical services.

③ “Transfer of information, knowledge, and technology”

Although there is instruction between health administration and medical facilities—from the health and medical bureaus (section) of districts, prefectures, and counties and family planning offices (officers) to medical facilities—neither technical instruction that leads to a referral system nor instruction on communication of patient information is carried out. In monthly meetings at the regional, divisional, or county level, case conferences are being held; however, such conferences are not standardized.

Referral information from low-level hospitals is not fully communicated to higher-level hospitals. Although patient information is also transferred between county hospitals and district hospitals through use of hospital discharge cards, these cards do not always note sufficient information. Furthermore, there is no feedback to low-level hospitals from higher-level hospitals due to defects in the results of patient treatment or written content of hospital discharge cards. However, because FWVs and FWAs visit patients after referral with regard to MCH services, prognostic checks are performed.

Moreover, in Bangladesh's health administration system, medical education and training systems are independent from the clinical system. Consequently, personnel training activities conducted through technical transfer of clinical practices among medical facilities, which are ordinarily for training in these training institutions, are not taking place.

(3) Promoting/Inhibiting Factors to Appearance Achievements

① The “patient referral system”

In Bangladesh, inefficiency in resource allocation was caused by overlapping health services that arose from having repeated integration and separation of two

systems in the country's past health policy. For example, two obstetrics referral lines exist; one is in the DFH and the other is in the DH. Although the complexity of the two lines differs depending on the area, it largely depends on human relations between the DH system and DFP system. Thus, coordination that will create opportunities for the two sides to come together for dialog is required.

A significant achievement is the fact that the Maternal and Child Health Handbook that was created by the "front line maternal-and-child health activity planned project" is still being utilized in Chogasa district hospital when acute cases or referral cases occur. The project concerned involved the dispatch of a JOCV team, and JOCVs' modest dedication would have led to the continuation of activities.

MCHTI, which was built under Japan's grant aid scheme and whose functions were enhanced as a training organization through a JICA project, is currently functioning as a top referral facility of the metropolitan area and is conducting training courses in response to many requests. With the support of many donors, MCHTI is implementing many training programs concerning maternal-and-child health, and training by MCHTI is in continuous demand. These achievements are leading to the sustainability and functional enhancement of MCHTI as a training organization.

Although equipment for emergency obstetric care (EOC) was supplied to the county hospitals, it is not being appropriately utilized due to movement of medical specialists. This situation was caused by the fact that personnel assignment plans, which the Bangladesh side promised to implement, were not carried out.

② "Improvement of accessibility to medical service of people in remote areas"

Activities by volunteers trained in JICA projects are serving to promote the continuation of antenatal care and delivery services. Volunteers are selected from local areas; they work hard, build trusting relationships with women through their activity, and help to empower women in terms of their social standing. Moreover, the fact that volunteers receive small remuneration for delivery care, etc. as per the social customs in Bangladesh, even if health services are free, serves as an incentive to continue their activity.

In Bangladesh, home delivery is more common than hospital delivery due to religious and social factors. Especially in remote areas, families fear medical services in many cases, and they often ask a traditional doctor, FWV, etc. to examine them when their condition becomes serious. For these reasons, provision of services through home visits by FWVs, FWAs and HAs seems to be effective.

Because medical human resources are insufficient in Bangladesh, health

services are delivered in cooperation with NGOs. Services by NGOs are advantageous in that they are provided by residents of the same region and can be developed based on mutual understanding.

4. Results of cross cutting analysis based on the view points of the evaluation

From three viewpoints set up in section 2 to define “referral system” in this evaluation survey, cooperation for referral systems in three countries are analyzed comprehensively as follows.

4.1 The “patient referral system”

(1) System management aspects

Introduction of referral forms and establishment of trusting relationships among hospitals and related organizations are the keys to strengthening referral systems. Coordination between hospitals and patient transport systems also helps smooth acceptance of referred patients.

Because referral systems do not function well without proper interaction among the stakeholders of a health system, it is important for a referral system to create opportunities for coordination among the stakeholders. In the example of Bolivia, periodical referral committee meetings are utilized not only as an opportunity to solve problems concerning the referral system but also to strengthen relationships among health facilities through the building of human relations.

Moreover, because information management of referred patients is indispensable in a patient referral system, the introduction of a referral form is effective. Also useful in control of patient information is management of the referral system with suitable communication with referred patients, as patients bring referral forms containing necessary information, such as a diagnosis name, to higher-level medical facilities. Furthermore, cooperation with emergency systems that enables the timely and appropriate transfer of patients to other medical facilities is an important point for a referral system. Through the establishment of the “115” emergency system as an emergency transport organization in Hanoi, Vietnam, and installation of an emergency carrier system in a hospital in the south of the country, a direct relationship between hospital acceptance and emergency carrier systems is being promoted for proper patient examination.

(2) Resources aspects

Granting medical equipment appropriate to the level of facilities makes it possible to provide medical/health services at each level.

In all three countries, Japanese grant aid paves the way for the building of medical facilities at the tertiary and quaternary levels, supply of medical equipment for medical facilities at each respective level, and provision of medical service appropriate for each relevant level.

In Bangladesh, there are cases where equipment is not being utilized due to movement of anesthesiologists. Although institutions that should conduct cesarean sections were supplied with anesthesia apparatuses, equipment supply is problematic due to difficulties in steadily assigning proper personnel for the equipment and proper training of such personnel in the recipient country.

(3) Financial aspects

Securing finances is essential for sustainable management of the system.

In order to operate a referral system continuously, support in securing revenue resources is important. In JICA projects, although cooperation in terms of direct financial support etc. is not given, support for the building of systems that bring in revenue, such as in financial and insurance management, is. In Bolivia, the national medical insurance system (SUMI) plays a major role in referral system management and financial management system, and because it can be applied to emergency transport services, it is increasing the efficiency of insurance claims and improving accuracy to support this system. Thus, it is expected that the referral system is sustainable.

(4) Service delivery aspects

Providing training appropriate to the relevant level of medical facilities makes it possible to provide medical/health services at each level. Also, it is effective for the system to give priority to diagnosis and benefits to referred patients.

In enhancement of referral systems, effective utilization of health resources provides proper services in the hospitals at each level based on their required roles. Cooperation for the enhancement of technology, systems, and organization should be provided according to the required level. In Bolivia and Vietnam, the number of patients who can receive proper medical service is increasing, skills are being further transferred to low-level medical facilities, and the breadth of correspondence to each medical facility is expanding as a result of support for improvement in the clinical skills of personnel in

upper-level medical facilities. Thus, such support may lead to relief of overcrowding in tertiary-level medical facilities and further improvement in service quality. In Bangladesh, community health workers visit households in remote areas to provide health services, and they refer patients to medical facilities when necessary. Such a health service system is highly effective in countries like Bangladesh, where people's access to health services is problematic.

(5) Service receiver's point of view

It is important to receive the opinions of service receivers. Important criteria when patients choose the medical/health facility that they will contact first are easy physical access and quality of services.

