Collaboration between Teachers and Medical Professionals to Promote Inclusive Education for Children Requiring Medical Care

Keywords: Inclusive Education, Child Requiring Medical Care, General Schools, Liaison and Collaboration between Teachers and Medical Professionals, Japan

1. Introduction

In Japan, the number of births is decreasing, whereas the proportion of children requiring medical care is increasing. According to a survey by the Japanese Society for Pediatric Home Care Support, the number of children aged 19 or younger requiring medical care reached 17,209 in FY2015; the number is about double the 9,403 in FY2005 (Japan Medical Association, 2018) (1).

There are two major types of school for children requiring medical care to be enrolled in: general and special support schools. In general schools, such children belong to special support classes, or they are provided with special support while belonging to general classes in some cases. In 2010, the Central Council for Education specified the goal of "enabling all children with and without disabilities to learn together in the same places as much as possible" (Special Committee on Education, Branch of Elementary and Secondary Education, Central Council for Education, 2012) (2). Based on this, local governments began to make environmental arrangements, and Funabashi City and some other municipalities are establishing operational guidelines to appropriately provide medical care at school (Funabashi City, 2016) (3). In 2018, the Ministry of Education, Culture, Sports, Science, and Technology launched a program to dispatch nurses for medical care provision at school, aiming to establish a seamless support system. It is also proceeding with programs to establish medical care systems for schools. In the former, 1,500 nurses are scheduled to be newly allocated in FY 2018, with national subsidies to cover a third of employment-related costs, including salaries, mutual aid membership fees, and travel expenses. In the latter, various approaches, such as developing in-school support based on liaison with medical doctors and creating medical service manuals, are being adopted to establish systems to appropriately provide medical care at school.

When children requiring medical care are enrolled in community schools, liaison and collaboration between teachers and healthcare/medical professionals, represented by medical doctors and nurses, are crucial. In June
2018, the Interim Report of Review Meetings on the Provision of Medical Care at School was issued (Ministry of Education, Culture, Sports, Science, and Technology, 2018)\(^{(4)}\). This notification emphasizes that “expertise in medical care is indispensable to appropriately provide it at school”, and “the effective use of expertise in pediatric and home care with cooperation from medical professionals is necessary”.

However, in my surveys, both teachers and nurses stated that it is difficult to communicate with each other.

Concerning liaison and collaboration between teachers and nurses involved in school enrollment support for children requiring medical care, a previous study revealed a lack of mutual understanding between the two parties, especially when they begin to provide medical care at school (Katsuda, 2006)\(^{(5)}\). As factors associated with such a lack of mutual understanding between teachers and nurses, another study reported confusion among the former when cooperating with the latter from a different professional area in the actual setting of education. It was also clarified that the latter also faced confusion when performing nursing activities in schools, which are different from medical settings (Tomari, 2016)\(^{(6)}\).

These studies mainly examined special support schools. However, with inclusive education being internationally promoted, quite a few children requiring medical care are currently attending general schools. Under these circumstances, the status of liaison and collaboration between teachers and nurses in general schools that are not necessarily designed to support children requiring medical care is an important issue.

Therefore, based on the results of my surveys involving several municipal departments of education and schools that support the enrollment of children requiring medical care, this paper discusses appropriate liaison and collaboration between teachers and nurses supporting such children.

2. Materials and Methods

The purpose of this paper is to further develop school enrollment support for children requiring medical care by determining appropriate liaison and collaboration between teachers and medical professionals to promote inclusive education for such children.

The following section reports systems to support the enrollment of children requiring medical care, as well as the current status of collaboration and challenges between teachers and nurses in the departments of education and schools we examined. Based on these findings, the outcomes and challenges of programs/systems to support teacher-nurse liaison and collaboration are examined.

