

ความคิดเห็นต่อการทำงานของครูพยาบาล และการรับรู้ของผู้ปกครองต่อบทบาทของครูพยาบาล
และบริการสุขภาพสำหรับนักเรียน โรงเรียนประถมศึกษา จังหวัดบักนิน ประเทศเวียดนาม



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DETERMINATION OF SCHOOL NURSES' OPINIONS TOWARD
THEIR WORKS AND PARENTS' PERCEPTIONS OF
SCHOOL NURSE'S ROLES AND HEALTH SERVICES
IN BACNINH, VIETNAM

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การศึกษาครั้งนี้มีวัตถุประสงค์เพื่อศึกษาหาความคิดเห็นต่อบทบาท และ การปฏิบัติงานของครู พยาบาล และการยอมรับของผู้ปกครองเด็กนักเรียนระดับประถมศึกษา ต่อบทบาท และการให้บริการ สุขภาพของครูพยาบาลโรงเรียน ทั้งใน โรงเรียนที่มีและไม่มีครูพยาบาลประจำ ซึ่งเป็นการศึกษาทั้งเชิง ปริมาณและเชิงคุณภาพ ใช้วิธีการสัมภาษณ์เชิงลึกด้วยแนวคำถามกับครูพยาบาล และครูที่ทำหน้าที่ ให้บริการด้านสุขภาพ รวมจำนวน 2 คน และใช้แบบสอบถามที่ตอบด้วยตนเองกับผู้ปกครองเด็กนักเรียน จำนวน 580 คน ในทั้งสองโรงเรียน ซึ่งพบว่าโรงเรียนที่มีครูพยาบาล มีจำนวนห้อง และนักเรียนมากกว่า โรงเรียนที่ไม่มีครูพยาบาลประจำ สำหรับผู้ปกครองที่เป็นกลุ่มตัวอย่างเป็นชายร้อยละ 53.1 อายุเฉลี่ย 37.5 ปี ประมาณหนึ่งในสามของผู้ปกครองเป็นข้าราชการ รองลงมา ร้อยละ 17.1 เป็นลูกจ้างบริษัทเอกชน

การศึกษายังพบว่าทั้ง ครูพยาบาลโรงเรียน ครูที่ทำหน้าที่ให้บริการด้านสุขภาพ และผู้ปกครอง มี ความคิดเห็นตรงกันว่าจำเป็นต้องมีครูพยาบาล (จบด้านการแพทย์หรือพยาบาล) ทำงานประจำและเต็ม เวลา สำหรับบทบาทที่สำคัญของครูพยาบาลในโรงเรียน มีอยู่ 6 ประการ คือ (1) การปฐมพยาบาล และ การดูแลในภาวะฉุกเฉินในเด็กนักเรียน (2) การคัดกรองทางด้านสุขภาพ (3)การจัดทำทะเบียนประวัติของ เด็กนักเรียน (4)การจัดการระบบสุขาภิบาลและสิ่งแวดล้อมในโรงเรียน (5) การเป็นผู้ให้คำปรึกษาแก่ นักเรียน ครู และผู้ปกครอง ด้านสุขภาพ (6) การให้สุขศึกษา ส่วนกิจกรรมที่จำเป็นอย่างยิ่ง 5 ประการ ที่ ครูพยาบาลในโรงเรียนต้องดำเนินการ คือ (1) การดูแลเรื่องสุขาภิบาลด้านอาหารกลางวันสำหรับเด็ก นักเรียนและครู (2) การตรวจสุขภาพ และลงรายงานผลการตรวจลงในระเบียบอย่างต่อเนื่อง (3)การจัดหา ยาที่จำเป็นสำหรับเด็กนักเรียนและครู (4) การจัดหาไม้ค้ำที่สะอาดและการจัดการสุขาภิบาลสิ่งแวดล้อม (5) จัดกิจกรรมการเรียนการสอนในเรื่องเกี่ยวกับสิ่งแวดล้อม สำหรับเด็กนักเรียนและครู บทบาท ซึ่ง บทบาท และบริการทั้งหมดของครูพยาบาลโรงเรียน สอดคล้องกับนโยบายของกระทรวงสาธารณสุขและ กระทรวงศึกษาธิการ นอกจากนี้ยังพบว่าผู้ปกครองของ โรงเรียนที่มีครูพยาบาล ทราบที่ตั้งของห้อง พยาบาลอย่างถูกต้อง และได้รับข้อมูลด้านสุขภาพ มากกว่าโรงเรียนที่ไม่มีครูพยาบาล ($p < 0.001$) นอกจากนี้ ผู้ปกครองร้อยละ 94.6 เห็นด้วยที่จะสนับสนุนการให้บริการสุขภาพในโรงเรียน และร้อยละ 81 เห็นด้วย โดยการจ่ายเงินสนับสนุนโดยตรง จากผลการศึกษสามารถประยุกต์ใช้เป็นข้อเสนอแนะ แนวทาง และยุทธศาสตร์ในการจัดให้มีครูพยาบาลในโรงเรียนต่อไป

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PHUONG HIEN NGUYEN: DETERMINATION OF SCHOOL NURSES' OPINIONS TOWARD THEIR WORKS AND PARENTS' PERCEPTIONS OF SCHOOL NURSE'S ROLE AND HEALTH SERVICES IN BACNINH, VIETNAM. ADVISOR: ASST. PROF. RATANA SOMRONGTHONG, Ph.D., 117 pp.

This research aimed to examine opinions of school nurses towards their works with children and the perceptions of primary school parents/ guardians of school nurse's roles and health services which were provided by school nurses including the both categories of schools, which had school nurse and did not have school nurse. This was a descriptive study using both qualitative and quantitative methods, with in-depth interview following guideline question for 2 school nurse and school health staff, and with self - responding questionnaires for 580 parents/guardians of primary school students in 2 primary schools in BacNinh City. In the school having school nurse, the number of class room and students was larger than in school without school nurse. About the respondents, there were 53.1% males, with the mean of age was about 37.5 years, about one-third of parents/ caregivers of both schools working for the government and 17.1% were private company employees.

The study found that both subject groups including school nurse and school health staff and almost parents thought that it needed a permanent school nurse to work full-time. The findings pointed out 6 prior roles of school nurse, including (1) providing first aid and emergency care for student at school, (2) performing health screenings, (3) managing student health records, (4) providing a sanitary school environment, (5) consulting health issues for students, teachers and parents, (6) providing health education. There were shown 5 necessary activities that school nurse can provide, which included (1) Providing lunch with food safety hygiene to students and teachers, (2) Checking up student's health and Maintaining student's health record, (3) Providing necessary medicine for students and teachers, (4) Providing fresh water and sanitary environment, (5) Providing teaching-learning and playing environment for students and teachers. All of these roles and services accorded with the school health tenors of Ministry of Health and Ministry of Education Training. The study also found that, the parents/guardians in school having school nurse know correctly about setting school nurse and health clinic exiting in their children school than in school having school health staff ($p < 0.001$) and they got more information about school health programs from school than in school having school health staff ($p < 0.001$). Besides, the results showed that the parents agreed to support for school health services (94.6%) and 81% of them wanted to pay directly for school. To assess effectiveness on implementing the roles of school nurse and school health services there need to have the other investigation study and the other should study about mobilization of social resources and community participation.