In Bolivia, Japan Hospital sets opportunities to hear people's opinions about health services during community health festivals. The main purpose of establishing a referral system is to supply better services to people by providing treatment at the appropriate facility level at appropriate cost. This makes it important to acquire service receivers' opinions.

In addition, it is found that patients' choice of first-contact health facility depends not only on the quality of services but also easiest physical accessibility. In Bolivia, France Hospital was opened in 2006 as a secondary-care hospital to which only patients referred from lower-level facilities could visit. However, it is now functioning as a primary-care hospital because community residents around the hospital protested against it for not accepting them without referral forms. Also, in Vietnam, a questionnaire survey on patients at a primary-care facility, which is the only accessible health facility in the area, reveals that none of the respondents had ever been to another health facility.

4.2 "Improvement of accessibility to medical service of people in remote areas"

Strengthening primary-care facilities and mobile clinics as the community's first contact with health care service helps ensure people's access to health care services in remote areas. It is also beneficial to encourage community participation for health promotion as a measure of disease prevention at the community level.

In terms of the definition of "referral system" in the evaluation survey—i.e., the relationship not only between medical facilities but also between the medical facility and residents—mobile clinics and periodical home visits were effective for people for whom access to primary medical facilities is difficult. In Bangladesh, support to help women feel comfortable receiving medication at home by FWVs, FWAs and CHPs who

have been selected in the community was promoted to overcome geographical barriers to access to medical service and social customs that keep women at home.

Furthermore, health promotion as preventive care is an important role of primary medical facilities. In the FORSA project of Bolivia, health-promotion support for residents was effective, as were approaches that involved citizens' participation in municipal affairs.

Introduction and improvement of medical insurance play an important role in securing people's financial accessibility to medical/health care.

In general, people in remote areas have difficulty accessing health and medical services due to financial issues. Therefore, adoption of national medical insurance systems contributes greatly to alleviating financial barriers. In Bolivia, after the insurance system (SUMI) was applied to children aged 5 and below and pregnant women in 2003, the number of the outpatients has been increasing rapidly. However in Vietnam, when an insurance system was adopted (insurance applies if a referral form is brought from an insurance-authorized institution [county hospital etc.] to a high-level medical facility), problems arose that include patients' visiting hospitals only to receive referral forms. Nonetheless, these cases suggest that appropriate utilization of insurance is necessary to alleviate monetary barriers.

4.3 "Transfer of information, knowledge, and technology"

Establishing training systems from upper- to lower-level medical facilities helps establish trusting relationships among medical personnel, and it helps strengthen patients' referral between facilities. Training, guidelines and manuals are effective tools for transferring skills and knowledge.

Based on patient information in the referral form, a case conference is held with proper stakeholders. The conclusions of this meeting are then fed back to low-level medical facilities. This helps improve the medical examination capability of each medical institution.

Use of guidelines and manuals was found to be effective in transferring skills and knowledge in three all countries. In Bolivia, developing pocket-size guidelines was successful because such guidelines can be carried in the pocket for use in diagnosis. In Vietnam, trained doctors at upper-level hospitals utilize the guidelines and manuals to teach skills to doctors at lower-level hospitals. This process of transferring skills helps to establish trusting relationships among health personnel that lead to smooth patient referrals.

4.4 Process of establishing Referral system by JICA Cooperation

In cities, where population is concentrated, strengthening upper-level hospitals is the first priority. After this is completed, strengthened hospitals then transfer medical skills to lower levels. This top-down approach ultimately establishes a referral system. In rural areas, where population is scattered, the first priority is to secure people's access to health services in remote areas. In the process of upgrading health services for all, coordination with upper-level hospitals is inevitable. Establishing such coordination ultimately develops into a referral system.

In cooperation for referral system improvement, it is important to determine the kind of approach that should be taken and to choose the level at which cooperation will be targeted. Looking at the examples of this evaluation survey in terms of cooperation history, in Bolivia and Vietnam, cooperation consequently began with strengthening of the top-level medical facilities that eventually moved down to low-level facilities. On the other hand, in Bangladesh, cooperation started with efforts to improve people's access to health services at the community level. Although differences among these approaches are influenced by the historical background of Japan's cooperation strategy in the health and medical sector, which in the past put importance on support for high-level hospitals, whether the place is an urban or rural area and the difficulty of access to medical service are also influential.

Table 2: Key issues extracted from the above crosscutting analysis are as follows.

Viewpoint of evaluation	Key Issue
① Patient referral system	<ul style="list-style-type: none"> a. Coordination among stakeholders b. Means of transferring patient information c. Coordination with emergency system d. Sufficient medical facilities and equipment e. Support to secure operational cost f. Strengthening of diagnostic skills g. Appropriate deployment of primary-care facilities and infrastructure
② Improvement of accessibility to medical service of people in remote areas	<ul style="list-style-type: none"> a. Establishment of primary-care facility as a first contact b. Service delivery to remote area c. Community participation d. Health insurance
③ Transfer of information, knowledge, and technology	<ul style="list-style-type: none"> a. Case conference and feedback system b. Guidelines and manuals c. Technical transfer of clinical practices
Process of establishing a referral system through JICA Cooperation a. Urban area b. Rural area	

5. Lessons Learned and Recommendations

Based on key issues in referral system improvement extracted by crosscutting analysis, lessons learned and recommendations are summarized as follows.

5.1 The “patient referral system”

a. Coordination among stakeholders

It is desirable that various organizations gather and stakeholders discuss a referral system. In order to reflect issues related to the referral system and the results of coordination among medical facilities on health policy, it is also desirable to involve the health offices of national/local government and to authorize institutions as a public system in the health sector. Participants should be not only personnel from health facilities but also all organizations related to the referral system, such as government health offices, emergency systems, and health-related NGOs. Because communicating face to face and getting to know one another well through such opportunities contribute to referral system configuration, setting periodical meetings is also effective.

b. Coordination with emergency systems

Preparing systems for appropriate acceptance of emergency patients in hospitals is an important role of referral systems in efforts to relieve overcrowding at higher medical facilities. In Bolivia, because demand for tertiary hospitals may exceed their capacity, there are times when they cannot accept emergency patients. To overcome this problem, communication and coordination between hospitals and emergency services are essential. Moreover, in order that low-level medical facilities may send referral patients, it is important to develop guidelines on the procedure for requesting ambulances and for communicating with higher-level facilities. Furthermore, cooperation with other sectors (such as fire departments, as is the case in Japan) would be also effective in reducing operational expenses.

c. Introduction of referral forms

In addition to the patient’s name and address, information on referral forms should include the diagnosis, symptoms, primary-care treatment, and the doctor in charge. This information is also useful in case conferences and feedback and instruction to referring hospitals. Because copies of referral forms are utilized at several levels (for example, for the hospital, for the patient, and for the hospital of referral), it is advisable to introduce simple entry methods, such as use of carbon paper.

