

Current Status and Issues of School Health

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Introduction

Sound education is supported by healthcare that protects the health of people, and it produces a foundation for lifetime health. Reflecting the diversity and complexity of frontline issues that school health is facing, dispatching specialist doctors to schools has been conducted on various occasions around the nation, achieving satisfactory results. School health covers the period from kindergarten to university age, a very important period in the life cycle. Consciousness of and efforts aimed at enhancing health during this period form the basis of health in the person's subsequent long life.

Schools are places where children learn life skills. They should learn and enhance their life skills through not only studies but also physical education, moral education, and various experiences. In particular, health education activities presented by healthcare professionals including doctors are considered to be essential for enhancing the life skills of children. School health is a part of community health, and it is essential to nurture children from a community viewpoint.

Current Status of School Health

Population of children

In Japan, 18 million children spend their time in school from Monday morning through Friday evening¹ (Fig. 1). In fact, including parents and school personnel, about half of the total population of Japan is involved in schools. Because children spend a very long time in school, it may

well be said that the overall health of children depends on the status of health in school. Over the past decade, the number of students has been decreasing, showing a reduction of about 1,350,000 children¹ (Fig. 2).

School doctors

Along with the decrease in the number of children, the number of school doctors has shown a tendency to gradually decline¹ (Fig. 3). According to the questionnaire survey carried out in 2001 by the Japan Medical Association (JMA), as to the specialties of school doctors, internal medicine accounted for 40% and ophthalmology and otorhinolaryngology nearly 30% each; these three combined accounted for 97%² (Fig. 4). Other specialties of school doctors included surgery, obstetrics and gynecology, orthopedic surgery, psychiatry, and others. This trend appears to be essentially unchanged today.

Growth of children

According to data on changes in the mean height of children, it peaked around 1997 to 2001, and thereafter it tended to level off.³ The mean body weight peaked around 1998 to 2003, and tended to decrease thereafter.³ The childhood obesity trend rate is relatively low in urban areas, and tends to be higher in boys than in girls. Among 11-year-old boys, those with an obesity rate of 20% or higher accounted for 9.46%.³ Overall, the childhood obesity trend rate tends to be decreasing. Among 17-year-old boys, however, those with a tendency to be obese are leveling off or showing an upward trend.³

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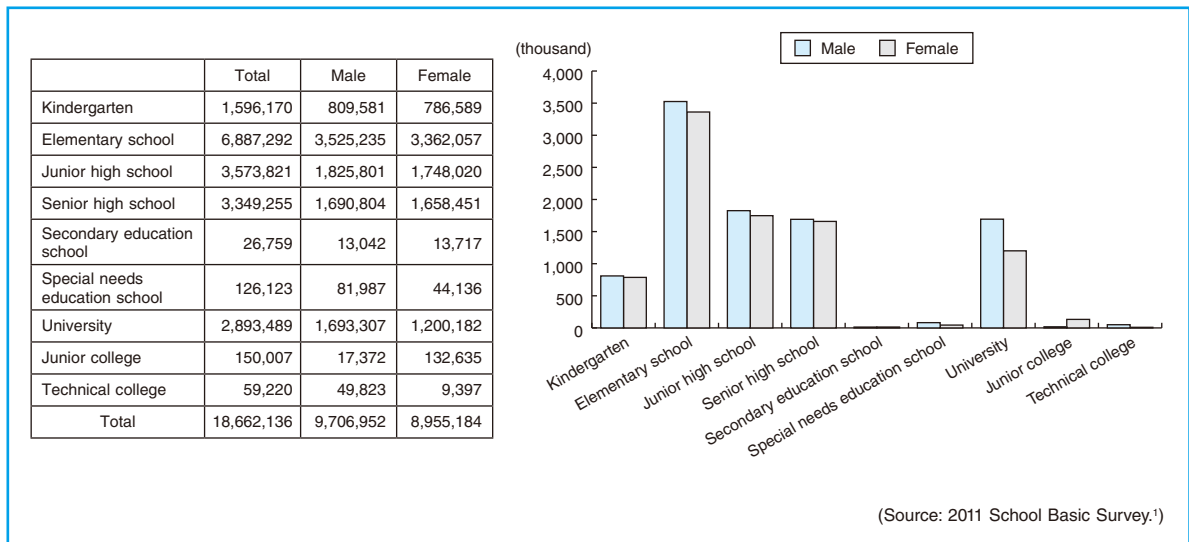


