School health promotion in South-East Asia by Japan and partners

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School health promotion through the Hashimoto Initiative and the Japan Consortium for Global School Health Research

School health promotion in South-East Asia has developed rapidly in recent years, and Japan has been one of the significant contributors to the reinforcement of school health promotion in the region. Starting from the Hashimoto Initiative on global parasite control, Japan advocated for international partnerships with several agencies for the development of school health programs in South-East Asia. Through a strengthened collaboration with international organizations, countries such as the Lao PDR, Cambodia, the Philippines, and Thailand have created and implemented school health programs on nutrition, sanitation, and deworming, among others. In addition to school health program formulation and implementation, the expanded network in South-East Asia led to more capable school health personnel, with many workers in the education and health sectors benefitting from the training programs jointly held by collaborating organizations.

Key words school health promotion, South-East Asia, Japan.
cooperation project in collaboration with Mahidol University and the Ministry of Public Health, Thailand. Since then, ACIPAC has carried out its activities with an emphasis on the establishment of school health-based parasite control in the Great Mekong sub-region countries. In addition to contributing to human resource development through its training courses on school-based malaria and soil-transmitted helminth (STH) control for program managers and through small-scale pilot projects implemented in partner countries, the project has carried out school health-based activities to link deworming with health-promoting school programs in the Greater Mekong Subregion. A basic but essential school health system was also established in low-income countries such as Cambodia, Lao PDR, Myanmar, and Vietnam, through the school-based parasite control approach. The ACIPAC training course alumni also created a school health taskforce involving the health and educational sectors and, under the guidance of ACIPAC, built a basic school health system composed of policy and implementation formulation, curriculum and textbook development, and an in-country school-health training system.

Aside from its activities in South-East Asia, ACIPAC assisted two African International Parasite Control Centers in Kenya and Ghana in implementing a school health-based approach through the promotion of deworming activities. Following this, several African countries also laid the groundwork for school health promotion through the conduct of projects. Training participants in African centers also formulated their own school health policy in Kenya, Ghana, Benin, and Niger.

After JICA’s assistance was concluded, the Japanese Consortium for Global School Health Research (JC-GSHR) carried on the Hashimoto Initiative and developed activities with Japan as a focal point. The JC-GSHR was set up in 2010 as a think tank and a hub for international school health networks. Rooted in the Hashimoto Initiative, it is working towards the appropriate implementation and dissemination of school health programs in low- and middle-income countries. The activities of the JC-GSHR are as follows: (i) Implementing school health research and practices; (ii) providing technical support for practices and provide human resource training on school health; (iii) cultivating young researchers and technical experts through a network of research members; (iv) publicizing and disseminating information on the results of research and school health projects; and (v) strengthening international partnerships.

The consortium strongly encourages its members to address challenges beyond deworming, such as school feeding, mental health, and the strengthening of educational ownership of school health programs in low- and middle-income countries. The consortium is currently composed of pediatricians, epidemiologists, and specialists on health education, physical education, and global health.

Aside from school health implementation, considerable efforts towards developing human resources for health have been made by the consortium in recent years. The Training Course on School Health and Nutrition Programs in South-East Asia was one of these initiatives. The training program was launched in 2012 and jointly organized by Mahidol University Thailand, the JC-GSHR Japan, and the PCD of the Imperial College London United Kingdom. The training course aimed to capacitate countries by improving knowledge and strengthening partnerships for school health and nutrition activities at the global, regional, national, and local level.

Fig. 1 Professor Tsutomu Takeuchi (2018) spearheaded the strengthening of the global initiative on global parasite control.
Training participants, who were from the education and health sectors, shared their country experiences and drafted action plans for their respective countries. Since the training course has been offered, it has catered to more than 200 practitioners coming from 27 countries across the globe. The training had also expanded the school health network in Asia, with the inclusion of Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ), Save the Children, SEAMEO-TROPMED, International School Health Network, an academic institution in Korea, and the United Nations Educational, Scientific and Cultural Organization (UNESCO). Participants who attended the training courses contributed to formulate and implement school health policy in their home country.