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Student's Signature: Natlan
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สถาบันวิทยบริการ
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LIST OF ABBREVIATIONS

| | |
|---------------|--|
| DoET | Department of Education and Training |
| DoH | Department of Health |
| MoET | Ministry of Education and Training |
| MoE | Ministry of Education |
| MoH | Ministry of Health |
| MoIA | Ministry of Interior Affair |
| MoLIA | Ministry of Labour Invalids and Social Affair |
| NASN | National Association of School Nurses |
| SN | School nurse |
| SHS | School health staff |
| VND | Vietnam Dong (<i>Vietnam currency</i>) |
| WHO | World Health Organization |
| UNESCO | United Nations Educational Scientific and Cultural Organization |

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CHAPTER I

INTRODUCTION

1.1. Background and Rationale

The childhood is an important period of development for every one. In this time, each person can develop not only biophysically but also psychologically and sociological too. This process of development requires a lot of factors such as nutrition, knowledge about the human development and other health factors to take place and get better and better. *“The 5 to 19-year period is a time when health-related knowledge, skills, attitudes and values can be acquired. It is a long and unique period of continuous opportunity for healthy personal development and public health intervention”*(WHO, 1999). Throughout this period, a child spends a lot of hours per day at school more than anywhere except at home.

School is one amongst the main settings for children to study and live. School can promote their health and development and can transmit prevalent cultural values to children through organizing training experiences (Jenne and Green, 1976). Thus, schools also create the safe environment for children. According to the report from the WHO Expert Committee on Comprehensive School Education and Promotion, school should constantly strengthen their capacity as a healthy setting for living, learning, and working (WHO, 1998). The schools enable to make effect to good health behavior by teaching about health and life skills of caring and protecting children health. *“Children, who learn skills to maintain health when they are young, are able to apply them in their adult lives and pass them along to their children”* (WHO, UNESCO, & EDC, 2000c). In 1986, being approved the Ottawa Charter for health

promotion, the World Health Organization emphasizes the school health care as an important foundation for the improvement of public health (WHO et al., 2000c). So that to implement school health programs in school, it requires active roles of a specialist, a health promotion practitioner, a school nurse.

“School nurses are specialized professionals who are trained to help advance and promote student well-being, academic success and lifelong achievement” (Resnicow & Allensworth, 1996). As health care providers in schools, they play a crucial role in assisting children to form positive health values, to develop life skills and to share experiences for solving health problems (XiaomingYu, 2002). They often provide services such as health screenings and assessments, health counseling and referrals, educational resources, and prevention and intervention activities. They also promote student health by serving as liaisons between the school and the community programs on health promotion.

In Vietnam, health care for schoolchildren and students has gained much preoccupation. Since the years of war (1965), the Ministry of Education and the Ministry of Health have issued many official texts for the guidance of implementation of school health care program. Recently, the Ministry of Education and Training has issued the decree No. 73/2007/MoET about the regulation of school health activities (MoET, 2007a). It said about the activities of protecting student health and the roles of school nurses, and determined also the tasks of school nurses. Based on the goals setting in the health promotion policies, each province determines proper potentials and real strength to deploy local implementation plan fitting to each socio-economic condition according to the field researches.

BacNinh is a provincial area nearby Hanoi, located at 20km far from Hanoi toward the north. The province is in the path of development and innovation, so the socio-economic condition is between rural and urban status. According to the annual report of the year 2008, the province possesses a territory of 807.6 square km of land area and a population of about 1 million people, and there are 207,639 schoolchildren (DoET, 2008). The school health care program has been very early taken care by both health and of educational offices, but the recruitment for school health services has met with great difficulties. The public policies have confronted many complicated obstacles in the implementation process due to the complexity of the community-based development oriented to urbanization. There were consequently coarse networks of health care professionals for the health care services of school-based health promotion. In the school year 2007-2008, according to the report of the Centre of Health Preventive, Department of Health, BacNinh province *“There are more than 300 schools in the province, but only 27 (6.8%) having school nurses, all of these schools are located in urban areas. The other schools appoint teachers to work as health staffs”* (DoH, 2008). The situation of school nurse in BacNinh province is typical, as every province in all over the country gets the similar difficulty. Being in the zone of high influence of public policies and developmental urbanization issued by the capital Hanoi, BacNinh province becomes a focal point of research for socio-economic development.

The aim of this research was to examine opinions and expectations of school nurses towards their works with children and the perceptions of primary school parents/ guardians of school nurse's role and health services which are provided by school nurses to children. Some recommendations about necessary interventions may

be extracted from findings for the purposes of improving the effectiveness of school nurses' roles in BacNinh province.

1.2. Research questions

1. What are opinions of the school nurse and school health staff about on work?
2. What do parents think about school nurse's roles and health services they provide including both categories of schools, which have school nurse and do not have school nurse?

1.3. Objectives

1. To explore the opinions of the school nurse and school health staff on their works, focusing on school health services with children.
2. To determine the perceptions of primary school parents/ guardians of school nurse role and health services which are provided by school nurse including the both categories of schools, which have school nurse and do not have school nurse.

1.4. Benefit of study

The findings of this study serve for public health evidence and provide recommendations to the health authorities in school health promotion. Furthermore, the result can be a scientific feedback for educational sector and health sector in making policy and implementing school health programs.