Fig. 1 The number of students in 2011

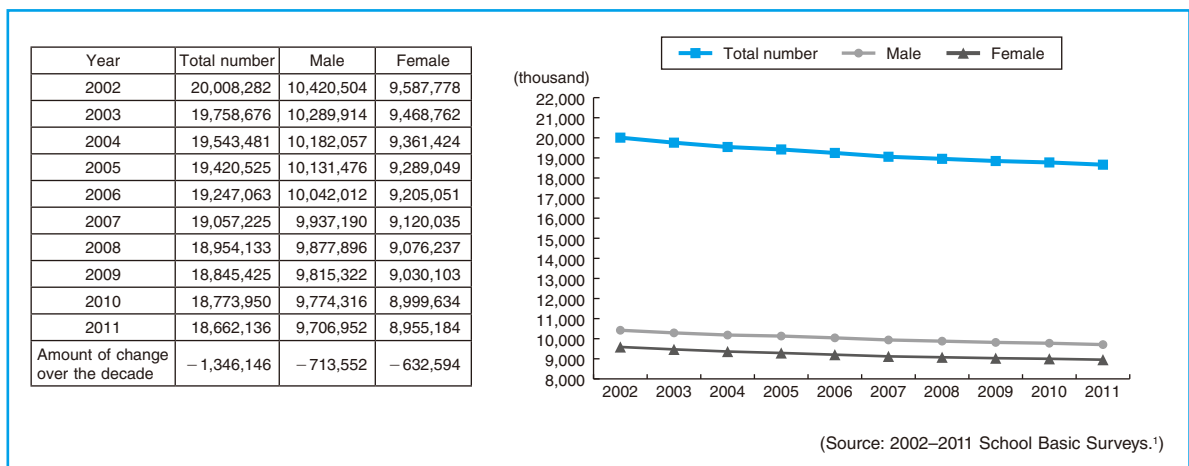


Fig. 2 Changes in the number of students over the past decade

School children with asthma are more common currently than during the childhood of the parental generation, indicating that allergic diseases are increasing.³

Problem behavior and bullying

Cases recognized as bullying have increased by about 2,500 cases in comparison with the last year, 2011, reaching a total of 75,000 cases.⁴ Under the current situation with the number of school children showing a decreasing tendency, the increase in bullying cases requires serious

attention. There are 15,675 schools that recognized bullying among their children, the figure being greater by 549 in comparison with 2011. The schools with recognized bullying cases account for 42.2% of all schools in Japan, showing that nearly half of all schools have bullying issues.⁴ Bullying was detected by class teachers in less than 20% of all bullying cases. This suggests that the issue of who can protect children is important.

In regard to other problem behaviors, acts of violence have reached the highest-ever num-