Another effective use of the referral form is as a means of giving incentive for patients by, for example, exempting them from fees for first-time visits when they bring

the form. This would contribute greatly to efforts to decrease bypassing patients and ease congestion at upper level facilities.

d. Sufficient medical facilities and equipment

One of the important purposes of the referral system is suitable resource allocation. For example, providing ultrasonographies, endoscopes, artificial dialysis machines, etc. at upper-level facilities would be effective. At the community level, providing community health workers with sphygmomanometers could be considered.

e. Securing operational cost

In a referral system consisting of several stakeholders, it is essential that each related organization be managed appropriately. Therefore, a system for securing revenue system should be secured. When a public medical insurance system exists, insurance income becomes a main medical source of revenue, and therefore support for rationalization of insurance claims should be considered. For example, JICA supported the establishment of emergency systems as autonomous bodies, utilizing revenues from public health insurance.

f. Strengthening diagnostic skills

In order to enhance a referral system for suitable resource allocation, it is important to provide medical examinations in which each medical facility is in line with the referral system. As an example, technical transfer by JICA experts or in-country training could be considered. Standards for each referral level need to be instituted according to national or regional disease trends and existing resources, etc.

g. Appropriate deployment of primary-care facilities and infrastructure

Appropriate allocation of primary-care facilities and infrastructure is a crucial aspect of referral systems. Especially in rural areas where population is scattered, the location of primary-care facilities and whether or not transportation infrastructures such as roads and bridges to the facilities need to be developed must be taken into consideration.

5.2 “Improvement of accessibility to medical service of people in remote areas”

a. Establishment of primary-care facility for initial care

Providing health information through household visits or at community events to encourage patients to go to primary-care facilities for initial care is effective.

Establishing good relationships between the staffs of primary-care facilities and the community is important. Training on communication skills with patients could make a contribution here.

b. Service delivery to remote areas

Mobile clinic services are necessary in areas where access to primary medical facilities is difficult. Mobile clinic services and home visits are required to overcome not only geographical problems to access but social customs that restrict that women should stay at home. Even if such customs exist, easier access to medical examinations can be provided by community health workers selected from the community. Also, mobilization of existing resources such as village doctors, traditional healers, and traditional birth attendants (TBA) can be effective, as they are trusted by community.

c. Community Participation

Although it is important that people visit primary medical facilities first in the referral system, health promotion is also important at the community level to mitigate residents' medical burden. Because every person has to practice health promotion voluntarily, supporting people-centered health activity is effective. Promoting health and preventing diseases is expected to lower people's medical expenses.

d. Health Insurance

Introducing health insurance systems is effective for those who have financial difficulties that impede their access to health services. However, when a health insurance system is introduced, it is often the case that patients go for better services at upper-level hospitals, which causes patient congestion. In order to avoid or solve this problem, one measure could be the establishment of a rule stating that health insurance can be applied at an upper level only when the patient brings his/her referral form. Giving some form of incentive that uses health insurance can contribute to the success of the referral system.

5.3 “Transfer of information, knowledge, and technology”

a. Case conferences and feedback system

Case conferences are useful for the staffs and persons concerned of higher-level and lower-level medical facilities, and they improve the referral system through feedback of conference results.

b. Guidelines and manuals

Guidelines and manuals are effective tools for strengthening clinical skills. Also, specification of referral standards for each level in guidelines helps health personnel recognize their own roles in the system.

c. Transfer of clinical skills

Clinical practices training from higher-level medical facilities to lower-level medical facilities builds trusting relationships among these facilities through direct visits by higher-level doctors to lower-level facilities. It also helps strengthen cooperation that could result in smoother patient referrals.

5.4 Process of establishing a referral system through JICA cooperation

It is important to consider how and from which levels cooperation should be implemented according to characteristics of the targeted country and limited aid budgets. In this section, cooperation procedures that use components extracted from the analysis will be introduced. In 5-1-1, process 1-3 presents an example of input steps when planning a project; it applies to planning of both projects of several phases and single projects. It can be also utilized as a checklist of whether or not each component already exists or needs development.

Table 3: Process of establishing a referral system by component

Component	① Patients' referral system							② Accessibility to health services for people in remote areas				③ Transfer of information, knowledge and skills	
	Coordination among stakeholders	Means of transferring patient information	Coordination with emergency systems	Facility and equipment	Securing operational cost	Strengthening diagnostic skills	Deployment of primary-care facilities and infrastructure	Strengthening primary-care facilities	Service delivery in remote areas	Community participation	Health insurance	Transfer of clinical skills	Guidelines and manuals
Urban	1			○	○	○						○	
	2	○	○	○						○	○		○
	3						○	○	○	○			
Rural	1			○			○	○	○		○		
	2			○	○	○			○				
	3	○	○							○		○	○

(1) Urban areas

In urban areas where population is concentrated, infrastructure and transportation are generally developed, and therefore people's physical access to health services is most likely secured. In such cases, the first step to be taken is to strengthen upper-level hospitals. When demand for medical service increases because of economic development or population expansion in urban areas, the appropriate allocation of health/medical resources and expansion of lower-level hospitals' capacity must be considered.

The key point for cooperation in urban areas is the implementation of some form of measure that can decrease the number of patients bypassing lower-level facilities to go to upper-level hospitals. One example is utilization of referral forms for fee exemption for first-time visits, and another is utilization of health insurance. Strengthening lower-level facilities with such measures helps establish or improve the referral system as a whole.

(2) Rural areas

The key for cooperation in rural areas is to secure people's access to basic health services. Existing medical resources, such as village doctors, traditional healers, and TBAs, are effective because they are trusted by the community. After securing people's access to primary-care facilities, coordination with upper-level facilities will be needed to provide higher-level services. In this process, establishing coordination meetings and introducing referral forms will build coordination between hospitals and ultimately establish the referral system.

本 文

第1章 評価の概要

1.1 評価調査の背景

限られた資源と人材で人々に医療サービスを提供することは、十分な保健医療制度が整備されていない開発途上国にとって、国家レベルの重点課題となっている。植民地時代に宗主国によって建設された病院が、独立後も診療病院として機能していても、都市部の限られた人々しか利用できず、地方に住む人々は病院へのアクセスがほぼ無いに等しいのが現状である国も多い。国の政策により県や郡レベルへの病院が建設されても、必要機材や技術の不足のため十分に機能しない場合が多く、地域における裨益人口は依然少ないのが実状である。

2000年の国連ミレニアムサミットにおいて採択された、国連ミレニアム開発目標（以下MDGs）では、乳幼児死亡率の減少、妊産婦の健康の改善、感染症対策といった保健医療分野の課題が優先して解決されるべきと位置づけられている。これらの課題解決のために様々な援助機関により個別の疾病や、限定したターゲットに焦点をあてた協力や研究が行われてきた。しかしながら、世界保健機関（WHO）による「Task Force on Child Health and Maternal Health」報告書（2005）にも見られるように、地域の末端までサービスが行き届くための組織整備なしにはMDGsの達成は不可能であり、高次医療施設から地域住民を繋ぐ保健システム改善への協力が有効な援助であるという認識が世界的に高まりつつある。