1.5. Conception framework

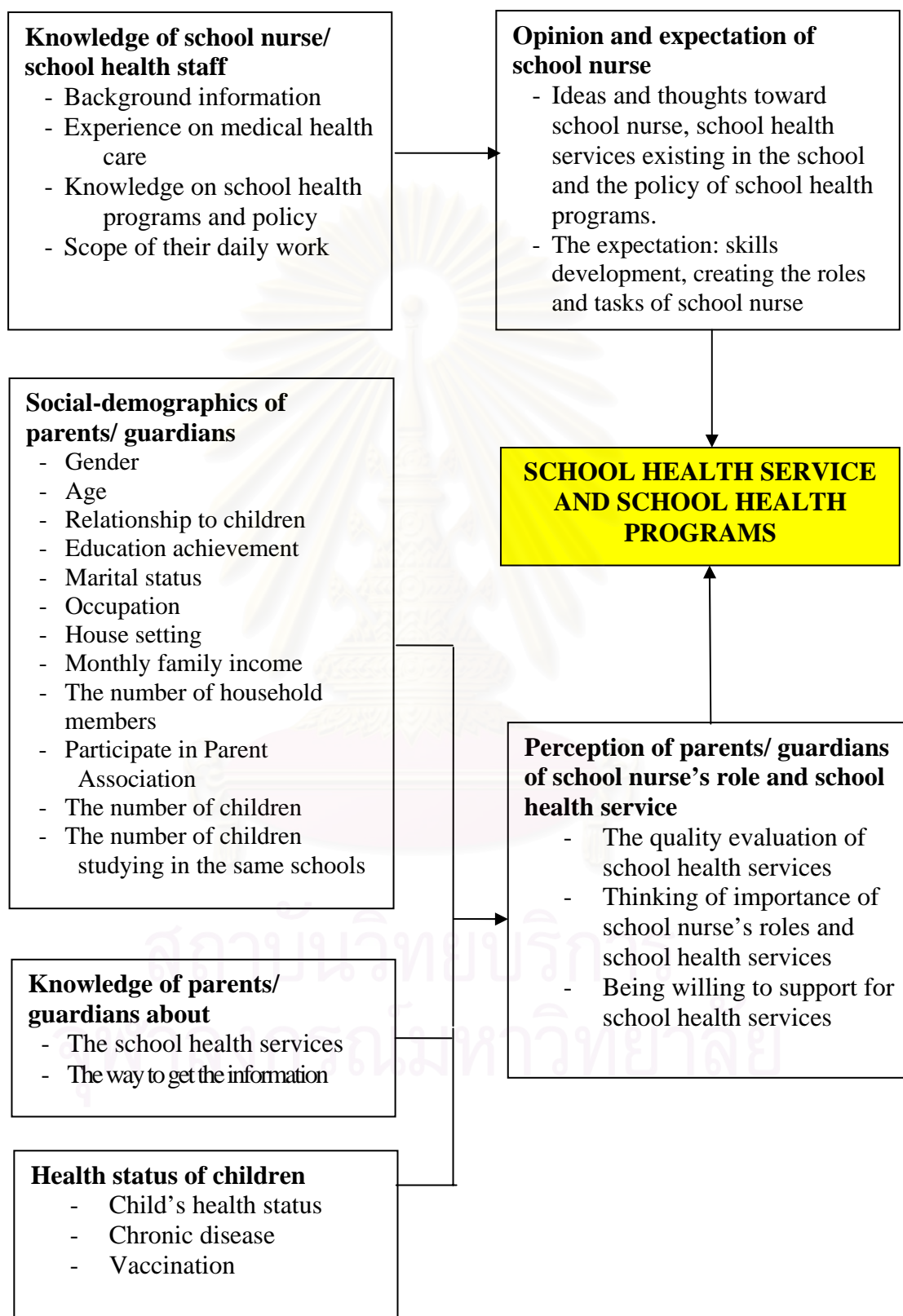


Figure 1. Conceptual framework

1.6. Operational definitions:

➤ School health staff is the teacher or the staff who works without medical certificate as health caretaker at school to protect schoolchildren's health and implement all school health care programs in the school.

➤ School nurse is the nurse or doctor who works at school to protect schoolchildren's health, and to implement all school health care programs in the school.

➤ The roles of school nurse is to support student learning by acting as an advocate and liaison between home, the school, and the medical community regarding concerns that are likely to affect a students ability to learn. Components of a coordinated school health program (provided by the school nurse) (NASN, 2002a). In Vietnam, the contents of school health programs following to the decree No. 73/2007/MoET consists:

- supervising student's health status
- providing health education
- improving the school environment
- controlling children's health issues in school and communicating to community health center
- providing counseling on children health issues

➤ Health services in school setting provide opportunities to appraise, protect, and promote schoolchildren health.

➤ Opinion of school nurse and school health staff: the ideas or thoughts of school nurse and school health staff about their work.

➤ Perception of parents/ guardians of school nurse role and school health service: the assessment of them about the health services existing in the school, the thinking of parents about importance of the role of school nurse and school health services, the agreement of them to support to school in health services

With 1st objective: To explore the opinions of the school nurse and school health staff of their works focusing on school health services with children. (Applying qualitative method)

All of information will be interviewed both school nurse and school health staff and drawn as following:

- Background information:
 - School nurse or school health staff
 - If being school nurse: the interviewee is nurse or medical doctor
 - Graduated year
- Experience on medical health care
 - If the interviewee is nurse or medical doctor, how long he/ she work in health care program
 - Before working in the school, any other where he/ she had worked
- Their knowledge on school health promotion
 - The number of years the interviewee has worked in school
 - The number of years the interviewee works in school health service
 - Their knowledge on school health programs
 - Where they got the school health information

- Frequent level they are re- trained on knowledge of school health promotion
- Scope of their daily work
 - The works they do everyday in school
 - Their roles and tasks in school and school health services
- Opinion of school nurse
 - Ideas and thoughts toward student health care, the work of school health services existing in the school and the policy of school health programs.
 - The expectation: skills development, creating the roles and tasks of school nurse

With 2nd objective: To determine the perceptions of primary school parents/ guardians of school nurse role and health services which are provided by school nurse including the both categories of schools, which have school nurse and do not have school nurse (apply quantitative method)

- **Social-demographics of parents/ guardians**

- Relationship to children refers to parents, grand parents or other. This question wants to know who takes care of children the most of time.
- Gender refers to male and female
- Age refers to how old the respondent is at the time answering the questionnaire.
- Education achievement refers to the highest education of the respondent.
- Marital status refers to the current marital status of respondent.
- Occupation refers to where the respondent works.

- House setting refers to the local of the respondent house. It is classified into urban, suburban and rural.
- Monthly family income refers to the amount of money that respondent and the family member receive per month
- The number of household members: the number of members in the family.
- The number of children refers to the number of children the respondent have at the time answer the questionnaire.
- The number of children studying in the same school refers to the number of respondent's children learning in the same school.
- Participate in Parent Association of class and of school refers to the respondent joins in the Parent Association of the children class and children school. It is divided into Parent Association of the child's class, Parent Association of the child's school, be not jointing in the Parent Association.
- **Knowledge of parents/ guardians about school health programs**
 - Knowledge of parents/ guardians on school health programs refers to the respondent does he/ she know about school health program. It is divided into know and don't know,
 - The programs have refers to the name of the programs which the respondent have known.
 - How to know the school health programs refers to how the respondent have get information by training or from media
 - Thinking about the school health services: what the respondent thinks about the school health services which have been done in the child's school. It is divided into good or not good.

- **Children health**
 - Age of children.
 - Children's health status refers to health status of the respondent's child is very well, well or not well in 2 recent years. If not well, it will be divided into minor illness, or major illness.
 - Chronic disease refers to the respondent's child has chronic disease as respiratory disease, heart disease, hematological disease, nutritious disorder, metabolic disease.
 - Vaccination refers to the respondent's child had been taken some vaccine as Hepatitis vaccine, influenza vaccine.
- **Perception of parents/ guardians of school nurse's role and school health service**
 - Assessment of school health services existing in the schools
 - Thinking of importance of school nurse's roles and school health services
 - Being willing to support for school health services

CHAPTER II

LITERATURE REVIEW

2.1. Health-Promoting School

According to WHO, it said about the heart of the process of becoming a Health-Promoting School. *“A Health-Promoting School views “health” as physical, social and emotional well-being. It strives to build health into all aspects of life at school and in the community. From country to country, even within different regions and communities of one country, schools have distinct strengths and needs. By building on those strengths and drawing on the imagination of students, parents, teachers and administrators, every school can find new ways to improve health and address health problems”* (WHO & UNESCO and EDC, 2000a).