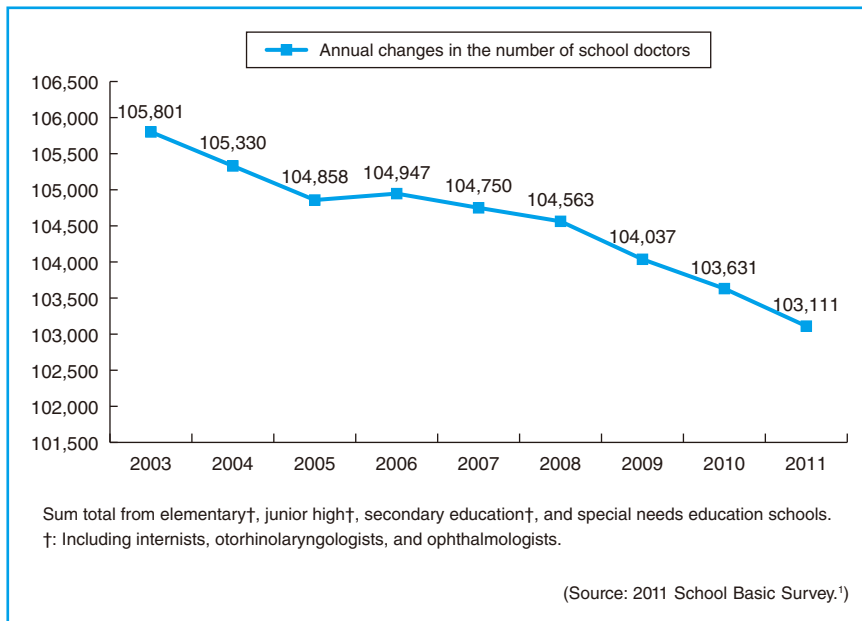


Fig. 3 Annual changes in the total number of school doctors (2003–2011)

ber of cases. School avoidance is also increasing among senior high school students, producing about 53,000 early leavers.⁴ Where suicide is concerned, the number of students in elementary through senior high schools who committed suicide has reached 147, a very large figure.⁴ The number of children who were bullied and committed suicide was reported to be 4, but whether this figure truly reflects the actual situation is questionable.

Important Issues Involved in School Health

Diversity of health problems

Factors concerning the mental and physical health of children are becoming more diverse and serious, involving mental health issues such as bullying, suicide, school avoidance, spread of lifestyle-related diseases among younger generations, allergic diseases, infections, sexual problem behaviors, drug abuse, motor organ disorders, etc. It is hardly possible for children, parents, schools, or school doctors alone to deal with these problems by themselves, and they are not solvable within the conventional framework. It is therefore indispensable that school health be considered through an organization and system

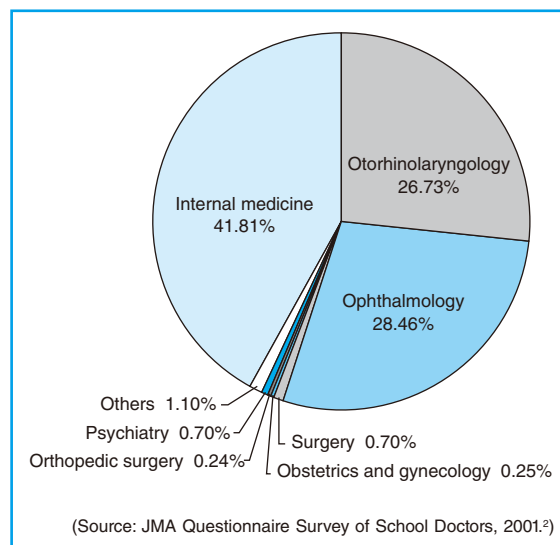


Fig. 4 Proportions of the specialties of school doctors

established under the auspices of an enhanced coalition with medical associations and medical institutions within the framework of community health centering on families and schools. In this regard, there is an increasing need for the participation of doctors of various specialties in order to cope with ever more diverse problems.

Table 1 WMA Declaration of Lisbon on the Rights of the Patient (extract)⁶**9. Right to Health Education**

Every person has the right to health education that will assist him/her in making informed choices about personal health and about the available health services. The education should include information about healthy lifestyles and about methods of prevention and early detection of illnesses. The personal responsibility of everybody for his/her own health should be stressed. Physicians have an obligation to participate actively in educational efforts.

Bullying issues

According to the survey conducted by the Ministry of Education, Culture, Sports, Science and Technology (MEXT) in 2008,⁴ the number of violent acts occurring in elementary, junior high, and senior high schools rose, and the number of recognized bullying cases was about 85,000, a decrease of about 16% in comparison with the previous year. The number of students who committed suicide was 136 (including 3 due to bullying issues). However, a 2010 report revealed that the reason for suicide was unclear in about 60% of child suicides.⁵ Thus, it is apparent that the actual state of this issue is not yet fully understood.