Current situation and challenges in South-East Asia

The United Nation’s Sustainable Development Goal No. 3 aims to ensure healthy lives and promotion of well-being at all ages. This includes children and adolescents, who constitute a large proportion of the world’s population. In 2018, it was estimated that the population of children and adolescents has reached more than 1.8 billion and a huge part of them are in school. In 2012, an estimated 1.3 million adolescents died from road injuries, AIDS, suicide, respiratory diseases, and interpersonal violence. It is therefore imperative that interventions targeting children and adolescents should be designed, implemented, regularly monitored, and evaluated in order to contribute significantly to the attainment of Sustainable Development Goal 3.

Schools and school health play a crucial role in reducing child and adolescent mortality as young people spend most of their productive time in the schools. They are also considered to be a “captive audience” for health interventions; they view their teachers as role models, and life skills including behaviors are developed and established during childhood up to early adolescence. Moreover, schools have the potential to provide school health policies, supportive environments, curricular and extra-curricular offerings for life skills development, and linkage to communities.

A systematic review in low-income countries in East Asia and the Pacific in 2004 revealed a paucity of school-health research in the past four decades. This review found 63 articles related to school health, and the topics included helminthic infections, nutrition, oral health, leprosy, drug abuse, mental health, and allergy. As of this writing, there have not been any follow up systematic reviews in the region since 2004. In 2015, the South-East Asian Ministers of Education Organization Regional Centre for Educational Innovation and Technology (SEAMEO-INNOTECH) conducted a two-phase study on school health care and nutrition (SHCN) in primary schools in South-East Asia as part of their five-year development plan (2011–2016). During Phase 1, the current national policies, frameworks, and programs implemented in support of SHCN were reviewed. The member countries included were Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Philippines, and Thailand. The Phase 1 findings revealed that the presence of national policies and frameworks on health and education, strong leadership, and the adequacy of funding and human resources contributed to the effective implementation of school health and nutrition programs. The study also identified lack of parent engagement, insufficient funding, and unsustainable behavior change among students as challenges. During the second phase, case studies of selected primary schools with good SHCN programs and practices from Indonesia, Myanmar, Singapore, the Philippines, Timor-Leste, and Vietnam were presented. Case studies showed that education ministries had varied interpretation of successful school health programs. The majority of the programs implemented in the schools reflected the national school health initiatives in these countries and schools can customize these programs based on their needs and available resources.

More recently, from November 23–25, 2015, the WHO, through its Geneva headquarters and its regional office in the South-East Asia, organized a School Health Technical Meeting in Bangkok, Thailand, assisted by the JC-GSHR. The meeting aimed to identify global school health initiatives, achievements in the region, why these achievements worked, and what lessons were learnt. The meeting also identified strategic recommendations to address barriers in school health, emerging issues encountered in the schools, and optimize opportunities in school health programs in low- and middle-income countries (LMIC). Lastly, delegates renewed their commitments to school health for all children and ensuring health equity and equal opportunities for education. The meeting was attended by a total of 67 delegates coming from the health and education sectors from South-East Asia, the Western Pacific, and the Middle East and African regions. United Nations (UN) agencies, international nongovernment organizations (NGOs), and school health experts from academia comprised the delegates.

The meeting focused on the implementation of school health programs in the LMIC. Delegates were able to pinpoint the types of school health programs that worked in countries with few resources as well as those with many resources. Deworming, water, sanitation and hygiene (WASH), immunization, school lunches, and health screening (weight and height measurement, eyesight, and hearing) were identified as school health programs that worked in countries with few resources. Meanwhile, successful programs for the prevention of noncommunicable diseases (NCDs) such as physical activity, healthy eating (increasing vegetable and fruit intake, control of sugar, and fat intake), oral health, and tobacco use were reported more from high-resource countries.