The first regional network for the development of Health-Promoting Schools was formally inaugurated and opened for membership in 1992 by the European Regional Office of WHO (WHO/EURO), the Council of Europe and the Commission of the European Communities. In 1995, WHO’s Global School Health Initiative collaborating with WHO Regional Offices launched actions to initiate networks in the other regions of WHO, such as in the southern part of the Western Pacific (1995), Latin America, Southern Africa (1996), South East Asia (1997) and the northern part of the Western Pacific (1997). Regional networks in the Western Pacific and Latin America have been initiated and taken form quickly, while the development of the Regional Network in southern Africa has been blocked by the civil wars and national crises. WHO will continue to develop additional networks among Francophone

countries of Africa and English speaking countries of central Africa, and among countries in the Eastern Mediterranean by the end of the decade (WHO, 1999b).

The 4th key in 6 main key features of health promoting school of WHO provides access to health services, with”(WHO & UNESCO and EDC, 2000a).

1. services (screening, diagnosis, monitoring growth and development, vaccination, selected medications or procedures) that may be most efficiently provided in the school setting, depending on school resources and mandates
2. partnerships with local health agencies that will provide services
3. nutrition and food safety programs

In the primary school

“Primary school enrollments are increasing in nearly every part of the world. The main exception is in Sub-Saharan Africa, where enrollments are stagnating or declining. However, worldwide, schools reach millions of students and, through them, their families and communities” (American Cancer Society, 1994). Therefore, as articulated by UNICEF, the formal education system is “the developing world’s broadest and deepest channel for putting information at the disposal of families, school personnel, and community members as well as students” (American School Health Association, 1992).

In Shanghai, China, the Jin Ling Road Primary School and community authorities worked together to improve health schoolchildren. “The primary school drew up a set of health-behavior standards for pupils that are closely monitored by teachers: correct posture for reading and writing, carrying a handkerchief, washing hands before eating, and a prohibition against dropping litter and spitting. The school’s health standards included social and personal behavior, such as cultivating a

wide range of interests, taking part in social activities, and showing friendliness toward other pupils. The school encouraged health standards at home: boiling drinking water and having adequate light for reading (which is very important in locales where eyesight problems among children are common). Schoolchildren also worked on improving sanitation and the physical environment by extending the school's "green belt". Neighborhood authorities reinforced the importance of these standards with parents. An event called "parents' school", held once a year for the past four years, provides information about eye care, diet, child psychology, and other health issues" (Hong-Ying, 1996).

2.2. The health services in school

"School Health Services are services from medical, teaching and other professionals applied in or out of school to improve the health and well-being of children and in some cases whole families. These services have been developed in different ways around the globe but the fundamentals are constant ... the early detection, correction, prevention or amelioration of disease, disability and abuse from which school aged children can suffer" (Wikipedia, 2005).

The mission of school health services program is to appraise, protect and promote the health of students. *"Health services in the school setting provide opportunities to appraise protect and promote student health. The school health services require that professionals as school nurses take an important role in overall children health"* (Vessey, 2000). Preventive and emergency school health services are provided to public school children in grades kindergarten through twelve. In each

local school, based upon availability and need, local services are organized and managed following a local School Health Services Plan by the county health department, school district and school health advisory committee. School health services are an important component of the public health system and help to assure that students are healthy, in the classroom, and ready to learn (Florida Health Department, 2001)

School nurses take an important role to the school health services. They enhance health within the school and community by providing health appraisals, nursing assessments, nutrition assessments, preventive dental services, periodic health screenings, health counseling, referral and follow-up of suspected or confirmed health problems, emergency health services, and promoting activities to reduce risk-taking behaviors. School nurses also collaborate with parents, teachers, social workers, and other health care providers to develop care plans, identify available health resources, and identify the need for health referrals to address specific health problems discovered through mandated health screenings and assessments.

2.3. The roles of school nurse

Up to now nursing has become considered broadly and developed fully in a four-fold institution. In the academic plan, there had been the science of nursing with many researches. As every day application, activities of nurses have been visible everywhere. For education and training, a lot of update and installation of curriculum and training courses in medical college's institution and health training center, so the society has gained much more understanding about the needs and importance as well as the missions and responsibilities of nurses. In the great scale of the whole country, a lot of national policies have been settled up and implemented to enhance the roles of

nurses. Especially, in the school setting, school nurses play an important role in student health care (Xiaoming Yu, 2002)

In the history of health professionals working in schools, the roles of school nurse had often been limited to routine screening and surveillance tasks in both UK and USA (Cotton et al., 2000). Following UK policy, the school nurse is the professional best located to achieve the creation of a health school environment (Department of Health, 2004a, 2004b).

The responsibilities of school nurse focus on the activity of schoolchildren health, providing an opportunity to develop in-depth knowledge of individual for children and their family and health needs of children and their family. The school nurses not only take care of their health and treat them from pre-existing illness, but also train children about health education and promoting health or healthy behavior (healthy eating, physical activity, substance abuse prevention) (Kimel, 1996; White, Shinder, Shinder, & Dyer, 2001).

The Rules of School Health (National Education Committee and Ministry of Health, 1990) gave a definition of the roles of school nurses: *“In 1990, the National Education Commission and Ministry of Health of China issued the document Regulations on School Health which stipulated that the role of School nurse should include supervising student health status; providing health education; improving the school environment and controlling common diseases among school”*. It agrees with National Association of School Nurse (NASN) about assigning the task of school nurse. It said that *“the task of school nurse often achieved by providing services such as health screening and assessments, health counseling and referrals, educational resources, and prevention and intervention activities. The school also promotes*

student health by serving as a liaison between the school and the community programs where contacts are made through outreach and medical programs” (NASN, 2002b)

2.4. The perception of primary school parents/ guardians of school nurse’ roles and school health service

“The vast majority of element school parents/ caregivers reported that the school where their child studying need have a full time school nurse working and they had an interaction with that school nurses”(Gregg, Susan, James, Joseph, & Martin, 2005).

According the School Health Policies and Programs Study (2000) results, it found that health services were being provided in 78.6% of elementary, middle/ junior high and senior high schools by school nurses, both full time and part time. In this record, all most of parents/ caregivers perceived the dispensing of medication by the school nurse as somewhat important or extremely important in regards to some of the roles of the school nurse (Centers for Disease Control and Prevention, 2000).

In opinion of Gregg, “In vast majority (94%) of school parents/ caregivers were willing to pay additional tax dollar to have a full time school nurse in their child’s elementary school”(Gregg et al., 2005).