JICAでは、母子の健康改善や感染症対策の強化が持続的に行われるために、保健サービスを提供する保健システムの改善を重点課題のひとつとして掲げている。保健システムにおいて中央から地域の末端までサービスが行き届く連携体制として（基幹病院－県病院－郡病院－地域ヘルスセンター－コミュニティクリニックなどの）リファラル・システムが重要な柱であり、JICAでは、医療施設（3次、2次、1次）の機能強化と共に、サービスが届きにくい地方の農村部や山間部を繋ぐリファラル・システム整備に重点を置いたプロジェクトや、リファラル・システム整備が直接の目的でなくてもその要素を含む協力を実施してきている。対象国の政治・経済・地理的条件などによって、リファラル・システムのあり方は当然異なり、JICAも相手国の状況に応じて異なった展開による協力を行ってきた。したがって、これまでのリファラル・システム整備に係わる協力の実績を体系的・包括的に評価し、より有効かつ効率的なアプローチを明らかにすることは現在の大きな課題である。

1.2 評価調査の対象

本評価では、これまでJICAが比較的長期にわたり、リファラル・システム整備のための直接的/間接的支援を行ってきた事例として、ボリビア、ベトナム、バングラデシュにおける協力を評価対象とする。ボリビアにおいては、対象県の中央病院強化とそれと連携した地域医療サービス提供への協力を約20年にわたって実施している。ベトナムでは、主要3都市の中核病院強化と、各病院の管轄地域における2次医療施設との研修体制構築を通じ

た病院間の連携強化に加え、郡レベル以下において地域保健に係る技術協力を実施している。バングラデシュへの協力は、母子保健・リプロダクティブ・ヘルス分野において、中央での保健人材育成とともに、郡レベル以下をターゲットとしたプロジェクトが行われてきており、母子保健の課題から間接的にリファラル・システム整備に貢献している。これらの対象案件群を整理し、JICA の協力によって整備されてきたリファラル・システムのインパクト、有効性を比較分析することで、今後の同分野への協力における提言・教訓の抽出を行うこととする。評価対象案件は表 1-1-1 のとおりである。

表 1-1-1 評価対象案件リスト

国名	プロジェクト名	協力スキーム	協力期間
ボ リ ビ ア	サンタクルス総合病院建設	無償資金協力	83年～85年
	サンタクルス総合病院プロジェクト	技術協力	87年～92年
	サンタクルス医療供給システムプロジェクト	技術協力	94年～99年
	サンタクルス県地域保健ネットワーク強化プロジェクト	技術協力	01年～06年
	サンタクルス地方公衆衛生向上ミニプロジェクト	個別専門家チーム派遣	96年～99年
ベ ト ナ ム	ハノイ市医療機材整備計画	無償資金協力	93年～94年
	バックマイ病院改善計画	無償資金協力	97年～00年
	バックマイ病院プロジェクト	技術協力	00年～05年
	バックマイ病院地方医療人材研修能力強化プロジェクト	技術協力	06年～09年
	ホアビン省総合病院改善計画	無償資金協力	04年～05年
	ホアビン省保健医療サービス強化プロジェクト	技術協力	04年～09年
	フエ中央病院改善計画	無償資金協力	2003年
	中部地域医療サービス向上プロジェクト	技術協力	05年～10年
	チョーライ病院建設	無償資金協力	71年～74年
	チョーライ病院プロジェクト	技術協力	95年～99年
	チョーライ病院臨床技術研修	在外技術研修	99年～03年
	南部地域保健医療人材能力向上研修	在外技術研修	04年～09年
バ ン グ ラ デ シ ュ	母子保健研修所 (MCHTI) 改善計画	無償資金協力	97年
	リプロダクティブ・ヘルス人材開発プロジェクト	技術協力	99年～04年
	地域住民参加型家族計画フェーズⅠ	開発福祉支援	98年～01年
	地域住民参加型家族計画フェーズⅡ	開発福祉支援	01年～04年
	リプロダクティブ・ヘルス地域展開プロジェクト	開発パートナー事業	01年～04年
	緊急産科ケアサービス強化計画	無償資金協力	2001年
	母性保護サービス強化プロジェクト	技術協力	06年～10年

(注) 斜字体の無償資金協力案件は、技術協力案件との連携を評価するものであり、直接の評価対象としない。

1.3 評価調査の方法

調査方法としては、対象案件に係る過去の評価関連報告書等による文献調査を行い、その結果を基に現地調査では、関係者へのインタビューとアンケート調査を実施した。

評価設問は以下のとおり。

1. 対象国における JICA の保健医療分野案件群は、各対象国においてどのようなプロセスでどのようなリファラル・システムを整備してきたか。
2. 各対象国におけるリファラル・システム整備への協力は、①患者紹介システムの確

立、②農村部や遠隔地域の人々の医療サービスへのアクセス確保、③情報・知識・技術の伝達、の視点から有効であったか。(第2章 2.3 リファラル・システムの定義参照)

3. 効果発現の貢献・阻害要因の分析を通じて抽出される、教訓・提言は何か。

1.3.1 保健医療分野における国際潮流とリファラル・システムの役割

最初に保健医療分野における国際的潮流を歴史的な動きを踏まえて概観する。その動きの中で、リファラル・システムが占める重要な位置づけとその役割について説明し、日本をはじめとする先進諸国におけるリファラル・システムが担う役割を確認する。その上で、途上国におけるリファラル・システムが果たすべき重要な役割を分析し、①患者紹介システムの確立、②農村部・遠隔地の人々の医療サービスへのアクセス確保、③情報・知識・技術の伝達、という3点に整理した。本評価では、対象案件群の評価にあたり、これらを分析の枠組みとして用いた。

1.3.2 国ごとの評価分析

対象国ごとに JICA の協力のアプローチを上記3つの評価の視点に沿ってまとめ、協力の流れ/展開についても整理する。さらに、各対象国のリファラル・システムにおける JICA 協力の位置づけを明確化し、これら協力の効果について検証した。

1.3.3 横断分析と教訓の抽出

1.3.2 を踏まえ、各国のリファラル・システム整備への協力について包括的に考察する。さらに、今後のリファラル・システム整備に対する JICA の協力アプローチ、協力展開についての教訓を検討する。

1.4 評価調査の実施プロセス

1.4.1 評価検討委員会

本評価の実施体制は、JICA 企画・調整部事業評価グループを主管とし、人間開発部第三グループ(保健1)、外部有識者(評価アドバイザー)から構成される評価検討委員会を設置した。この他検討委員会では、必要に応じ対象案件の担当職員の同席も得て、案件に関する情報提供や調査方針に関するコメントを求めた。のべ8ヶ月間、計6回の検討委員会での議論を踏まえ、本報告書の執筆・取りまとめを行った。

【評価アドバイザー】

秋山 稔 (国立国際医療センター国際医療協力局派遣協力第二課派遣協力専門官)




三好 知明 (国立国際医療センター国際医療協力局派遣協力第二課派遣協力専門官)




【評価コンサルタント】

(株)フジタプランニング

1.4.2 調査工程

表 1-1-3 調査工程

	2007年2月	3月	4月	5月	6月	7月	8月	9月
国内作業								
現地調査								
検討委員会	☆		☆	☆	☆		☆	

 ボリビア
  ベトナム
  バングラデシュ

1.4.3 調査団の構成

本評価は2007年2月から2007年9月まで実施された。国内準備作業に続いて、調査対象3カ国（ボリビア、ベトナム、バングラデシュ）への現地調査を2007年3月末から6月上旬にかけて実施。調査団員の構成は表1-1-4のとおりである。