After reviewing the lessons learnt in implementing school health programs and in scaling up their implementation, the technical committee recognized that the establishment of a better data collecting system and the strengthening of advocacy and cooperation between and within ministries and collaboration with stakeholders at all levels were important to the success of program implementation despite limited human and
financial resources. In addition, the report also recognized the need to ensure sustainable funding, better costing, long-term financing plans and procedures, develop institutionalized human resource, and establish health education curriculum as a home for all topics as vital factors to program implementation. Finally, the report also emphasized the need to promote the engagement of parents, students, and teachers. 5

The meeting also recognized the need to address equity issues for children who come from low socioeconomic status backgrounds and those from geographically isolated and disadvantaged areas as emerging issues. There is also a need to address mental health issues, personal violence, safety and injuries, and different climate change-related challenges and issues such as emergencies and disasters, conflict, and humanitarian crises. 6

Progress of School Health and Nutrition in the Philippines

In the Philippines, the Department of Education or DepEd (formerly the Department of Education, Culture and Sports or DECS) serves as the primary government agency mandated to formulate and implement school health and nutrition policies and programs. From 1931 to 1978, the DECS implemented school health programs using “standalone” manuals and guides for various school health services such as nursing. However, driven by the need to integrate their efforts, programs, and activities on school health, the then DECS developed an integrated manual in 1987, which was later revised in 1989 to include the school nutrition program – the School Health and Nutrition Manual. Another revision was made in June 1997, which, since then, has served as a guide for DECS medical officers, dentists, nurses, nutritionist-dieters, health and nutrition educators, school administrators, supervisors, and teachers, so that they can perform their roles in the effective implementation of health and nutrition programs in the schools.

Complementing the standards, policies, and guidelines contained in the 1997 version of the manual, the Department continued to issue various policies on school health and nutrition programs and services on a regular basis, in support of institutional commitments, legal mandates, and priorities set by the management. In June 2007, the Department launched the Universal Medical and Dental Check-Up (UMDC) to strengthen health examinations and treatment among learners in partnership with health personnel from other government agencies and non-government organizations. 7

In June 2009, the DepEd issued Department Order 65 series of 2009, otherwise known as the Essential Health Care Program (EHCP). The Department Order aims to institutionalize simple interventions in schools such as daily hand washing with soap, daily tooth brushing with fluoride toothpaste, and bi-annual deworming of all children in public elementary schools. These were found to be the most efficient, simple, and evidence-based interventions to improve public school children’s health, and which will eventually lead to improved academic performance. 8

In May 30, 2011, the DepEd developed and issued Department Order No 43, series of 2011, otherwise known as “Strengthening the School Health and Nutrition Programs (SHNP) for the Achievement of the Education for All (EFA) and the Millennium Development Goals (MDGs).” The policy envisions positioning the department to be more capable of determining the effectiveness and relevance of its programs and to make these more responsive to the DepEd’s mission of enhancing the students’ motivation and capacity for learning, improving learning outcomes, reducing absenteeism, and ensuring that school-aged children are able to stay in schools as clearly highlighted in the EFA and MDGs. The policy is designed to maintain and improve the health of school children by preventing diseases, and promoting health-related knowledge, attitudes, skills, and practices. The alignment of the SHNP with the DepEd’s programs will pave the way for a more systematic and holistic approach to the implementation, monitoring, and evaluation of its multifarious undertakings. 9

The administration of DepEd from 2010 to 2016 ushered in various reforms and organizational changes, which influenced the structure, functions, and programs of the school health units across all levels of governance. One of these is the implementation of the rationalization plan, which reorganized the structure and staffing patterns of the department to streamline the bureaucracy. During this same period, the focus of school health has been more on program management and health education, along with strengthening external partnerships. Several policies were issued covering HIV/AIDS education, WASH in schools, comprehensive tobacco control, drug education, and promoting healthy food and beverage choices in DepEd, among others. 10-14

The School Health Division, under the Bureau of Learner Support Services, still formulates and implements policies and programs that are cascaded down to the schools through their respective regional and school division offices. The current administration has refocused the efforts of school health towards the delivery of health services, prioritizing vulnerable learners and those needing emergency care services, along with the strengthening of health education. This is demonstrated in the more recent and noteworthy school health policy issued by the department in July 2018, the Policy and Guidelines on Oplan Kalusugan sa Department of Education (Operational Plan for Health in the Department of Education) or more popularly known as “OK sa DepEd”. The policy aims to promote and provide all learners and DepEd personnel with a sustainable holistic school health and nutrition program for healthier behaviors and better learning outcomes. It also aims to promote efficient implementation of school health and nutrition programs through service provision for public school learners and teachers, information generation as basis for planning, as well as wider partner and stakeholder collaboration. 9