2.5. The school health policy and situation of school nurse in Vietnam

2.5.1. The policies of school health programs

In Vietnam, the Ministry of Health (MoH) and the Ministry of Education and Training (MoET) have issued some decrees about school health care and student

health protection. Since 1973, the Ministry of Education (MoE) has coordinated to the Ministry of Health in publicizing a interdepartmental circular to supply guideline for all departments of health and of education and schools in all over the country to implement School Sanitation and School Health Care Program (MoE & MoH, 1973). It said about health examination and management of health for all students in schools, and decentralized administration to each level of communal organization (commune, district, and province) in school health to work and protect student's health. Because the interdepartmental circular has been implemented for a long time, it became obsolete and less adaptive to the new conditions of socio-economic development in Vietnam. In the year 2000, the Ministry of Education with the collaboration of the Ministry of Health issued an other circular to direct concrete guidance of implementing School Health Program nationwide (MoET & MoH, 2000). For the goal setting, it said that all schools must provide a safe learning environment for students, which include providing safe water and sanitary facilities, protecting students from infectious diseases, protecting them from discrimination, harassment, abuse, and violence and rejecting the use of tobacco, alcohol and illicit drugs. Furthermore, the decree also said that each school need at least one health staff as school nurse to take care of student's health and implement actions of school health care program. For the real-field fulfillment, the implementation of the decree depends strongly on local economic conditions of each school. If a school has enough financial resource to regulate salary for school nursing, it can recruit one school nurse for student's health services. In the case of schools which do not have enough money to regulate salary for school nursing, it is usually that they cooperate together between schools in the same region to engage one health professional.

In the determination of national programs for the period of 2010 – 2020, the Ministry of Education and Training issues the protocol about the regulation of school health activities in primary, secondary and high schools in accordance with the instruction of Preventive Health National Strategy for the purpose of enhancing the effectiveness of programs for protecting the schoolchildren health, strengthening regional school health network and school nurse development and organizing health examination for students every school year. It said about the activities of protecting student health and the roles of school nurses. The missions of school nurses are determined as following, *“School nurse is a special profession. It demands collecting skills of specialist knowledge as psychology, medicine and management. They need to understand and monitor psychology of adolescent and schoolchildren by interacting with many students and other individuals. It means that in school, they take care of health not only of students but also of teachers and staffs who are working in their schools. On the other hand, they have to connect to community health centre to cooperate implementing programs of community health care in the community where their school sets”*. (MoET, 2007a)

However, the common problem is that schools do not have a regular member for school nursing personnel. In most cases, school nurses are recruited from medical doctors or nurses who are retired or jobless at hospitals (ThanhNien, 2004).

2.5.2. The situation of school nurse

The health care services of schoolchildren confront a critical problem. In the recent years, there are serious cases of food poisoning revealed in some schools and school health services deal with the situation ineffectively. Besides, contagious diseases still persist; ophthalmologic and dental diseases are showing an upward

tendency. According to the summary report of the Ministry of Health about school health programs (MoH, 2007b), there were 95% of schoolchildren having oral and dental diseases as gingivitis, dental caries; 10 – 24% of schoolchildren having refraction problems as pre-myopia, myopia, astigmatism, while in 1996 the rate was 7-17%; and the rate of worm contamination was 50-95% of schoolchildren. Although the need for school health care increases obviously, the implementation of school health care program in community faces to many obstacles especially the strictly tight budget and the lacking manpower support.

Indeed, setting school nurse into school is very difficult. According to a new report of Department of Preventive Health, Ministry of Health, in all over the country there are 32.218 schools of all grades from kindergartens to twelve, including primary schools, secondary and high schools, among which there are more than 5.346 schools, approximately 16.6%, have school health teachers and about 20% of schools having health care room. It is remarkable that 47% of holders of health caretakers functioning without medical certificates or being trained on medicine, about 2% are medical doctors and 51% graduate from medical schools (ThanhNien, 2004). And in the report, it said that up to 2007, all school nurses were not in school personnel. They could not get salary from government. The salary was depended on school insurance. Therefore, must accept a payment lower than the other health staffs who work at hospitals or on health care centers. Their salary is amounted from 300,000 VND to 1,000,000 VND per month, and is extracted from school health insurance fund which is voluntarily supported by parents of schoolchildren.

In report of Department of Education and Training of Hanoi, which is the capital of Vietnam, it said that about 70% Hanoi schools have school nurses and the

other schools have teachers working as health staffs (ThanhNien, 2004). In the schools which do not have school nurses, their directors appoint teachers to work as health staffs. In secondary and high schools, almost of health staffs are teachers on biology and civil education; in primary schools, health staffs are designated from teachers on social activities. That is the reason why they only fulfill partly the role of school nurses, as not enough for the responsibility of school health professionals (Tran Van Dan, Le Thi Thanh Xuan, & al., 2005). Therefore, they have to be trained on health care and health education to be able to take actively the responsibility and engage effectively the role of school nurse.

2.6. The opinions of school nurse of their work with children in Vietnam

According to ThanhNien newspaper, the school health personnel working in schools have not treated well. In the opinion of Mrs. Do Phuong Lan, a primary school nurse in Hanoi, she said that in the school there are more 600 student but having only she be school nurse, so she must take care of all students' health. Sometime, there are lots students being get sick together, the school nurse had to work hardly to look after them. In the other hand, with nearly 20 years experience working as school nurse, she summary that school health sector is specially, differing to other health sectors in health care system because of working with schoolchildren. For example, the nurse working in hospital is able to not understand school students' psychology but the school nurse is not able. So the role of school nurse in primary school is extremely important but their salary is not satisfied, it is lower than the based salary of a new officer. Additionally, they are not in school personnel, they work with contract, so they easily loss the work and when retiring, they do not have

retired salary like the other officer. But she continues to work in the school because she loves the children and because of the school's need. Now she want to be in the school personnel, getting the government's salary and have the tasks and roles of school nurse in school (ThanhNien, 2004). This story is the presentation of the other stories of school nurses in Vietnam. All most of them want to have the seat in school personnel, and have correct roles that they can work following.

2.7. The perception of school parents/ guardians of school health service in Vietnam

Now in Vietnam, there is rarely research studying about the perception of school parents/ guardians of school health services. But in the newspaper, there are some opinions of parents of the health activities in the children's school.

According to Thien Chuong, in the VNexpress, there are a lot parents in HoChiMinh city being willing to support money for school hire one health specialist, as medical doctor to take care of their children health in school at the time they absence, but it is very difficult to the school looks for one people who is a medical doctor or a nurse to work as school nurse with the limited salary (ThienChuong, 2008).

To know about the opinion of school nurse and school health staff and the perception of parents of school nurse's roles and school health services they will provide, some school located in BacNinh province will be researched.

BacNinh province is located 28 kilometers northern ward of Hanoi, Vietnam. There are 1 city and 5 districts (the BacNinh map). The province is in the path of development so that the socio-economic condition is between rural and urban status.