I studied prefectural or municipal departments of education and schools as public educational institutions. When conducting surveys requiring their consent and cooperation, I adopted the following measures:

(1) Basic idea of ethical considerations

- Ensuring human rights
- Respecting each person’s dignity and free will
- Protecting personal privacy
- Confirming the appropriateness and rationality of the study contents and procedures
- Avoiding possible disadvantages and risks related to the study

(2) Items considered when planning and implementing the study
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Planning the procedure and method to ask candidate institutions to cooperate with the study clearly and in detail

- Asking candidate institutions to only cooperate with the processes necessary and indispensable to fulfill the study objective
- Avoiding forcing candidate institutions to cooperate with the study
- Allowing candidate institutions not to consent to participate in any or some processes of the study and to withdraw their consent at any time
- Giving psychological considerations for candidate institutions
- Preventing the identification of individuals other than the candidate institutions

I investigated the Department of Education of A City through interviews with two teachers in May 2018. During the interviews, I mainly examined: the city’s systems to support the school enrollment of children requiring medical care, systems to promote liaison and collaboration between teachers and healthcare medical professionals involved in such support, and related challenges.

Next I studied the Department of Education of B City through interviews with two employees in July 2018. During the interviews, I mainly examined: the city’s systems to support the school enrollment of children requiring medical care, systems to promote liaison and collaboration between teachers and healthcare medical professionals involved in such support, and related challenges.

Lastly I examined a junior high school with a student requiring medical care in C City, Aichi Prefecture, in July 2018. I interviewed the principal of this school. During the interview, I mainly examined the details of support for the student (Student X), who was in her first grade at junior high school. Student X began to attend the school from April 2018, having advanced from an elementary school in the same school district. Due to multiple severe disabilities requiring tracheal cannula insertion and gastrostomy, she needs assistance in daily life, such as urinary catheterization, diaper change, and dressing. She performs daily activities while being bedridden, and moves on a stretcher exclusively adjusted for her. She attends school every day, except for 1 day a month to receive rehabilitation based on the diagnosis provided by her doctor in charge. She is planning to advance to a part-time high school after graduation, if she passes an entrance examination.

3. Results

3.1 A City

3.1.1 School enrollment support systems

In A City, the Section of Health Support, Division of Human Rights, Health, and Education, Secretariat of the Departments of Education, was in charge of school enrollment support.

Up until the present, it has provided such support for one child in FY2017 and two children (one of them is still being supported) in FY 2018; in all cases, support started from enrollment. Support is being provided for first-and second-grade elementary school students, including a child who has been supported since he belonged to a private kindergarten accepting children requiring medical care.

A City defines support for these children as follows: "giving considerations for students requiring daily medical care at school, and supporting the elementary and junior high schools they belong to through medical care provided by nurses in these schools".
It is based on the following criteria: among all students of elementary and junior high schools providing compulsory education in A City, <those requiring daily medical care at school>, <those regarded as being able to attend general schools, but requiring medical care at school by their doctors, with their parents understanding the relevant support program and requesting medical care provided by nurses, and the principal and School Committee agreeing with the provision of such care>, and <those also defined as children requiring medical care at the Medical Care Coordination Meeting from specialized perspectives>. The necessity of support is re-examined annually at the Medical Care Coordination Meeting.

Care procedures performed at school include: <suctioning sputum in the oral cavity> and <suctioning rhinorrhea in the nasal cavity>, <suctioning sputum in tracheal cannulas>, <gastro- or enterostomy tube feeding>, and <nasal tube feeding>. Among these, the city covers <suctioning sputum in the oral cavity (not including the management of artificial respiration or oxygen therapy in any case)>, <suctioning rhinorrhea in the nasal cavity>, and <suctioning sputum in tracheal cannulas>. Depending on the operational situation, it will also consider expanding the scopes of <suctioning rhinorrhea in the nasal cavity> and <suctioning sputum in tracheal cannulas> in the future.

Medical devices can be reserved within each school, but their management, such as cleaning, replacement, and replenishment, should be performed by parents.