The department currently focuses on the implementation of six flagship programs under OK sa DepEd, namely: (i) School-
Based on the recommended policies and programs related to health, including school health and nutrition. This is done through the healthy settings approach with schools as one of the settings. There are also programs within the DOH such as the adolescent health and development program, and children’s health 2025, among others, which can impact the health of the children and adolescents. Moreover, several indicators under the Service Delivery strategic pillar in the National Objectives for Health 2017–2022 require strengthened coordination and partnership with the Department of Health under the umbrella of school health. These indicators include the following: Modern contraceptive prevalence rate (all women), adolescent birthrate, percentage of fully immunized children, prevalence of current tobacco use, treatment program completion rate for people who abuse drugs, percentage anti-retroviral therapy (ART) coverage, percentage of disaster-affected areas with no reported outbreaks (disaggregated by locus, e.g. within / outside evacuation centers). The DOH, through their regional health offices, also implements school health programs that are cascaded down to various local governments within their respective regions. The local government units – provincial, municipal and city – also formulate and implement local ordinances that can impact the health of the people in the schools and communities. The Philippines has just passed two landmark legislations: Republic Act 11036, otherwise known as the Mental Health Act and the RA 11223 or the Universal Health Care Law. These laws mandate the integration of age-appropriate mental health and mental health promotion into the educational system and institutions under the supervision of the Department of Education.

On another front, the Department of Health (DOH), through the Health Promotion and Communication Services, is a government agency that is mandated to formulate and implement policies and programs related to health, including school health and nutrition. This is done through the healthy settings approach with schools as one of the settings. There are also programs within the DOH such as the adolescent health and development program, and children’s health 2025, among others, which can impact the health of the children and adolescents. Moreover, several indicators under the Service Delivery strategic pillar in the National Objectives for Health 2017–2022 require strengthened coordination and partnership with the Department of Health under the umbrella of school health. These indicators include the following: Modern contraceptive prevalence rate (all women), adolescent birthrate, percentage of fully immunized children, prevalence of current tobacco use, treatment program completion rate for people who abuse drugs, percentage anti-retroviral therapy (ART) coverage, percentage of disaster-affected areas with no reported outbreaks (disaggregated by locus, e.g. within / outside evacuation centers). The DOH, through their regional health offices, also implements school health programs that are cascaded down to various local governments within their respective regions. The local government units – provincial, municipal and city – also formulate and implement local ordinances that can impact the health of the people in the schools and communities. The Philippines has just passed two landmark legislations: Republic Act 11036, otherwise known as the Mental Health Act and the RA 11223 or the Universal Health Care Law. These laws mandate the integration of age-appropriate mental health and mental health promotion into the educational system and institutions under the supervision of the Department of Education.

The Department of Health and Department of Education also partner with various local and international development organizations in the implementation of their school health and nutrition programs both in the formal and non-formal education systems. These include, but are not limited to, Save the Children, GIZ, UNESCO, UNICEF, Fit for School, Inc., Jollibee Foundation, and the League of Provinces of the Philippines.

The partnership among the JC-GSHR, academia, and the Department of Education has produced research-based evidence on the status of school health in the Philippines. This evidence is related to disaster preparedness, mental health, menstrual health management, and infectious diseases. This partnership has also contributed to the health workforce capacity development on school health in the Philippines.