According to the annual report of the year 2008, there is in the province 807.6 square kilometer of land area with about 1 million of population, and there are 207,639 schoolchildren (DoET 2008).

Table 1. The distribution of types of school and students (DoET, 2008)

| The type of school | Schools | | Students | |
|---------------------|------------|------------|----------------|------------|
| | Number | Percentage | Number | Percentage |
| 1. Primary school | 150 | 47 | 80,940 | 39 |
| 2. Secondary school | 134 | 42 | 75,168 | 36 |
| 3. High school | 37 | 12 | 51,531 | 25 |
| Total | 321 | 100 | 207,639 | 100 |

The determination of schoolchildren health promotion and school health program are centered to the preoccupation of leadership at all levels from national to provincial scales. The school health care program has been implemented since 1996; however, the number of school children having school disease symptoms is still very high. The rate of school diseases increases in the recent years, from 13% in the school year 1995 - 1996 to over 20% in the school year 2005-2006. In the school year 2007-2008, according to the report of the Centre of Health Preventive, Department of Health, BacNinh province “*There are more than 300 schools in the province, but only 27 (6.8%) having school nurses, all of these schools are located in urban areas. The other schools appoint teachers to work as health staffs*” (DoET, 2008; DoH, 2008). The situation of school nurse in the province is typical, as the same as in all over the country.

In BacNinh city, the center of the province, there are 22 primary schools in which 8 schools have school nurses, 10 schools have health staffs and the others do not have school nurse or school health staff. In the 8 schools having school nurses, 5 schools have just hire school nurse in the school year (2008-2009). With the 10 schools having school health staffs, 9 schools had to use president or vice president working as school health staffs.

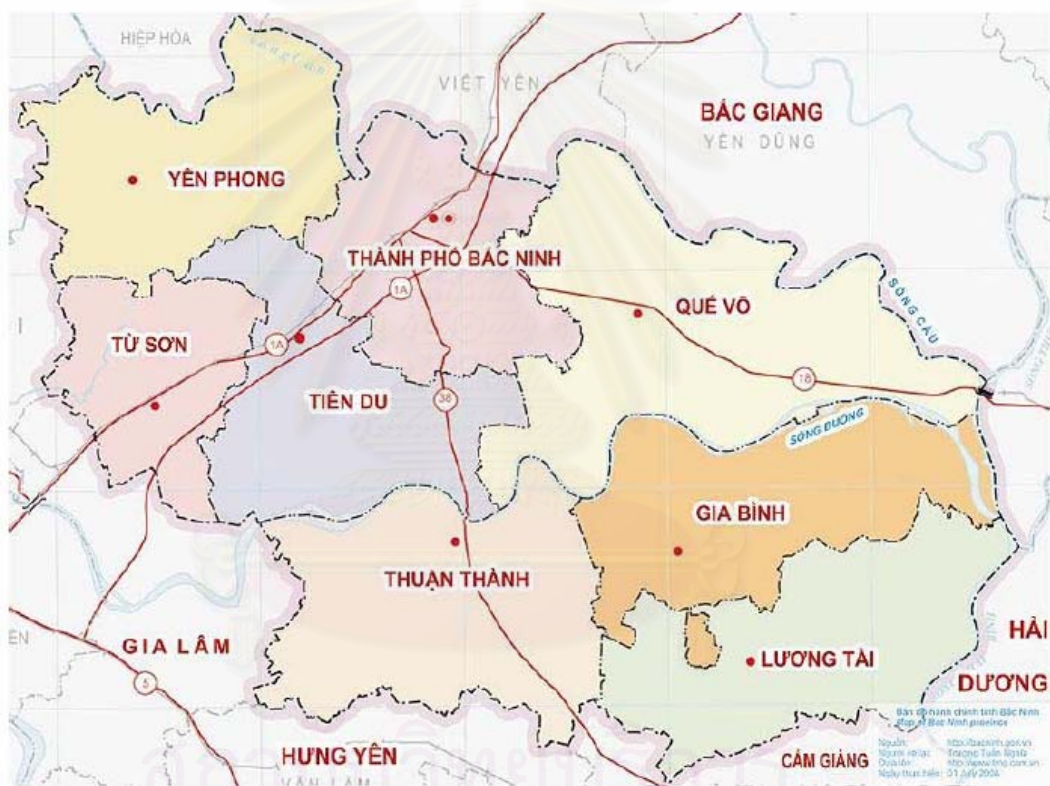


Figure 2 BacNinh Map

CHAPTER III

RESEARCH METHODOLOGY

3.1. Research design

A descriptive study using both qualitative and quantitative methods.

3.2. Study area

The study area was BacNinh city, BacNinh province.

3.3. Study period

From October of 2008 to April of 2009

3.4. Study population

Two schools were randomly selected by simple random sampling in all schools which set in BacNinh city: one of which has school nurse and another has school health staff.

For objective 1: the study did with 1 school nurse and 1 school health staff who are working at the two selected schools.

For objective 2: 580 parents of the primary schoolchildren studying at both two selected schools responded the questionnaires by themselves.

3.5. Sampling technique and Sample size

Multistage sampling method used to collect the data.

The basic criteria for schools:

- Must set in BacNinh city
- Must have school nurse or school health staff
- School nurse or school health staff must work as the position in their school more than 3 years.

Following the basic criteria for schools, there were 3 schools having school nurses and 10 schools having school health staffs setting in BacNinh city.