表 1-1-4 調査団員構成

(ボリビア)

氏名	担当分野	所属	調査期間
田中 章久	総括	JICA 企画・調整部事業評価グループ テーマ別評価チーム主査	3月10日～19日
秋山 稔	リファラル・システム	国立国際医療センター国際医療協力局 派遣協力第二課派遣協力専門官	3月10日～19日
阿部 久美子	評価監理	JICA 企画・調整部事業評価グループ テーマ別評価チームジュニア専門員	3月10日～19日
鈴木 修一	評価分析	(株)フジタプランニング	3月10日～27日

(ベトナム)

氏名	担当分野	所属	調査期間
秋山 稔	総括/リファラル・システム	国立国際医療センター国際医療協力局 派遣協力第二課派遣協力専門官	4月15日～26日
阿部 久美子	評価監理	JICA 企画・調整部事業評価グループ テーマ別評価チームジュニア専門員	4月15日～26日
杉田 雅子	評価分析	(株)フジタプランニング	4月15日～5月5日

(バングラデシュ)

氏名	担当分野	所属	調査期間
三浦 和紀	総括	JICA 企画・調整部事業評価グループ長	5月21日～29日
秋山 稔	リファラル・システム	国立国際医療センター国際医療協力局 派遣協力第二課派遣協力専門官	5月21日～29日
阿部 久美子	評価監理	JICA 企画・調整部事業評価グループ テーマ別評価チームジュニア専門員	5月21日～29日
鈴木 修一	評価分析	(株)フジタプランニング	5月21日～6月2日

第2章 保健医療分野における国際協力動向とリファラル・システムの位置づけ

2.1 保健医療分野の国際動向とリファラル・システム

保健医療分野は個別の疾病から政策、制度など様々な課題があるが、それらは各国の社会、文化、経済、地勢などの要因により異なり、それらを整理し包括的にまとめることはそれだけでひとつの研究テーマとなるほど密度の濃いものである。本項では、保健リファラルに関係が深いと思われる事項を抽出し、その状況、動向を整理した。

2.1.1 疾病構造の国際状況とリファラル・システム

先進国においては、感染症の克服、そして慢性疾患への取り組みという Health Transition（健康転換）を技術革新、医療資源及び財源の確保、保健医療制度の構築などにより乗り越えてきた歴史があるが、その背景には保健医療分野を支えられる経済成長があった。現在、高齢化（Aging）社会における医療制度の構築、設計が急務であるが、これは先進国のみの問題ではなく、急激な高齢化が進む一部の途上国においても重要である。特に、中国や台湾、韓国、タイなどのアジア諸国は、将来、経済的基盤が未成熟な中で、老齢医療に大量の医療資源を割かれる可能性が高い。

感染症については、近年、その脅威は徐々に減少しつつあったが、新興感染症（SARS や鳥インフルエンザなど）の流行（Pandemic）防止、日本を含む先進国での再興感染症（結核など）への対策など、未だに全世界的な取り組みが重要となっている。

途上国では、経済成長による下支えがない状況で、感染症対策と慢性疾患対策を同時に抱え込むという二重の負担を抱えており、国際的な支援が欠かせない状況となっている。

途上国への支援は、もともと植民地における自国民の医療サービス確保の目的で実施されてきた（19世紀以前）。その後支援は、植民地諸国の独立以降（1950、60年代）、西洋医学モデルの移転として、主に都市部の教育病院や先端医療を実施できる大病院を中心に実施されてきた。しかし、医療資源やサービスの、都市部や富裕層への集中に対する批判から、「ベーシック・ヒューマン・ニーズ」（Basic Human Needs）を基にした公平、公正、平等な医療サービスの提供を目指す様々なアプローチが模索され始めた。1978年「アルマアタ宣言」のプライマリ・ヘルス・ケア（Primary Health Care, PHC）、1986年「オタワ憲章」のヘルス・プロモーション（Health Promotion）、1994年「リプロダクティブ・ヘルス/ライツ」（国際人口開発会議：カイロ）、1995年「人間中心の開発」（社会開発サミット：コペンハーゲン）、1996年「DAC 新開発戦略」（DAC 上級会合）などを通じて、保健医療の臨床施設の基盤整備から疾患別プログラム、予防接種拡大プログラム（EPI）、母子保健プログラム、コミュニティ・ヘルス（Community Health）などのアプローチが実施されるようになった。このような流れを受けて2000年9月の国連総会において「ミレニアム開発目標（Millennium Development Goals, MDGs）」が採択された。保健医療では妊産婦死亡率や新生児死亡率、HIV/AIDS やマラリアなどの罹患率の削減が指標として掲げられている。

上述のように途上国への保健医療支援が、都市部の大病院中心の医療から地方の予防、保健啓発、PHC に移行することにより、保健医療へのアクセスの向上、そして予防可能な、あるいは簡易に治療可能な疾病の罹患率、死亡率が減少につながった。それに伴い、PHC では対処できない疾病への対処が求められるようになった。特に出産時の合併症への処置や帝王切開が実施可能な施設が必要となり、地域の拠点病院及び地域の診療所から病院へのリファラル・システムの構築が求められるようになった。つまり1次医療サービスの展開から、1次レベルの対処できないサービスの提供拠点としての2次医療施設の整備、そして両サービス間のリファラル・システムが求められた経緯がある。

2.1.2 保健医療政策の国際動向とレファラルシステム

一方、保健医療政策の側面を見ると、先進国は既に3つの波（革命）を乗り越えてきている。20世紀から21世紀の世紀の変わり目に、世界各国で医療事故が相次ぎ、医療安全における概念、患者安全（Patient Safety）が提唱され、その後、質と安全を併せて捉える考えが世界に広がった。現在は、患者安全と医療の質の包含が謳われるような状況である。

表 2-1-1 医療の3つの波（革命）

1950 1960	第1次医療革命 拡張の時代 病院急増、医師増加、医療の技術革新 医療保険カバー拡大
1970 1980	第2次医療革命 医療費の抑制時代 医療費急増は国民総生産4%から11% 政府雇用主支払い拒否 マネジドケア、前支払い制度 総額予算制、医療計画による規制、技術評価
1990	第3次医療革命 評価と説明責任の時代 OutCome (Management) Movement 公平、満足できる質、適合性、適正価格、安全性を目指す

出所: Arnold S. Relman, (1988) (ニューイングランド医学誌をもとに作成)

米国では2003年から厚生省の質研究庁（AHRQ）が国レベルと州レベルで179の指標を用いて医療の質を測定し、毎年公表している。そしてさらに質に基づく医療行為の支払い方式（Pay for Performance）の測定手法として今一度臨床指標が注目を浴び、米国医師会自ら適切な100の臨床指標を選定するといった種々の活動が展開されている。英国でも20世紀の終わりに医療事故が国民的関心となり、その解決の方法として当時の英国国営医療（NHS）病院局長のドナルドソン卿を中心に臨床統治（クリニカルガバナンス）が病院経営の理念として提唱された。日本では1999年の横浜市立大学病院における「患者取り違え事件」以降、国民の医療への信頼が損なわれ、医療事故の予防は医療界への最大の課題の一つとなっている。この間、国民の関心は次第に医療の質へと移行し、各施設の質評価が相次いで出版され、学会でも手術例を集めて医療の質を測って改善するプロジェクトが開始され、厚生労働省も