Progress of school health and nutrition in Thailand

Thailand started school health and nutrition (SHN) implementation from 1925. In the beginning, school health was implemented by the Ministry of Education (MOE) and focused only on prevention and control of communicable diseases among school children. Collaboration with the Ministry of Public Health (MOPH) started in 1977, and school health has significantly expanded. The Thai government established the health promoting school (HPS) as a strategy in 1998 to manage school children’s health, and this was expanded nationwide. The HPS concept and content have been regarded by the Thai government as a national school health program (SHP) in Thailand. Currently, the MOPH leads the school health activities in collaboration with MOE. In Thailand, health-promotion activities at schools are positioned as part of improving school management and one of the educational activities in educational policy. Through the activities, the students are required to have a healthy and aesthetic sense. Thailand created the slogan, “A health promoting school is a school constantly strengthening its capacity as a healthy setting for living, learning and working” as its slogan for HPS. School is placing a greater emphasis on health education and environmental sanitation. The MOPH has established a guideline to facilitate school health activities since 2000. Its guideline consisted of the following 10 indicators: (i) Establish a health-promoting school policy; (ii) Adapt aspects of school management to allow effective health promotion; (iii) Conduct health promotion activities with collaboration between the school and the local community; (iv) Give appropriate attention to the school environment; (v) Provide school health services such as physical examinations and first aid; (vi) Provide school-based health education; (vii) Promote proper nutrition and consumption of safe foods; (viii) Promote regular physical exercise, sports, and healthy recreational activities; (ix) Provide counseling and social support for student; and (x) Support the health status of school staff. Thailand has introduced the SHN awarding system across the country since 2000. In the system, a school health management committee composed of school principals, teachers, parents, and community authority assessed and rated their own school health activities through a self-assessment checklist. Consequently, the MOE selected schools to be awarded according to the results. Since 2002, three levels of awards have been given, namely bronze, silver, and gold level. “Gold” level schools have dramatically increased...
in a short period from 8.9% in 2003 to 40.3% in 2007. In 2008, “diamond” level schools were added as the highest level with further three process indicators, including results of implementation such as students’ weight / height, and mental condition. In 2008, the Thai government changed the award system from outside evaluation by district educational staffs to a self-reporting system from school to district education office. In this new system, whenever schools confirm that the school health activities have reached the required criteria, the schools report to the educational office, and an educational officer provides certification.

Thailand has recorded strong achievements in school health implementation. For example, the nutrition status of all the primary school children in Thailand has improved through the nationwide school lunch program. However, it has faced several challenges. First, the country experienced challenges in maintaining the motivation for activities at the school level after changing its award system. The regular award system has contributed to the spread of school health promotion in Thailand; however, by changing to this award system in 2008, the school lost the opportunity to receive regular monitoring and advice from district education staff. As regular award activities have contributed to keeping the motivation of health promotion activities in school, keeping and improving these activities is one of the crucial challenges.

Thailand also needs to clarify the role classification and systematic human resource development in local education offices. The current Thai guidelines do not clarify the role of local education offices in health-promoting school activities. Each school is therefore not able to receive sufficient guidance and advice for promoting and improving activities. To promote health at the school level, it is essential to promote monitoring and evaluation activities. Moreover, at the school level, the process of human resource development for health promotion school activities has been clarified. However, at the national and local levels, the system for human resource development has not been clarified. Clarifying roles and furthering systematic human resource development in local education offices are essential elements to strengthen the guidance and advice provided to schools.

Thailand’s response to emerging health issues also poses a challenge. Rapid social and economic development in Thailand over the past 30 years has Westernized food intake and lifestyle and it has been pointed out that such changes particularly affect Thai young people’s practice of sexual behavior. Thai children also face the double burden of infectious and non-infectious diseases, such as malnutrition and obesity. To respond to such new health issues, it is necessary to update the contents of guidelines on health promotion activities regularly. In Thailand, there are currently disagreements between the MOE and the MOPH regarding the promotion of sexually transmitted disease prevention education and sexual education such as education for prevention of early pregnancy. The MOPH insists on the promotion of continuous education through primary and secondary education in schools. On the other hand, the MOE is reluctant to conduct sex-related education. MOE is reluctant to conduct sexual education at school because Thai culture does not recommend talking about sexual topics such as sexual intercourse and abortion in public. Not only the administrative staff of the MOE but also teachers at school sites are showing negative attitudes regarding the implementation of sex education. However, it has been reported that the attitudes of teachers toward guidance on sexual issues can be improved by providing training in an appropriate manner. Therefore, in the future, it is important to find a more effective training method considering cultural differences.