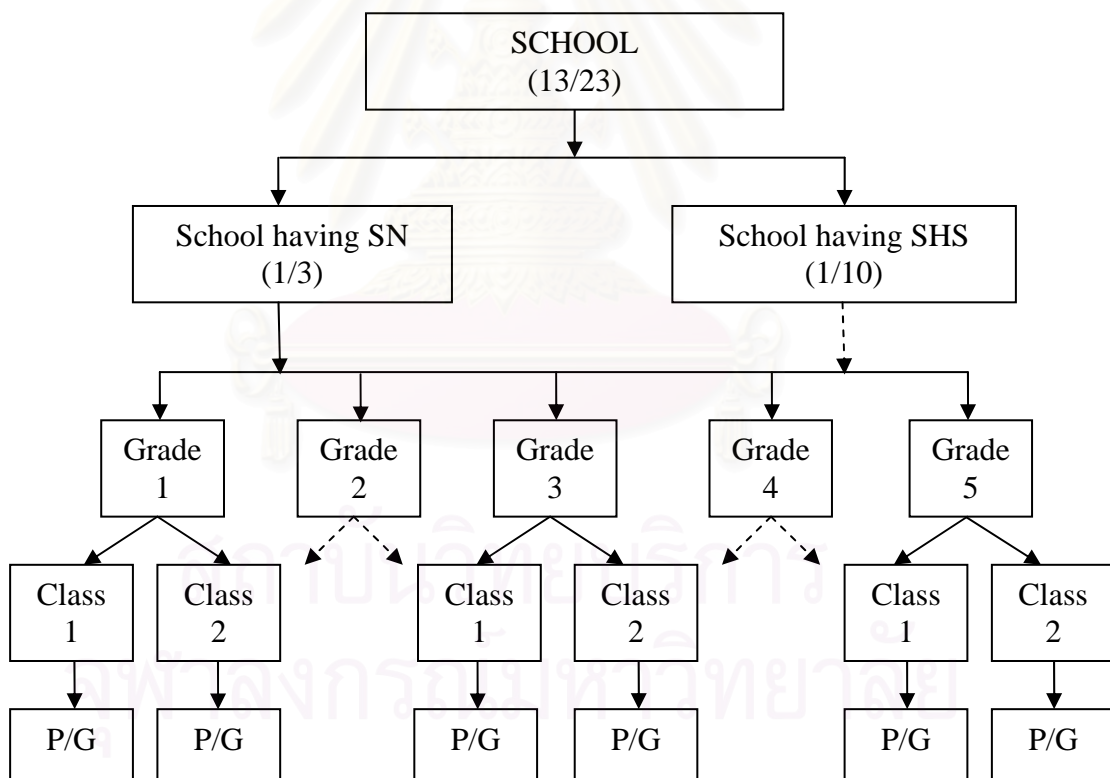


Figure 3. Sampling method to choose parents/ guardians

With 1st objective: To explore the opinions of the school nurses and school health staffs of their works focusing on school health services.

Asking the school nurse and the school health staff who working in 2 selected schools.

Selected schools:

- The first step: from 3 primary schools having school nurses located in BacNinh city, researcher randomly selected one school having school nurse following simple random sampling method (school SN).
- The second step: randomly selecting by simple random sampling method the school has not school nurse in all private schools having school health staff.

There are 10 schools.

With 2nd objective: To determine the perceptions of primary school parents/guardians of school nurse role and health services which are provided by school nurse including the both categories of schools, which have school nurse and do not have school nurse.

+ The sample size was calculated by the following formula created by Daniel (Daniel, 2005)

Sample size calculation

Formula of sampling:

$$Z^2_{1-\alpha/2} \times p(1-p)$$

$$n = \frac{\quad}{\quad}$$

Where:

$$d^2$$

n: calculated sample size

Z: Z value (Z= 1.96 for 95% confidence level $\alpha = 0.05$)

There was no previous study for perception of parents about school health services in Vietnam, so the proportion of parents' perception would be 50% ($p=0.5$) giving the maximum sample size.

d: absolute precision ($d=0.05$)

$$n = \frac{1.96^2 \times 0.5 (1 - 0.5)}{0.05^2} \approx 384.16$$

Predicted number of questionnaire missing data joining in the study was about 20%, therefore, the sample size would be at least 480 students' parents/ guardians from both schools.

Sampling method

In primary school, there were 5 class levels/ grades. Each grades, there are 4 to 6 classes. In each class, there were 30 to 35 students.

The researcher randomly chose 2 classes for each level.

So each school there were 10 selected classes and number of subjects was about 300 parents or guardians of students. There were about 600 parents / guardians. The researcher made about 600 questionnaires, sending to students' parents/ guardians.

There were 580 returned questionnaires which were completely answered.

Inclusion criteria

The respondents were determined following the inclusion criteria as:

1. Must be parents or guardians of students studying in the selected classes.
2. Must be at the age between 20 and 60 years by the time of interview.
3. Able to read, write and understand Vietnamese language
4. Willing to self-respond all the questionnaire

Exclusion criteria

The researcher defined the exclusion as follows:

1. Have difficulties in reading, writing in Vietnamese
2. Not answer all questions in the questionnaire.

3.6. Measurement tool

With objective 1: To explore the opinions of the school nurses and school health staffs of their works, which focus on school health services.

- In-depth interview of school nurse or school health staff about their perception and expectation of school health services and their works.
- Using the question guideline focus on following information:
 - Background information on school nurses
 - Scope of their daily work
 - Training prior to taking up work
 - Opinion toward student health care though school nurse, school health services and school health programs
 - The expectation: skills development and creating the roles and tasks of school nurse.
- Observation of medical equipment which is used in school health clinic also will be done to understand their working conditions.

With objective 2: To determine the perceptions of primary school parents/ guardians of school nurse role and health services which are provided by school nurse including the both categories of schools, which have school nurse and do not have school nurse.

All the questions of the questionnaire were translated to Vietnamese Language with formal valid checking. In the questionnaire, there explained to respondents (schoolchildren's parents/ guardians) about objectives and information of the study so that they completely understood before responding to all questions.

The questionnaire contains 55 questions about:

- Socio-demographic information of parent
- The knowledge of parents/ guardians about school health services and school health programs
- The parents/ guardians perceived importance of school nurse's role and school health services they provide
- Parents'/ guardians' support of school health services

3.7. Data Collection

Qualitative research methods

The qualitative method involves the identification and exploration of the perception and expectation of school nurse and school health staff of their works.

The interview was done between 2 trained researchers and only school nurse or school health staff to ensure that the information was real and not be repaired and forced.

In the school SN, the interview was set in health clinic room. The researcher observed and took some picture the medical equipment used in the school to show working conditions of the school nurse or school health staff.

Records from notes and tape recorder were transcribed.

Quantitative research methods:

Data collection method was self – administrated

The data collection process was done as follows:

1. The researcher explained the aims of study to presidents of selected schools and head teachers of all chosen classes.
2. The researcher explained the aims of study and the questionnaire to subjects so they understood the study and all questions of the questionnaire.
3. The questionnaires were sent to parents.
4. After 1 week, the head teachers of the selected classes collected returned questionnaires.

3.8. Data analysis

Qualitative data was summarized and drawn after collecting.

Quantitative data:

All questionnaires were coded and the data were entered to computer by Epi Data program, then using SPSS v16 to analyze data.

Descriptive statistics including frequency, percentage, mean, and standard deviation were applied to socio-demographic characteristics, importance of parents'/ guardians' perception of each school nurse's roles.

Table 2. The variables with measurement scale and statistic inference

| Variables | Measurement scale | Statistic inference |
|---|--------------------------|----------------------------|
| Social-demographic | | |
| Age | Ratio scale | Mean, max, min, S.D |
| Gender | Nominal scale | Number, Percentage |
| Relationship to the child | Nominal scale | Number, Percentage |
| Marital status | Nominal scale | Number, Percentage |
| Ethnic | Nominal scale | Number, Percentage |
| Education | Nominal scale | Number, Percentage |
| Occupation | Nominal scale | Number, Percentage |
| Monthly family income | Ratio scale | Mean, max, min, S.D |
| Number of household member | Ratio scale | Mean, max, min, S.D |
| Participate in Parent Association | Nominal scale | Number, Percentage |
| Number of children | Ratio scale | Mean, max, min, S.D |
| Number of children study | Ratio scale | Mean, max, min, S.D |
| Knowledge of parents/ guardians about school health program | Nominal scale | Number, Percentage |
| Children health status | Nominal scale | Number, Percentage |
| Importance of parents'/ guardians' perception of each school nurse's roles | Nominal scale | Number, Percentage |
| Parents'/ guardians' support of school health service | | |
| Agreement to support | Nominal scale | Number, Percentage |
| Willing to pay | Nominal scale | Number, Percentage |
| How to pay | Nominal scale | Number, Percentage |
| Account willing to pay | Ratio scale | Mean, max, min, S.D |

3.9. Reliability and Validity

Validity

The content validity was checked by 3 experts from ministries of health and education and 2 primary school parents in BacNinh city after constructing the draft questionnaire. Their comments used to revise questionnaire.