The MEXT states that reinforcement of the support system under the cooperation of specialists in the community is necessary when implementing children's education for preventing suicides.⁵ Accordingly, we are keenly aware of the need for doctors to provide mental health education to children, parents, school personnel, and the board of education in the community as a whole. In view of how school doctors can contribute to resolution of bullying and suicides of children, there is a clear insufficiency of education on mental aspects of preventing children from becoming victimizers or victims, aside from problems in the organization and administration of schools and the boards of education.

The report issued by the MEXT⁵ states the following:

“It is important to hold training sessions targeting parents and to develop a cooperative relationship between the school and parents in preventing suicides of students. In the US, it is generally advocated that education for preventing suicides be provided based on three mainstays, i.e.,

school children, teachers, and parents. In Japan, hardly any programs targeting parents have been provided. It is necessary to seek education for preventing suicides from a new viewpoint, with an enriched content, with teachers and parents, from different perspectives, learning together about the prevention of suicides.”

It is our duty to take action for the next generation, based on verification and reviewing whether this principle has actually been put into practice in the school scene.

Suggestions of the JMA for elimination of bullying

The JMA advocates that the Japanese government establish and implement a solid system for early elimination of bullying. We present the following suggestions regarding the development and clear practice of the framework for protecting children in the community:

- The administrative authorities should nurture social awareness of raising children by the entire community, and hold a number of training sessions and lecture meetings for doctors and counselors.
- In the local community, the local government, the board of education, and the local medical association should set up a “Regional School Health Committee,” and address identifying and solving problems through frequent exchange of information, giving first priority to the mental health of children.
- Children should be provided with regular classes and lectures about the “preciousness of life” and mental health by doctors during the period from their early elementary school years through the third grade of junior high school.

Health education for the society

When we think of bullying problems among children, we should be aware that they are not problems of children alone. It is necessary for adults to show the norm to children in our society now exhibiting a degree of moral hazard and tension. The World Medical Association (WMA) Declaration of Lisbon on the Rights of the Patients states that every person has the right to health education (Table 1)⁶. In a certain sense, health education for the society as a whole may be the responsibility of us doctors. In these modern days when normative consciousness is weakened, it is probably feasible for doctors who are assuming