質の研究費を2004年頃から本格的に開始した。

先進各国では、医療サービスの安全から質へ、そして満足の時代に差し掛かっており、さらに患者の疾病サイクルに合わせた患者中心の医療サービス供給体制の構築が求められている。

一方、途上国の保健医療政策を見ると、まずオイルショックに端を発した累積債務問題への対応として実施された、世界銀行による構造調整融資の影響が大きい。その融資条件（コンディショナリティ）には、緊縮財政、国営企業の民営化が含まれており、元々公的支出が大きく、非営利分野である保健医療セクターはますます縮小され、その結果、ドナーによる縦割りプログラムのみが機能する状況となった。その後、個々の縦割りプログラムの有効性への限界から多くのドナーや国際機関が途上国の保健医療分野の包括的長期開発戦略の策定を援助の対象とするようになった。1993年に発行された世界銀行の世界開発報告「健康への投資」ではヘルス・セクターリフォーム（Health Sector Reform, HSR）が取り上げられ、保健システムの4つの課題（「不適切な配分」、「不公平」、「非効率」、「医療コストの激増」とその改善のための3つのポイント（「家庭の健康増進を可能にする環境作り」、「保健への政府投資の改善」、民間セクターの関与の促進」が掲げられた。¹

その後、各ドナーのセクター・ワイド・アプローチ（SWAPs）の下、保健セクターも被援助国政府のオーナーシップの下で、共通のアプローチを採用し、すべての資金に対する拠出および管理を行う国々もある。

先進国では「第2次医療革命 医療費抑制の時代」に突入した際、医療資源の最適配分を図る手段の一つとして、リファラル・システムの構築が試みられている。つまり1次レベルでは簡易な疾患を対象とし、2次、3次レベルでは、より高度な診療を行うことにより、簡易な疾患に対する高度医療の無駄遣いを削減する、ひいては医療費の上昇を抑制することを目指している。また途上国においても、ヘルス・セクターリフォームの一環として医療資源の適正配分が謳われることとなり、リファラル・システムの構築が模索されることとなった。

2.2 リファラル・システムの現状

2.2.1 先進国のリファラル・システム

日本では、医療制度は「かかりつけ医」制度から「病診連携」「医療・介護連携」に移行しつつある。2005年に取りまとめられた「医療制度改革大綱」に沿って「国民の医療に対する安心・信頼を確保し、質の高い医療サービスが適切に受けられる体制を構築するため、患者等への医療に関する情報提供の推進、医療計画制度の見直し等を通じた医療機能の分化・連携の促進、地域や診療科による医師不足問題への対応等の措置を講ずる」ための医療法等の改正が検討されている。

¹ World Bank (1993) P3-6

日本には、約 9,000 の病院と約 90,000 の診療所があるが、病院の 78%、診療所の 95% が民間施設であり、行政が直接的連携を推進することは困難である。実際はモデル事業への補助金や、診療報酬制度による誘引を行い、連携を進めている。

表 2-2-1 日本の医療連携の系譜

第 1 期	「かかりつけ医」強化のための連携 (80 年代中期～90 年代)
	「かかりつけ医」推進モデル事業 開業医から病院への働きかけ
第 2 期	病院経営のための病診連携 (90 年代後期～)
	診療報酬点数による誘導 (平均在院日数の短縮、「紹介率加算」) 急性期病院の経営のための連携(地域医療連携室)
第 3 期	患者中心の医療のためのシステム連携
	紹介率加算の廃止、連携パス加算 前方・後方連携、予防・救急・急性期・回復期・慢性期・末期までの継続した連携

出所：種田憲一郎他 (2006)

先進諸国のリファラル・システムは、保健医療財源のタイプにより大まかに分けることができる。

保健医療財源が税により賄われている英国では、NHS のもと、医療サービスのほとんどが公的サービスかつ無料である。住民は地域の「かかりつけ医」に登録をし、そのかかりつけ医の指示のもと、病院へ紹介される。このように、かかりつけ医がゲートキーパーを果たすリファラル・システムが構築されている。スウェーデンも医療サービスは、税によって賄われており、1994 年に家庭医制度が導入されたが、現在は廃止されている。かかりつけ医（家庭医）制度の問題としては、待機患者が多く発生し、ファーストコンタクトのみならず紹介された病院にかかるために長期間の待機が必要となることが問題となっており、両国ともその対策に力を入れている。

表 2-2-2 先進国のリファラル・システム

国名	医療システムの状況	リファラルシステム
イギリス	税金により全国民が公的保健医療サービスを無料で受診できる(NHS:国民保健サービス制度)。なお、国民は任意により民間保険にも加入することもできる。	救急の場合を除いて、あらかじめ登録しているかかりつけ医の診察をまず受け、かかりつけ医の判断に基づき適当な病院へ紹介される。
スウェーデン	公的セクターが提供主体になっており、県のランディング税(地方税)を主な財源としている。承認されていない民間開業医等を受診する場合は全額患者の自己負担となる。	以前導入されていた家庭医制度は廃止されたが、プライマリケアにおいて特定の医師とのコンタクトを選択することができる。通常、外来診療では診療所もしくはプライマリケア施設で初診を受ける。
ドイツ	国民の90%以上が、公的医療保険に加入しており、公務員、自営業者等は民間医療保険に加入することができる。	開業医(診療所レベル)の診察を受け、その紹介をもとに適当な施設を持った病院へ行く。ただし、患者が直接専門医にかかることが禁止されている訳ではない。 開業医の選択は自由にできる。
フランス	国民皆保険制となっており、国民の80%は被用者保険に加入している。公的病院における外来医療の場合は償還払い、入院医療の場合は自己負担分のみ施設に支払う。民間病院の場合はいずれも償還払いが適用される。	医療機関選択の完全な自由が認められている。16歳以上の患者はすべてかかりつけ医を選択する制度が導入されているが、かかりつけ医の紹介なしにも他の医師にかかることができる。
アメリカ	公的医療保険制度は高齢者に対するMedicare(連邦政府による)と低所得者に対するMedicaid(連邦政府・州政府による)のみで、現役世代は民間医療保険が中心となっている。	プライマリケア医(診療所レベル)を受診し、そこで推薦された専門医にかかる。専門医は自ら契約する病院の機器、病床を使って治療を行い、退院後も継続してケアを行う。病院では外来患者を受け付けない。