A City also provides counseling for parents. The principal of each school confirms the conditions of relevant children and their parents during health examinations on admission. When a school has decided to support a child, it makes an application to the Section of Health Education at the request of the child's parents. Based on this application, the Section of Health Education held a Medical Care Coordination Meeting to examine the necessity of support. Medical Care Coordination Meetings were held, with the Section of Health Education and Section of Education for Children Requiring Special Support as a secretariat. Representatives of school doctors (medical association), principals (principals’ association), nurse-teachers, and those involved participate in the meetings to discuss approaches to care and the details of equipment and personnel support, and develop future perspectives on medical care in A City. When they decided to support the child, with methods to support him/her determined, the Section of Health Education contracted with home-visit nursing facilities belonging to the medical association. These facilities were out of service at weekends and on national holidays, in principle, but their services may also be available on these days (e.g., during an educational school trip), depending on the contents of entrustment.

In addition to the above-listed approaches, the Section of Special Education Support Consultation provided school enrollment counseling for parents, as necessary. The section provided/shared information for/with relevant schools, and adopted actions based on the results of examination. It also shared information and collaborated with the Section of Health Education.

3. 1. 2 Current status of collaboration

Home-visit nursing facilities belonging to the medical association dispatch their nurses to each school. These nurses are not in charge of specific children, and the nurse in charge of a child may vary among days.

Medical care for individual children is provided based on instructions given by their doctors in charge.

Since the latter half of April, the city has held multiple sessions for nurses to rehearse procedures, such as suctioning, conveyed by parents to ensure appropriate care for their children. Medical care provision by nurses has started around May.
Attending or school doctors in charge send their instructions to home-visit nursing facilities.

A private room for nurses to provide medical care for relevant children is available at each school (it is not exclusively used for care). Nurses stay in this room during relevant children’s school attendance or for 1 hour to 1 hour and 30 minutes around noon. The children visit the room to receive care.

Special support coordinators in charge of relevant children provide necessary coordination. Teachers in charge and nurse-teachers also hold the concurrent post in some cases.

Special support coordinators hold a School Committee Meeting about three times a year to determine methods to support relevant children. The principal and vice-principal of each school, nurse-teachers, teachers in charge, and school doctors, as well as nurses of home-visit nursing facilities, when necessary, participate in these meetings to mainly discuss the frequency, condition, and method of medical care, and school life-related concerns and problems.

3. 1. 3 Challenges of collaboration

As of June 2018, more than a year has passed since the city began to provide medical care at school. All schools accepting children requiring such care favorably evaluate this program, stating that it is very helpful.

No challenges have been reported by nurses.

3. 1. 4 Future perspectives

The ongoing 3-year model program was launched in FY2017, and will be reviewed each year. As of June 2018, the program is scheduled to continue also from FY2019 onward.

3. 2 B City

3. 2. 1 School enrollment support systems

In B City, the Section of School Education Supervision (education support group in charge of special support schools) provides school enrollment support for children requiring medical care. For every seven districts, there is a base nursery school for preschoolers, with two nurses performing phlegm suctioning, urinary catheterization, and tube feeding. Facilities specializing in children requiring medical care and providing developmental support and after-school day services for children with multiple severe disabilities are also available.

B City holds a school enrollment counseling event in May of the year before enrollment at six venues within the city (four developmental rehabilitation centers and two facilities for general citizens). During counseling, parents and the chief counselor examine the details of support needed for the former’s children to receive school education, while psychotherapists directly deal with the children to determine the contents of specialized support for them.

All municipal elementary and junior high schools within the city organize special support classes for children with different needs, such as those with emotional disorders and physical handicaps. There are three choices for children and their parents in all school districts: general classes, special support classes, and special support schools. As part of the city’s welfare program, welfare toilets with beds and shelves are placed in private rooms at each school.

As for special support schools, there is a special support school for physically handicapped children, prefectural special support school, and adjacent municipal special support school, covering the northern, central, and southern parts of B City, respectively, with school nurses dealing with children requiring medical care.
To determine optimal schools for their children, parents can observe all selectable schools. They are also provided with explanation and consultation at these schools. In this process, importance is placed on the fact that schools are places for children to learn during the 9-year compulsory education period, and medical care is regarded as an educational support approach (priority is given to ensuring access to necessary education for all children, including those requiring medical care). Measures are adopted from the perspective of creating appropriate learning environments for individual children. Children with multiple severe disabilities are enrolled in special support schools, in principle.