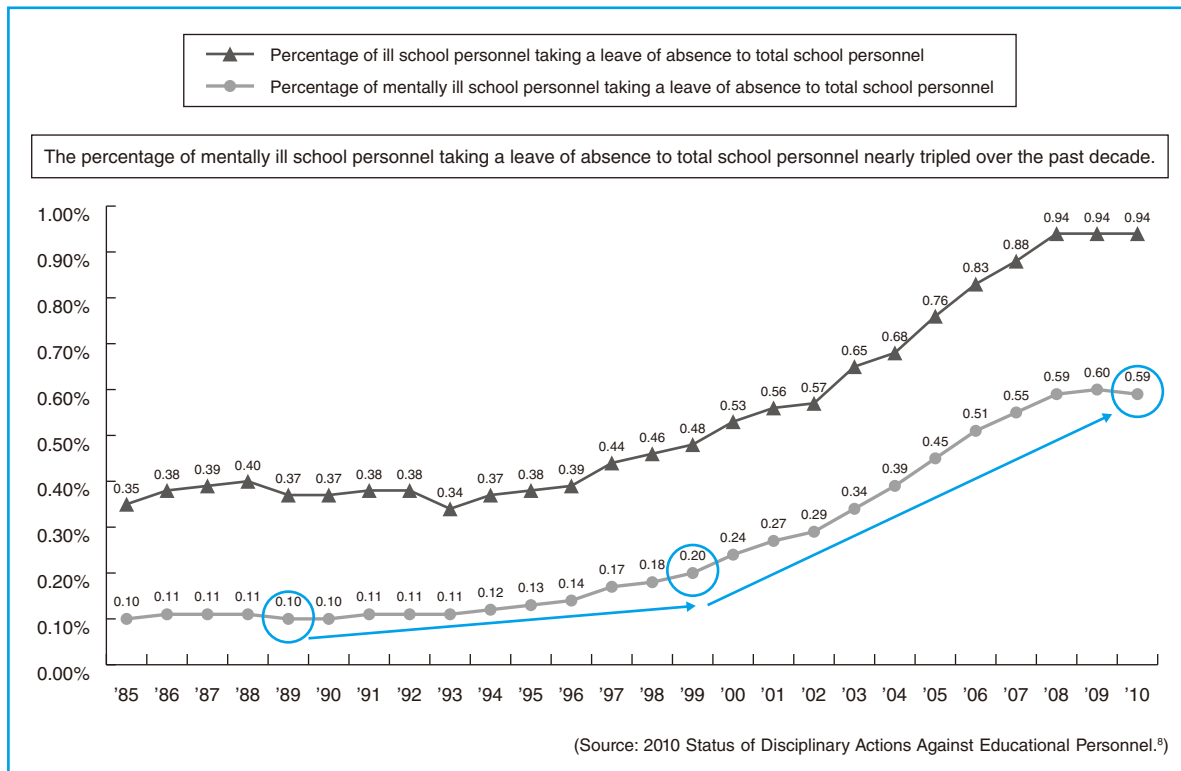


Fig. 5 Changes in the percentages of overall and mentally ill school personnel taking a leave of absence to total school personnel

a role in protecting the health and life of people to exert favorable influences on children, beyond their role in school health.

Issues of Mental Health

Education for mental health

The official curriculum guidelines set up the principles for cultivating a zest for living and life skills.⁷ There is a question as to whether the contents of mental health education, being very specialized and difficult to teach, can really be handled solely by teachers and school nurses. We believe that doctors should take charge of mental health education, if we strive to realize the principles of the official curriculum guidelines.

There have been a number of case examples showing that local medical associations and school doctors are contributing to improvement of the mental health of children, through cooperation with schools, administrative authorities, hospital associations, and societies of various specialties in the involved regions. Accumulation

of these efforts in each region inspires people at the scene of school health practice in the region to take action, and eventually serves as the driving force making the Japanese government take necessary actions.

Mental health measures for school personnel and children

Figure 5 shows annual changes in the percentages of overall and mentally ill school personnel taking a leave of absence to total school personnel. Public school personnel taking a leave because of mental illness reached 5,407 individuals in 2010.⁸ The percentage of mentally ill school personnel taking a leave of absence has shown a leveling-off trend in recent years, although in a precise sense there was a decrease of 51 individuals in 2010 from 5,458 individuals in 2009. The percentage of such school personnel to total school personnel has almost tripled over the past decade.

The increase in patients with mental illness among school personnel not only exerts a seri-

ous influence on the educational environment for students, but also increases the financial burden resulting from salary compensation or placement of substitutional personnel, etc., during the leave of absence. Therefore, the Japanese government decided in December 2011 to set up “review meetings on measures for mental health of school personnel” in the MEXT to address this high-priority issue.

The fact that school personnel suffering a major mental burden are increasing may imply that children with mental burdens are also increasing. Enhancement of lifetime health cannot be achieved if satisfying mental health is lacking in schools. We sincerely hope that the government shares awareness of this problem and the sense of urgency, and promotes measures aimed at safeguarding and improving the mental health of children and school personnel working in schools.

However, the fact is that, in the school scene, bullying problems occur in nearly half of all schools in Japan. Acts of bullying and violence in school may persist as deep trauma in the minds of victims even after they grow up, and may damage their lifetime health. We believe that the role of the JMA is to facilitate sharing consciousness of this problem and to cooperate in policies involving interactions between the Ministry of Health, Labour and Welfare (MHLW) and the MEXT and to thereby promote measures for the mental health of children and personnel in school.

Modality of Health Examination

Studies and reviews

As for the modality of health examinations conducted in schools, a survey targeting schools carried out in 2011 by an investigative commission of the MEXT⁹ addressed the budget, state of implementation, actual condition of ex-post measures, addition or elimination of examination items, and the role of school doctors in health examinations of students. In regard to the board of education, the budget and the participation rate in school entry health check-ups, addition and elimination of check-up items, and the presence/absence of complaints from parents about health check-up contents have been studied. In addition, the budget, implementing body, state of implementation, and the health check-up par-

ticipation rate of school personnel have been studied.