Progress of school health and nutrition in Lao PDR

In the Lao PDR, the Ministry of Education and Sports (MOES), formerly known as the Ministry of Education, and the Ministry of Health (MOH) have implemented various vertical health activities in schools over several decades. Since 1993, school health program activities have been implemented widely and continuously. In 2002, both ministries signed a memorandum of understanding (MOU) to work collaboratively on school health promotion. In 2004, school health task forces, which aimed to support schools in improving children’s health status, were established at each administrative level (national, provincial, district, and school). Each task force consists of representative officers from both the education and health sectors at the upper three levels, and the principal and a few teachers at the school level. In 2005, the National School Health Policy was established and it was revised in 2010. The National School Health Policy was developed to provide reference standards for the implementation of school health strategies by health program task forces from central to local levels, school directors from preschool to secondary education, and line ministries and international organizations that support school health program activities. The policy consists of seven components: (i) personal hygiene and life skills; (ii) physical school environment; (iii) psycho-social school environment; (iv) disease control and prevention; (v) health-care services; (vi) nutrition promotion; and (vii) cooperation between the school and community.

Through the support of the Japanese government, several school health activities have been conducted in Lao PDR, such as the Japan International Cooperation Agency’s (JICA) program, which trained staff members from both Ministries of Health and Education. The trainees started deworming in schools, resulting in 98% deworming coverage among primary school students nationwide. In 2008, the national school health checklist was developed through the collaboration between MOES and JICA. The checklist consisted of 72 indicators and was implemented at 22 schools in Oudomxay province and Vientiane capital. In 2013, the School Health Taskforce of Lao PDR and the National University of Laos signed a memorandum of agreement (MOU) with JC-GSHR to promote and develop cooperation in school health promotion in Lao PDR. Through this collaboration, several school health...
implementers from the central to local levels of both the health and education ministries participated in the training for capacity building on school health promotion called “The Annual Course on School Health and Nutrition Programme in Asia,” which has been organized annually since 2012 by the Faculty of Tropical Medicine, Mahidol University, Bangkok, Thailand.

Cooperation between the Faculty of Education, National University of Laos, Tokyo Gakugei University, Shinshu University, and Kobe University in Japan gave rise to the establishment of the Ecohealth education project since 2009. With the objective of promoting health and environmental education in the Lao PDR, the project focused on developing the health and environment education curriculum, improving teaching-learning, and encouraging health and environment education research in schools. Ecohealth education is an educational approach that applies the ideas of Charron and Butler, which advocate an ecological approach to human health. Ecohealth education aims to make learners understand the importance of harmonious relationships between socio-economic development, ecosystem sustainability, lifestyle, and human health. The goal is to educate children, adolescents, youths, and adults to be responsible citizens, not only for their health but also for the environment around them. In the context of school education, Ecohealth education is a comprehensive subject that includes environmental and health education, and extends them.

As part of the project, the Ecohealth education textbook was developed in 2018. It was established and integrated in the curriculum of all nine teacher training institutions (TTIs) in Laos in 2018. The textbook consists of 16 chapters related to health education, such as ecosystem- and water-related diseases and food-borne diseases, endemic diseases, oral health, food education, substance use and health, lifestyle-related diseases, infectious diseases and other sexually transmitted diseases, safety education, and disaster prevention education, among others. Over 400 teachers from nine TTIs and their attachment schools (demonstration schools) attended teacher training for disseminating Ecohealth education and teachers were trained on how to teach Ecohealth in TTIs.