For children requiring medical care and enrolled in special support schools, a community exchange event is held about three times a year to communicate with students of elementary schools in the same school district. Another event to communicate with students of adjacent schools is also held about once a year. In addition to school-wide exchange, these events also aim at partial exchange, such as communicating with students in different grades. To date, experimental activities (such as musical, living, and cooking activities), social studies to become familiar with maps and community-based shops, and group discussions in the Japanese Language course have been held during the events.

Each child requiring medical care and attending general or special support classes is dealt with by two to three nurses in rotation, who are dispatched from multiple home-visit nursing facilities with cooperation from the municipal nursing association. The parents previously explain the child’s condition to all of these nurses at school. They start to perform medical care procedures independently only after repeated rehearsals in the presence of the parents to confirm their skills. Among visiting nurses, those with experience of working in departments of pediatrics and the ability to establish favorable relationships with children are preferentially selected. Private rooms for medical care provision are available at each school. It is possible to exclusively use these rooms during medical care. For each child, the city individually contracts with medical care service providers, with no financial burden on parents. At present, the scope is limited to care on school days and in-school support. Care during events at weekends and on national holidays should be provided by parents, but educational school trips are supported by nurses of nurse dispatch companies. Medical care for individual children is provided based on instructions given by their doctors in charge.

In addition to the five designated medical procedures: <suctioning phlegm in the oral cavity> and <suctioning phlegm in the nasal cavity>, <suctioning phlegm in tracheal cannulas>, <gastro- or enterostomy tube feeding>, and <nasal tube feeding>, the city also covers urinary catheterization and insulin injection. Furthermore, special support schools and prefectural special support schools within the city also cover oxygen inhalation and home-visit learning, respectively.

In FY2012, when the city began to provide medical care at municipal elementary and junior high schools, the timing of support was limited to one 90-minute session a week, consequently forcing parents to care for their children on other school days. Therefore, from the perspective of parental respite care, the frequency of the 90-minute support session was increased to twice a week in FY2016, and all school days in FY2018 (the duration of each session can be selected from 30, 60, and 90 minutes).

Children's advancement to junior high schools are supported mainly through liaison between teachers in charge of elementary and junior high schools.

3. 2. 2 Current status of collaboration

The city instructs nurses dispatched to each school to visit the teachers’ room and greet the vice-principal
and curriculum coordinator before and after work. They are also asked to create a medical care report and submit it to the school after each session. They also exchange notebooks with parents, which are also confirmed by teachers in charge daily.

An in-school committee meeting is held once a month, with managers, clerical staff, healthcare and medical professionals, and parents, in principle. When such meetings are held in the evening, teachers in charge also participate in them.

According to the interviewed employees, liaison among home-visit nursing facilities is also being promoted.

3.2.3 Challenges of collaboration

The interviewed employees regarded the scarcity of specialized nurses as a challenge. They demand the government to nurture healthcare medical professionals with skills to provide advanced medical care at school, in order to promote the school enrollment of children requiring medical care.

At the same time, they also expect doctors in charge to more actively communicate with schools when giving instructions, rather than based only on parents’ intentions, as instructed procedures are actually performed by the school and part-time nurses.

3.2.4 Future perspectives

The city will maintain and further develop this program, with a working group to address related issues.

3.3 City

3.3.1 School enrollment support systems

The Department of Education selected the school for Student X based on her parents’ desire, which was confirmed when she was in her sixth grade at a general elementary school. The parents’ desire was reconfirmed after they also observed special support schools with explanation, and the enrollment of the student in the school was determined.