The discussion of the investigative commission based on the results of these surveys is generally focused on the following four issues: the purpose of health check-ups in schools, handling of health information, ex-post measures, and the accuracy of health check-ups. The purpose of periodic health check-ups in schools is specified as follows¹⁰: the aims are to detect at an early stage any disease or abnormality that interferes with school life, and to accurately understand the growth and health status of students as individuals and as a population. Using this as the basis of discussion, the investigative commission investigates the health check-up modality employed in the school that responds to changes in times and the environment.

Ex-post measures

School health is an important basis of lifetime health, and is connected to subsequent “occupational safety and health.” Therefore, ex-post measures for health check-ups in school are critically important. In the past, implementation of health education in school itself tended to be the purpose of such education. However, if school doctors and medical specialists provide health education to children based on the results of health check-ups, children’s sense of responsibility and motivation for maintaining their own health will be aroused, and ex-post measures will thus become more effective. If a system is formed to cover the entire process from health check-up implementation to ex-post measures based on the check-up results, and if the system is practiced under established guidelines such as “Guideline on Steps to Be Taken by Employer Based On Medical Examination Results” provided by the Industrial Safety and Health Act, the lifetime health of the nation should be further enhanced.

Concerning Health Education

In regard to health education in school, the importance of various topics, such as infectious diseases, mental health, sex education, the preciousness of life, serial education on lifestyle diseases/cancer/smoking, education on medicines, and drug education, has been pointed out. It is important that health education be given sys-

tematically to children according to the process of their growth.

Measures against infectious diseases

In 2011, the MEXT set up an investigative commission mainly addressing measures against tuberculosis in elementary and junior high schools, and the JMA lent its cooperation to this effort. A report was compiled in August of that year, and the “Manual of Anti-Tuberculosis Measures in School” was sent to schools, boards of education, and local medical associations in the spring of 2012. In particular, the rule that the interview sheet specially designed for tuberculosis examination should be used was discarded after the JMA pointed out its drawback in efficiency, and the interview sheet was then integrated into the health survey sheet instead.

In the same manner as with the anti-tuberculosis measures, the JMA also cooperated with those meeting for development of “guidance reference materials about infectious diseases to be prevented in school” supported by the Sports and Youth Bureau of the MEXT. These materials are intended to serve as educational tools for prevention of infectious diseases and to define the duration of school absence because of influenza or other infections. The JMA proposed that children with influenza be out of school for 5 days after the onset and for 2 days after deferescence, and this recommendation was reflected in the revised implementing regulations of the School Health and Safety Act in April 2012. In May 2013, “Description of Infectious Diseases to be Prevented in School” was completed, and put to practical use in schools nationwide.

It is an important role for school health that children be given opportunities to acquire correct knowledge about “being infected” with common infectious diseases during the period of compulsory education, as a part of their life skills. Such knowledge forms the grounds of proper responses to and behaviors regarding infections and epidemics, without misunderstandings or biases when children become adult members of society.

Sex education and the preciousness of life

Sex education is a very delicate and difficult issue that is under the influence of various conceptions of the MEXT, the school scene, and the board of education. Sex education, or education about the

preciousness of life, in school is very important and can facilitate the prevention of bullying because it nurtures the development of a caring feeling toward others. However, it is not easy to provide sex education because various opinions of concerned people in the educational field are involved. Under this situation, sex educational materials prepared by the Japan Association of Obstetricians and Gynecologists are used effectively.¹¹

In March 2008, based on the report of its School Health Committee, the JMA selected items for health education in relation to medical specialties and school years,¹² and requested the implementation of health education and the development of educational materials to the MEXT. This report presented organized items regarding health education according to children’s stage of development, particularly from the aspects of children, parents, and school personnel. It is very important that not only children but also parents and school personnel share the contents of health education.