The project also successfully developed models for a “Child Health Club” in Laos. The school health club was piloted in four target primary schools – one in Vientiane, the capital, and three in Luangprabang province. The Child Health Club focused on improving the health status of school children and improving the school environment and school safety through children’s voluntary activity supported by schoolteachers, parents, and communities. The main actors of Child Health Club activities are school children. In Child Health Club activities, children conducted the following activities by themselves: classroom clearing, ground / garden cleaning, toilet cleaning, garbage bank, health check-up, water safety, dental hygiene, traffic safety, healthy lifestyle, school hygiene, school hazard map, nutrition and school canteen, and school public information. Despite the successes, there were also challenges for school health promotion in Lao PDR, which were mentioned by key informants from the MOES. These include the sustainability of existing activities, human and financial resources, and some of the students’ caregivers’ perceptions. The activities were well conducted while they were being supported by the project; however, some of the activities tend to be discontinued after project support was ended. These might be related to several factors such as lack of ownership, skill management, and financial resources. Human and financial resources are also considered as challenges. In terms of human resources, a limited number of participants and training events, and transfers of persons in charge, were identified as challenges. On the other hand, financial resource challenges include the absence of a specific budget for school health-promotion activities and unclear mechanisms for accessing funds across levels. The main budget for school health promotion is provided by the government of the Lao PDR, and some specific areas are supported by donor agencies. Another challenge is the students’ caregivers’ perceptions. For some, the concept of school health promotion or health education was still unclear. For example, during the implementation of child health club activities under the Ecohealth project, arguments between the school and students’ caregivers occurred. The students’ parents disagreed with teachers’ and students’ practice of school toilet cleaning, garbage collecting, and school field cleaning because they thought that the school was punishing their children. The misunderstanding occurred because the parents’ generation considered these kinds of activities as punishments for students who violated school policies.

Progress of school health and nutrition in the Kingdom of Cambodia

In Cambodia, the School Health Department under the Ministry of Education, Youth, and Sports (MoEYS) is the primary government agency responsible for the formulation, implementation, monitoring, and evaluation of policies and programs related to school health and nutrition. Prior to 1960, the School Health Department was named the School Hygiene Institution and mostly provided medical services to school staff. However, this institution was abolished during the 1975 to 1979 Democratic Kampuchea regime of Pol Pot. After the downfall of this regime, the School Hygiene Institution was revived and renamed the School Hygiene Unit. In 1992, the unit was renamed the School Hygiene Department until 1998, when it was changed into the current School Health Department.

Although the School Health Department has already been established for a long time and has been working on school health programs, it was only around 2004 when the School Health Department started developing the School Health Policy. In 2006, the School Health Policy was launched and came into full effect under the leadership of the Ministry of Education, Youth, and Sports. Aiming to contribute to the promotion of quality education, the School Health Policy encompassed the following components: (i) Provision of health check-up;
(ii) health education; (iii) improvement of learning environment and physical facilities; and (iv) strengthening of public-private partnerships. Health checkups aim to promote essential school health services such as vaccination, deworming, first aid, and school feeding. Meanwhile, under the umbrella of the health education pillar are six components: primary health care, mental health, comprehensive sexuality education, health and environment, health and belief, and health economy. The third pillar includes nutrition and the provision of safe drinking water, toilets, and handwashing facilities in schools across Cambodia. The fourth pillar focuses on strengthening public-private partnerships between the government and private sectors and nongovernment organizations. 

During the time the School Health Policy was in effect, the Ministry of Education, Youth, and Sports was the sole government agency responsible for implementing school health programs. Recognizing the need for interministerial collaboration to improve the quality of education and access to good health and welfare services, a new National School Health Policy was created in April 2019. The new policy, which was endorsed by the Prime Minister, mandates at least 20 government ministries to work together in improving and promoting school health service delivery in Cambodia. The National School Health Policy aims to promote: (i) essential health services for both learners and personnel; (ii) nutrition; (iii) an inclusive learning environment; (iv) a culture of personal, family, and society care; and (v) participation of all stakeholders in improving school health. In contrast with its predecessor, nine key strategies to achieve the vision, goal, and objectives of the policy have been outlined: (i) Developing a legal framework and mechanism; (ii) improving fundamental health of learners and educational personnel; (iii) promoting nutrition; (iv) improving infrastructure for water, sanitation, and hygiene; (v) promoting the improvement of a safe, inclusive, comfortable, and friendly learning environment; (vi) promoting security and order in educational institutions; (vii) promoting health education; (viii) promoting health skills; and (ix) mobilization of all stakeholders in improving school health. Prior to the development of the new national policy, program implementation came from central government directives; however, the new policy uses a grassroots approach, which aims to engage individual schools more in developing plans for program implementation.