出所：医療経済研究機構による各国医療関連データ集より作成

ドイツでは、保健医療財源は公的保険によって賄われている。患者は、開業医については自由に選択できるが、病院へのアクセスは、一般開業医による紹介が必要であり、疾病金庫(公的保険)の患者は、この紹介をもとに、適当な施設を持った病院へ行くことになる。ただし、患者が直接専門医にかかることは法律で禁止されているわけではない。同様に公的保険によって賄われているフランスではイギリスのように Gate Keeper としての「かかりつけ医」を試験的に導入し、16歳以上の患者はすべて自分の「かかりつけ医」を選択することになる。しかし、患者はかかりつけ医の紹介状なしに、他の医師にかかることもできる。また医療情報システムの構築が進められており、医療職は患者についての情報を共有することにより、試行中の「かかりつけ医」システムと組み合わせ、質の高い診々連携・病院連携体制の構築を目指している

米国では、保健医療財源の大半が民間保険で賄われており、患者は通常、まず近所で診療所を開業するプライマリケア医を受診し、その後プライマリケア医の推薦する専門医にかかることになる。また基本的に病院には医師は居らず、患者の主治医が診断から治療まですべてのプロセスに関与する。病院は診断サービスやベッド、施設を提供するのみで、施術後はすぐに退院するが多い。長期間の療養が必要な患者はナーシングホームに入所し、そこでケアを受ける。基本的に個人もしくは会社が掛けている医療保険によって受診できる医師、医療サービスが決められるため、患者は自由に医師や病院を選択することは出来ない。

この様に先進国のリファラル・システムは保健医療システムへの公的機関の関与が大きいほど、行政による強制力の高いシステムとなっている。逆に保健医療システムにおける民間の割合のほうが多い場合は、直接的な施策ではなく、インセンティブ等を通じた誘導によるリファラル・システムが推進されているといえる。

2.2.2 開発途上国のリファラル・システム

開発途上国のリファラル・システムに関する幾つかの先行研究からは、主に1次レベルから2次レベル医療施設へのリファラルが考察されているものが多いが、うまく機能していないことが確認されている。表 2-2-3 からわかる通り、パキスタンの事例では、1次医療施設の人材不足に加え質の悪さが原因で、1次医療施設が多くの人々に利用されていない現状がある。ジンバブエの例では、1次、2次レベルで対応可能な疾患が上位医療施設へ多くリファーされていることから、下位医療施設が適切に機能していないことが伺える。

表 2-2-3 開発途上国のリファラル・システムに関する先行研究

調査者	方法	対象国・分野	結果
Susan F. Murray etc.	文献調査	緊急産科ケア	多くの途上国の保健システムは女性(特に虐げられた人々)の緊急産科ケアへのアクセスの最適化に失敗している。
Susan F. Murray etc.	既存統計	ザンビア・産科	地域医療サービスの責任者がリファラルにおける活動、判断を行う場合、様々な情報をモニタリングすることが重要である。
S Sddiqi etc.	インタビュー(施設、患者)、既存統計	パキスタン・一次医療施設	質の悪さ、医師の不在などの理由で、近隣の一次医療施設を利用しない家庭が50%以上であった。またリファラル患者は6.5±5名/施設で15%しか、紹介用紙を持っていなかった。更に上位施設からのフィードバックはなかった。
Ohara etc.	カルテ調査	ホンジュラス	リファラル率は中央病院15.5%、リージョン4.0%、地域2.8%、保健センター0.8%で、院長がリファラルの重要性を強調していた施設ほど高かった。紹介用紙は病院で70-80%で保健センターでは60%の利用率であった。
D Saners etc.	カルテ調査	ジンバブエ・肺炎及びマalaria	肺炎(小児)で50%、マalaria(大人)で80-50%リファーされている。大半の患者は1次、2次レベルケアで十分にもかかわらず、3次レベル以上の施設で診療を受けている。リファラルネットワークの不備は中位の施設の強化で改善可能である。
John S Akin and Paul Hutchinson	施設調査、家庭調査	スリランカ	バイパス(直接上位施設に掛かる行動)は収入差ではなく、疾病がより重篤なケースほど多くなる傾向がある。

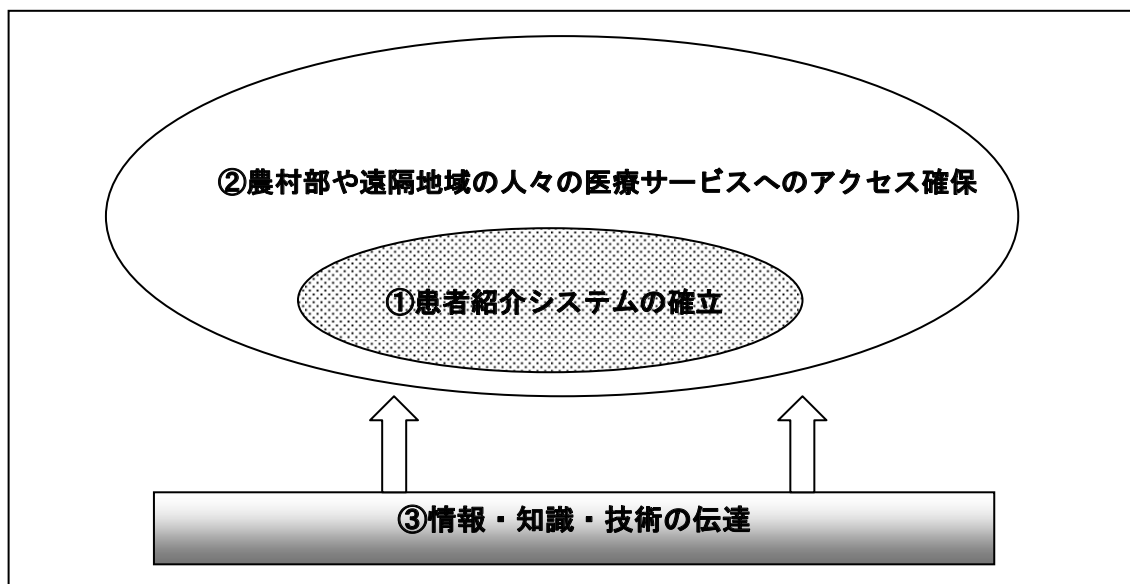
出所：評価チーム作成

多く開発途上国では、資源や人材が限られていることから、必ずしも先進国のようなリファラル・システム整備が可能ではない。植民地時代に宗主国によって病院が建設され、独立後も診療病院として機能しているものの、都市部の限られた人々しか利用できず、地方の人々は病院へのアクセスがほぼ無いに等しいのが現状である国も多い。国の政策により県や郡レベルへの病院が建設されても、必要機材や技術の不足のため十分に機能しない場合が多い。

2.3 リファラル・システムの評価の視点

前述の通り、先進国における一般的なリファラル・システムとは、①下位医療施設では対応しきれない重症患者を上位医療施設へ紹介・搬送、または上位医療施設で治療を終えた患者を低次医療施設へ患者を送る（カウンター・リファラル）、この患者の流れやそれに伴う行為と定義される。リファラル・システムを整備することによって、上位医療施設への患者の集中を防ぎ、患者の重症度に見合った施設において適切な治療費でサービスを受けることができるようになるといえる。本評価調査では、この一般的な定義に加え、開発途上国では、農村部や遠隔地域へ医療サービスを届けるのが困難であるという問題を踏まえ、①の機能を生かして②医療施設間の連携を地域の末端まで延長させ、全ての人々が医療サービスにアクセスできる体制整備という視点を加える。さらに、①と②の機能による医療施設間と地域の末端までの連携体制を活用し、保健医療サービス提供に係る情報や技術の移転・伝播が考えられる。医療施設間、医療従事者間の臨床技術移転や保健医療に係る情報の伝達により、リファラル・システム整備が期待されることから、この③情報・知識・技術の伝達を含め、本評価のリファラル・システムとする。