School Health in the Local Community

Health education for the community

The MHLW pointed out the major significance of school health when referring to future community health measures in the report of the investigative commission for community health measures issued in March 2012. In particular, the report pointed out the need for efforts of the whole community through “the Regional School Health Committee” set up in each junior high school district and “the School-Community Health Cooperation Promotion Council (provisional title)” set up in each municipality as a venue for collaborations among the board of education, the administrative institutions in the health sector and school doctors in the community. This report also states that it is important for the public health institute and local health centers, etc., to take an active part in opportunities for discussion with concerned parties involved in the school and to promote good health under adequate cooperation with the school.

In addition, it has clearly been shown that in prefectures, municipal governments and local medical associations, etc., should cooperate and plan health education to key persons in the community. It has also been recommended that

parties responsible for community health and those responsible for school health facilitate mutual cooperation for promoting the health of the nation.

What these issues mean, precisely, is that children should be nurtured by the community, as has been advocated by the JMA. With the wind of the MHLW movement at its back, the JMA intends to promote school health.

School Safety

School Health and Safety Act

School safety management, another aspect of the School Health and Safety Act, consists of mental and physical, life, and school environment safety management.

Accidents during physical education activities

According to a report filed by the MEXT,¹³ sudden death, as analyzed by the types of accidents and illnesses, accounted for 61% of all accidents occurring during physical education activities in school between 1998 and 2009. When annual changes in accidents, classified by the types of accidents and illnesses, during physical education activities in school between 1998 and 2009 were studied, sudden death accounted for more than 50% annually, remaining predominant in the category of death/severe disorders, although there was a general tendency for sudden death to decrease. There were 212 accidents during physical education classes and 318 during club activities in the first grade of junior high through the third grade of senior high school. In relation to the type of sports during club activities, Judo-related accidents were most frequent, accounting for 50 cases.

The report recommended that students be aware of avoiding blows to the heads of other players or oneself and to be thoroughly instructed on falling techniques in the Judo class. In 2012, martial art courses became compulsory in junior high schools, and many schools chose Judo for this course. In response to this, the MEXT carried out a survey about the schools' teaching systems for this compulsory course in July 2012, and published the result that 64% of all national, public, and private junior high schools chose Judo. Thus, close attention is necessary regarding possible accidents.

Avoidance of sudden death

Health education is an important means of avoiding tragedies such as sudden death during physical education activities in school. It is also important to implement ex-post measures such as testing, treatment, life management, and follow-up observation in definitely or possibly ill patients. The JMA, jointly with the Japanese Society for Emergency Medicine, recommended the introduction of cardiopulmonary resuscitation education in schools to the Minister of MEXT. Instruction for performing cardiopulmonary resuscitation is closely related to the lives of children and is included in the official curriculum guidelines. It is expected that education on life-saving measures will help children cultivate the spirit of aiding each other and learning the preciousness of life.

School safety education by third parties

School safety has chiefly targeted traffic accidents and traumatic injuries to date. However, large-scale disasters should also be addressed in the future. Even if doctors are requested to participate in school safety as key figures in the local community, it may be difficult to be involved in the school safety activities of individual schools. It is, however, possible for the views of doctors as advisers to have significant influences on the quality of school safety.

Protecting Children From Radiation

On April 19, 2011, around which time the seriousness of leakage of radioactive substances due to the disaster at the Tokyo Electric Power Company's Fukushima Daiichi Nuclear Power Plant became apparent, the MEXT issued "the provisional idea about decision making in the use of school buildings, schoolyards, etc., of schools in Fukushima Prefecture" to the Fukushima Prefecture Board of Education and related organizations, prescribing the provisional rule that the upper limit of radiation dose exposure for infants and children be 20 millisieverts. In this regard, the JMA realized a critical need for correction of the terrible mistake of the Japanese government, and submitted to the Minister of MEXT a paper demanding action, which was entitled "implementation of efforts toward reduction of radiation exposure to protect the safety of children." The MEXT promptly responded and

stated that the radiation dose limit for annual exposure of 1 millisievert or less in school be aimed for. This case exactly illustrates the JMA's essential role.