The School Health Department implements its programs in collaboration with its partner organizations. Under the initiatives of the Hashimoto Initiative and Asian Center of Parasite Control (ACIPAC), Cambodian officials participated in international training programs on school-based malaria and soil-transmitted helminthiasis control. As an effect of the ACIPAC’s advocacy, the Cambodian government created the National Task Force for the Control of STH, Schistosomiasis and for the Elimination Program of Lymphatic Filariasis, and the Helminthiasis Prevention and Control Policy in 2004. Trainees subsequently developed small-scale pilot projects such as the model children activity. The activity was grounded on the belief that children should be partners and not just recipients of health education, and as such, model children from selected classes were trained on STH and malaria prevention and they passed on their knowledge to their community. Malaria education in Cambodian primary schools was started as a national program supported by the Global Fund to Fight AIDS, Tuberculosis and Malaria (GAFTM). In the original proposal for support submitted to GAFTM in 2004, the Cambodian Country Coordinating Committee reported that malaria health education would be imparted to 10,829 schools, 1,353 provincial educational staff, 12,720 teachers and 2,644,379 pupils. For this nationwide activity, ACIPAC trainees in Cambodia had key roles in developing both the initial proposal and the malaria control strategy. This program was mentioned as an effective behavior change communication tool. In addition to these capacity-building initiatives on parasite control, officials from the School Health Department regularly participate in the Annual Course on School Health and Nutrition Programme in Asia being conducted by Mahidol University in conjunction with the JC-GSHR and PCD. JC-GSHR is also instrumental in fostering collaboration for research between Cambodia and other countries in the region.

Access to safe drinking water is essential in halting the spread of soil-transmitted infections (STI). Cognizant of the importance of safe drinking water for healthy populations, the Cambodian Millennium Development Goals aimed to provide safe potable water to 80% of its urban population by 2015. However, the Ministry of Industry, Mines, and Energy (MIME) reported low water supply in urban areas, with only 58.6% of the urban population having access to potable water in 2010. To address the problem, the JICA contributed to the enhancement of the operation and maintenance of water supply facilities. The JICA has also emphasized sanitation – by cooperating with government sectors in installing toilet facilities in schools and health facilities and improving hygiene behavior – as a priority area for achieving sustainable development goals (SDGs).

Despite the successes achieved by the School Health Department, daunting challenges still hamper its initiatives. The department faces limitations in funding, human resources, and a need for a stronger structure for implementation. Limited financial resources impede the implementation of school health programs and activities. The availability of human resources such as personnel professionally trained in school health, and of health professionals, also poses a challenge. At the national level, there are personnel with the technical capacity to implement and monitor programs; however, staff at the provincial and district levels are less equipped than their counterparts. Teachers have also yet to receive adequate training in teaching the new subject on health education. There is also a lack of health professionals such as school nurses who can be assigned to health care rooms in schools. The department also recognizes the need to strengthen guidelines connecting the national to subnational program implementation. There are currently specific guidelines for each school health program, but the department plans to develop a comprehensive school health guideline, which contains the implementing rules and regulations for the implementation, monitoring, and evaluation of school health programs across Cambodia. Finally,
translation of personnel function to action – that is, commitment and motivation to perform their duties and responsibilities – is also a challenge. Each official’s duties and functions are clearly stated in the department’s policy; however, this does not guarantee translation into efficient and committed service. On the other hand, at the school level, the school principals’ or school administrators’ capacity or commitment to implement school health programs also influences its success at the grassroots level.

**Conclusion**

School health promotion in South-East Asia was strengthened through the combined efforts of Japanese organizations, ministries of education and health, local governments, and other international nongovernmental organizations, and the cooperation and support of school administrators, teachers, and learners. The benefit of expanding the school health network in South-East Asia is not only limited to human resource development but also extends to school health policy formulation and implementation. The training and exchange programs also helped foster the sharing of best practices, research, and technical expertise between countries.

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**Disclosure**

The authors declare no conflict of interest.

**Author contributions**

C.E., K.K., E.R.G., and J.K. conceptualized the manuscript. K.K., S.T., E.R.G., C.E., and J.K. drafted the manuscript. J.H. and M.C.D. contributed to the manuscript. All authors reviewed the manuscript draft and approved the final version.

**Consent for publication**

Not applicable.

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