表 2-2-5 リファラル・システム定義概念図



本評価調査においては、医療施設のレベルを以下のとおり定義することとする。なお、ベトナムの事例では、第3次医療施設である省レベル病院から、さらに上位医療施設として主要3都市における拠点病院があるため、この拠点病院を第4次医療施設とする。

- ・第3次医療施設—地方における省または県レベルの病院
- ・第2次医療施設—郡レベルの病院
- ・第1次医療施設—コミュニティレベルのヘルスセンター

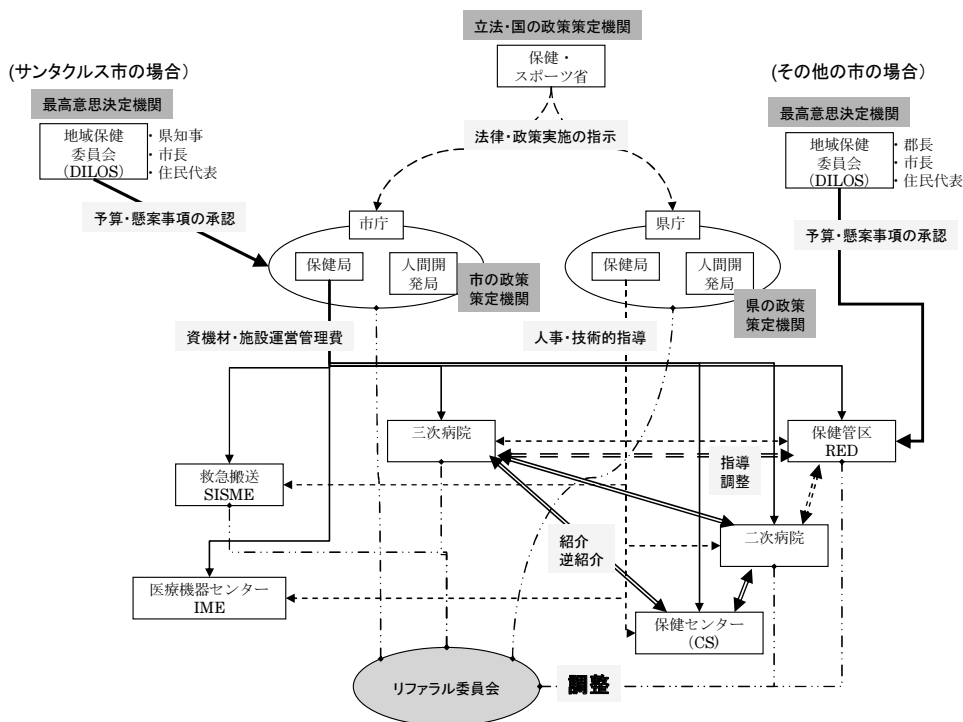
第3章 国別の評価分析

3.1 ボリビア

3.1.1 保健リファラル・システム組織体制

ボリビア国サンタクルス県サンタクルス市は人口約140万人、標高400mのボリビア第2の都市で、近年、急速に人口が増加している地域である。同市の医療施設は、日本病院や母性病院など5つの3次レベル医療施設、2次レベルとして最近開院したフランス病院、1次レベルとして各地域に保健センターがあり、これらを連携するリファラル・システムがある。保健行政においては、県の下に保健管区（RED）があり、サンタクルス市内には4箇所、また地方ではいくつかの市を束ねた保健管区単位にそれぞれ1か所の保健行政事務所（RED事務所）が設置されている。リファラル・システムに関わるその他の機関としては、救急患者の搬送を担う救急システム（SISME）、また医療施設や保健行政事務所のリファラル担当者などが患者リファラルに係る調整をするためのリファラル委員会が設置されている。なお、SUMI（国家の母子医療保険）の導入により医療サービスへアクセスできる人口が増えたことから、SUMI保険もリファラル・システムの運営に部分的に関係している。

図 3-1-1 サンタクルス県の保健リファラル・システム



出所：評価チーム作成

3.1.2 リファラル・システムの機能状況

前述の組織体制を基盤としたリファラル・システムの機能状況とこれまでの変化について、評価の3つの視点からまとめる。

(1) 患者紹介システム

1) システム管理

患者は下位から上位病院に紹介される際、医師によって、患者情報と診断された病名などが記入されたリファラル用紙を持参する。日本病院では患者がリファラル用紙を持参する場合、その患者を優先的に診察するシステムをとっており、リファラル用紙を受診時に患者自身が持参する場合も多いが、必要な場合は下位医療施設より患者情報が事前に病院に届くようになっている。しかし、未だより良い医療サービスを求めて下位からリファーされずに直接3次病院に来る患者も多く、日本病院では患者の混雑が問題となっており、救急車で直接搬送される患者を受け入れることができない事態も生じている。そのような中でも、3次病院でのみ対応可能と判断され下位病院からリファーされてくる患者に対しては、診察の優先権が与えられている。

3次病院で治療を受けた後に下位病院で対応可能となった患者が、患者の自宅近辺の病院へカウンター・リファラル（逆紹介）されるシステムも整備されており、その際は、カウンター・リファラルされる患者情報のリストが、3次病院から下位病院へ伝達されるようになっている。特に、日本病院の入院患者においては、リファラル患者は退院時カウンター・リファラルを受けないと退院許可が出されないという院内規則が設けられ、医療従事者は退院患者に対してカウンター・リファラル用紙を適切に渡している。しかしながら、下位病院が患者の自宅から遠い場合、また患者自身が3次病院での治療で治癒したと判断する場合など、カウンター・リファラルされても実際は病院に行かず自宅療養するケースも多い。

リファラル・システムを効果的に運営するために、各病院や保健行政のリファラル担当者が集まる「リファラル委員会」が月1回開催され、各病院への患者紹介に関する話し合いが行われている。症例検討会も必要に応じてこの場で行われており、外来、入院患者の推移や、リファラル・逆リファラル症例のモニタリング、リファラル症例が医学的な見地から見て適性であったかどうかの評価、紹介時の処置及びプロセスが適正であったかどうかの評価、そして来院までの所要時間などの情報が収集、分析されている。患者リファラルの統計に関する経年変化については、モニタリングが開始されて間もないことから、適切なデータ管理が今後の課題であると同時に、その効果的運用に関しては今後のさらなる発展が期待される。さらに、保健人材の人事を担当する県と医療施設の運営費や機材調達を担当する市は、このリファラル委員会への参加を通じて、以前の芳しくない関係から改善が図られている。他方で、リファラル委員会は、県や市から正式な認可を受けておらず、委員会での話し合いの結果が、サンタクルス県の保健政策に直接には反映されにくい状況