In July, the JMA presented its suggestions for protecting children from radiation to the MEXT. Most of these suggestions have since been enacted into law. In particular, concerning suggestions about health education, the Minister of MEXT gave implementation instructions to the department in charge soon after presentation of the suggestions, and training sessions on the scale of 500 participants targeting school doctors and other persons involved in school health and the boards of education were held in October.

Prefectural medical associations are also taking various actions. The training sessions were scheduled to be held on a larger scale as a project entrusted from the MEXT to prefectural governments in 2012.

Recommendations From the JMA

The view of the MHLW that Regional School Health Committees and School-Community Health Promotion Councils are important for promoting community health is right on the mark. Environments for promoting school health and school safety have been prepared under the concept of lifetime health in the community. The JMA wants to suggest to the Japanese government the importance of promoting health education involving doctors to refine children's life skills including understanding and practic-

ing mental health and the preciousness of life, within the framework having the temporal axis of lifetime health and the spatial axis of community health. The official curriculum guidelines set up the principle referred to as "zest for living." The presence of doctors including school doctors is indispensable for improvement of children's life skills and enhancing their zest for living.

Recently, the JMA's School Health Committee prepared an interim report and submitted their budget requests for 2014 to the Sports and Youth Bureau of the MEXT. To solve today's school health problems, we are making an overture to ask for the budget increase for solving these health problems on a regional basis. In addition, we have made a request that a system for dispatching specialist doctors to schools be established.

The MEXT also states that solving modern health issues in school requires that children's health promotion be addressed by the whole society, with cooperation from schools, families, and the community, rather than by regarding health issues only on an individual basis. The JMA desires further reinforcement of this cooperative system.

The great benefit of health education activities in which medical specialists listen to children on the occasion of health counseling in the actual scene of school health has already been demonstrated in schools across the nation. In this regard, we continue to recommend that the Japanese government dispatch such specialists to schools.

References

- 2002–2011 School Basic Surveys. <http://www.e-stat.go.jp/SG1/estat/NewList.do?tid=000001011528>. (in Japanese)
- Japan Medical Association. Questionnaire Survey of School Doctors (2001). (in Japanese)
- School Health Statistical Survey: 2011. <http://www.e-stat.go.jp/SG1/estat/NewList.do?tid=000001011648>. (in Japanese)
- Survey of Issues Such as Problem Behavior in Counseling and Guidance of Pupils and Students (2008, 2010). <http://www.e-stat.go.jp/SG1/estat/NewList.do?tid=000001016708>. (in Japanese)
- Outline of the Discussion of 2010 Research Study Collaborator Conference on Prevention of Suicides of Pupils and Students. http://www.mext.go.jp/b_menu/shingi/chousa/shotou/063_1/gaiyou/_icsFiles/afieldfile/2011/08/04/1306734_01.pdf. (in Japanese)
- WMA Declaration of Lisbon on the Rights of the Patient (adopted in 1981, and amended in 1995 and 2005). <http://www.wma.net/en/30publications/10policies/14/index.html>.
- Official Curriculum Guidelines. http://www.mext.go.jp/a_menu/shotou/new-cs/index.htm. (in Japanese)
- 2010 Status of Disciplinary Actions Against Educational Personnel. http://www.mext.go.jp/a_menu/shotou/jinji/1314343.htm. (in Japanese)
- 2011 Survey of the Optimal Way of Future Health Checkup. (in Japanese)
- Tokyo Medical Association, ed. School Doctor Handbook. 7th ed. (in Japanese)
- Japan Association of Obstetricians and Gynecologists. What Is Puberty? What Is Sex? <http://www.jaog.or.jp/medical/ikai/project04/>. (in Japanese)
- Health education in school. In: 2010 March Report of the Japan Medical Association School Health Committee. <http://dl.med.or.jp/dl-med/nichikara/houkokusyo/gakko21.pdf>. (in Japanese)
- Ministry of Education, Culture, Sports, Science and Technology. Report of Accident Prevention During Activities of Physical Education in School. July 2012. http://www.mext.go.jp/a_menu/sports/jyujitsu/1323968.htm. (in Japanese)