The Department of Education began to allocate nurses to general schools for medical care provision in 2012. Since that time, it has determined schools and the details of necessary care for individual children upon deliberations with their parents. It aims to fulfill parents’ desires as much as possible, adopting suggestions from experts. Before the enrollment of Student X, there were concerns among the parents of other students over learning achievement evaluation criteria and the influences of noise from her medical devices during classes. After enrollment, such concerns have not been heard again from parents or students. Students who had begun to study with Student X from junior high school, including those of other classes, actively communicate with her, and offer support for her. Learning with Student X daily, they have become aware of the presence of children requiring medical care and the necessity of autonomously supporting such children. They have developed the desire to help them, with enhanced awareness of the importance of life.

Prior to the enrollment of Student X, an elevator that allows transportation using stretchers was placed within the school. A private room was allocated for medical care provision, with a locker to store diapers, a shelf to store medical devices, and some space to place an oxygen cylinder. A slope for transportation using stretchers was also constructed around the swimming pool.

With several hundred million yen allocated from a budget for special education support, the school made necessary arrangements.

At present, daily necessities, including plastic bags and excluding diapers, are purchased at public expenses.
Used diapers are disposed of by the school.

There is a manager allocated to the school to exclusively deal with Student X. One manager is allocated to each school, rather than each child. The assignment of these managers for children requiring medical care is not necessarily based on their intention.

At the school, the manager, principal, and teacher specializing in each area of education provide individualized support for Student X for 21, 4, and 4 hours, respectively. The principal makes various arrangements for specialized teachers to use appropriate materials and methods for the teaching of each area.

The above-mentioned managers are currently present at eight junior high schools within the city, including the school, for teaching/guidance and individualized care provision (according to their levels of independence). The school is solely providing medical care at present, but it is expected that other schools will also need to adopt similar approaches in the future.

For Student X, who needs to learn while being bedridden on a stretcher, an iPad is being effectively used, with textbooks installed. Additionally, documents with enlarged photographs for easier viewing are especially created for her.

Special teaching materials and education methods for Student X are being used in each course. In the Physiology course, microscopic images are created for her to observe while being bedridden. In the Home Economics course, other students help her sew clothes, with a sewing machine placed by her stretcher, so that she can manipulate it with her shoulder. In the Music course, an air-feeding foot pump is attached to her alto recorder. She sends air by pressing the pump under her arm, and enjoys playing it, with the fingers of another student covering holes. In the Physical Education course, she participates in 100-m run and repeated sideways jumps while being on a stretcher, and bathes in a swimming pool, with a teacher supporting her. In all courses, she takes examinations, consisting of questions especially created for her with three multiple choices. Her answers are separately rated and reflected on the evaluation of her learning achievements.

Similarly, during extracurricular activities, Student X participates in gathering events with other students. Rules for other students to play with her during rest periods have also been created. She enjoys ball, statues, and other games with others in the schoolyard daily. When they visited a park as an out-of-school activity, she was moved around inside the park on a stretcher, and enjoyed eating ice cream and wearing national costumes with other members of her group.

The school organizes these educational activities, focusing on their learning effects on her and other students. Even if she faces difficulty in performing some activities, the school intends to help her “to become able” to perform them upon deliberations with her parents.

3.3.2 Current status of collaboration

At the school, nursing caregivers provide care for Student X. The nursing caregivers perform medical care procedures for her, such as phlegm suctioning and tube feeding management, and assist her in daily school life.

At the beginning, the Department of Education directly employed nurses as nursing caregivers, and picked/dropped them up/off. However, as it was difficult for them to agree with the parents about methods to provide medical care for the student (the level of the hygiene process and communication with the parents), all of them withdrew. Currently, nursing caregivers are dispatched from a dispatch company. Two nursing caregivers are caring for Student K in rotation from 08:15 to 16:15 for five days a week, in principle, as determined by the principal of the school.
At the beginning and end of work at school each day, they visit and greet the principal and other teachers. They also report the student's condition daily orally and using written documents. When greeting, they also exchange information regarding the student with teachers.

3. Challenges of collaboration

With regard to liaison and collaboration between teachers and nurses, the interviewed teachers regarded a high turnover rate among nursing caregivers dispatched to the school as a challenge. This indicates that the understanding and recognition of differences in medical care procedures, such as the hygiene process, between healthcare/medical institutions and living environments were insufficient.

The teachers listened to both the parents and nursing caregivers to resolve this problem, but they could not improve the relationship between the two parties, possibly due to a lack of expertise to provide medical care-related advice and coordination.

4. Discussion

All of the municipalities I examined created opportunities for teachers and nurses providing medical care to directly communicate with each other daily. In addition to communication before and after work, they had established systems for the two parties to mutually report children’s conditions and the details of care for them orally and using written documents. Teachers in charge varied among the municipalities, and they managers such as principals, teachers in charge of relevant classes, nurse-teachers, managers, and special support coordinators. Committee meetings were held regularly at different frequencies, from once a month to three times a year, but with teachers and nurses, as necessary, participating in all cases.

As for municipal departments of education, the section in charge of direct for children requiring medical care at school varied among the municipalities, such as the Section of School Education Supervision (education support group in charge of special support schools) and Section of Health Support, Division of Human Rights, Health, and Education. As the section in charge varies, there were also differences in the purpose of support. For example, the Section of School Education Supervision placed importance on the fact that schools were places for children to learn, and regarded medical care as an educational support approach to ensure access to necessary education for all children. In contrast, the Section of Health Support, Division of Human Rights, Health, and Education defines such support as "giving considerations for students requiring daily medical care at school, and supporting the elementary and junior high schools they belong to through medical care provided by nurses at these schools". However, in the latter, liaison with the Section of Education for Children Requiring Special Support was being promoted, as they held Medical Care Coordination Meetings through collaboration and shared information regarding school enrollment counseling services provided by the Section of Education for Children Requiring Special Support.

The timing of providing medical care at school also varied among the municipalities. Some of them held a 90-minute care session for five days a week, while others provided care from 08:15 to 16:15 for five days a week. Furthermore, in addition to the five designated medical procedures, there was a city that also covers urinary catheterization and insulin injection. These variations may have resulted from differences in the type and frequency of medical care needed among children.

The municipalities’ systems to dispatch nurses who medical care also differed. Nurses were allocated with cooperation from the medical and nursing associations or dispatched from nurse dispatch companies.
Liaison and collaboration between teachers and nurses involved in school enrollment support for children requiring medical care are being promoted through daily communication, written documents, and meetings. To further develop such liaison and collaboration, it may be necessary to ensure a sufficient number of nurses, and allow them to continuously work at school by improving working conditions for healthcare medical professionals dispatched to schools, represented by nurses.

5. Conclusions

Based on the results of my surveys involving several municipal departments of education and schools, this paper discusses liaison and collaboration between teachers and medical professionals involved in school enrollment support for children requiring medical care.

All departments of education and schools created sufficient opportunities for teachers and nurses providing medical care to directly communicate with each other daily. On the other hand, the section in charge varied among the municipalities, resulting in differences in the purposes of support. The timing of providing medical care at school and system to dispatch nurses providing medical care also varied. Liaison and collaboration between teachers and nurses involved in school enrollment support for children requiring medical care are being promoted.

Liaison and collaboration between teachers and nurses providing such support are being promoted through daily communication, written documents, and meetings. To further develop such liaison and collaboration, it may be necessary to ensure a sufficient number of nurses, and allow them to continuously work at school by improving working conditions for healthcare medical professionals dispatched to schools, represented by nurses.

Notes

(1) Japan Medical Association 2018. Infant Caring at Home Report.

(2) Special Committee on Education, Branch of Elementary and Secondary Education, Central Council for Education: Arguing Points 2012.

(3) Funabashi City: Operational Guidelines for the Implementation of Medical Care-Promoting Projects.


(6) Yuko Tomari. Difficulties and Challenges Faced by Nurses Providing Medical Care. Education and Medicine, 64(1), 2016, p. 71.
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