Reliability

The reliability was pre-tested on 40 parents/ guardians of schoolchildren those are learning in other two selected schools.

The Cronbach's alpha coefficient in pre-test of total was 0.85 (the result of each dimension was more than 0.80, showed in the Appendix, table C1)

3.10. Ethical consideration

From the view of this study's respondents, all questions about perceptions might be quite sensitive to a certain elements, though, the self-administrated method might avoid of "harm" to parents/ guardian and the anonymity made the respondents feel more comfortable.

Study's information was explained to parents/ guardian before delivering questionnaire with following content:

- The questionnaires were sent to the student's parents/ guardians.
- They can refuse to join this study without any effects on their study's result and no need to explain the reason.
- Data was used for research's purpose only.
- Their information was recorded confidentially.

3.11. Limitation

- Data collection procedure was filled self-administrated questionnaire; therefore some respondents may have answered the questionnaire or parts of the questionnaire, in a socially desirable manner and it was done at their home without researcher, so that, the parents’/ guardians’ respond could be influenced by the other.
- The questionnaire included close questions, which did not elicit any additional information from the parents/ guardians other that what was specifically addressed by each item. Therefore, parents/ guardians responding to the questionnaire might have some different perceptions regarding school health services, which not assessed by the questionnaire.
- Because of time and budget limitation, this study can only assess in 2 schools in one province so they can not represent the situation of all the country.

CHAPTER IV

RESEARCH RESULTS

This chapter consists of results of the study. Following the objectives, it was divided into 2 main parts. The first part revealed the opinions of school nurse and school health staff about their work focusing on school health services with children. The second part determined the perception of primary parents/ caregiver's about school nurse roles and the services which were provided by school nurses.

The study was done in 2 primary schools in BacNinh province, Vietnam. Both of these schools were located in BacNinh City, the center of BacNinh province. One had a school nurse (school SN), and the other did not have school nurse but it had a school health staff (school SHS). The different category of 2 selected schools was setting school nurse.

Table 3. The schools' characteristics of school SN and school SHS

| Characteristics | School SN | School SHS |
|---------------------------------|-------------------|--------------------------|
| Personnel | Have school nurse | Do not have school nurse |
| Number of class | 25 | 15 |
| Number of student of each class | 35 – 45 | 30 – 35 |
| Total student | 1123 | 591 |
| Sample of study | 307 | 308 |
| Number of respondents (%) | 287 (93.4%) | 293 (95.1%) |

From table 3, the number of classes, the number of students in each class and the total students of the school SN were greater than these of the school SHS.

Each objective had appropriate group subjects and different study methodology. The first objective was *“To explore the opinions of the school nurse and school health staff about their works focusing on school health services with children”*. So the subjects were school nurses and school health staffs, and the methodology was qualitative.

The second objective was *“To determine the perception of primary school parents/ guardians of school nurse roles and health services that are provided by school nurse including the both categories of schools, which have school nurse and does not have”*. So the subjects were parents/caregivers of students in the selected schools, and the methodology was quantitative.

4.1. Opinions of the school nurse and school health staff about their works, which focus on school health services with children.

To implement the part 1 of this study, the research was done with a school nurse and a school health staff. The school nurse was a 31-year-old man; he had graduated from BacNinh Medical School. After 3 years of military services and 2 years studying in BacNinh Medical School, he had worked for school nursing for 4 years. The school health staff was a 40-year-old woman teacher who had worked for more than 15 years in primary school as a teacher. Now she is the vice president of a primary school and also responsible of school health staff at her school. She did not have any medical certification.

The research used the method of in-depth interview for extracting essential information. By answering to the interviewer, both of the school nurse and the school

health staff express their knowledge and opinion towards student's health and school health services.

The knowledge content included essential basic concepts about the 11 school health programs that the MoH and MoET have promulgated, the 10 school health activities that are implemented in all primary schools, and the policy about setting school nurses. This was the basic of legal system for school nurses to work and to behave.

The opinion and expectation of school nurse and school health staff based on the scope of their daily work, their participation to school activities and their responsibility on the student health care. The questions focused on the opinions about two objects: the student, and the health care services at school. This was the core of the interview and the main part of results.



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Table 4. Summary of knowledge and opinion of school nurse towards students' health and school health services

| | School nurse | School health staff |
|---|---|---|
| Background information | | |
| <ul style="list-style-type: none"> • <i>Age</i> • <i>Sex</i> • <i>Graduation</i> • <i>Time work in the school</i> • <i>The main task</i> • <i>Working experience in school health</i> | 31 years old Male A nurse graduating from BacNinh Medical School (2004) 4 years School nurse 4 years experience on school nurse services. | 40 years old Female A teacher graduating from Hanoi College of Pedagogy. No certificate on medical 15 years Vice president 5 years experience on school health services as school health staff. |
| <ul style="list-style-type: none"> • <i>Re-training</i> | Every year | 2 short courses |
| Knowledge on school health | | |
| <ul style="list-style-type: none"> • <i>11 school health programs following MoH and MoET</i> | Correctly answer 8/11 programs | Correctly answer 6/11 programs |
| <ul style="list-style-type: none"> • <i>School health activities which are implemented in all primary schools</i> | Correctly answer 8/10 activities | Correctly answer 5/10 activities |
| <ul style="list-style-type: none"> • <i>Policy about setting school nurse</i> | - Did not know completely | - Did not know clearly |
| Scope of daily work | | |
| <ul style="list-style-type: none"> • <i>School health activities</i> | <ul style="list-style-type: none"> - Connecting to health centre and implementing checking up student health. - Look after student at school - Check food for lunch - Prepare oral hygiene for students <u>every learning day</u> - Prepare lesson for health education every month (*) - First aid and emergent care (*) - Maintaining student health record. (*) | <ul style="list-style-type: none"> - Connecting to health centre and implementing checking up student health. - Look after student at school - Check food for lunch - Organizing and helping other teachers to prepare oral hygiene for student <u>3 days per week</u>. |
| <ul style="list-style-type: none"> • <i>Some other school activities</i> | - No | <ul style="list-style-type: none"> - Teaching (**) - Managing all activities inside the school with the president (**) |

Table 4. Summary of knowledge and opinion of school nurse towards current students' health and school health services exiting in schools (cont.)

| | School nurse | School health staff |
|---|---|--|
| Opinion of school nurse: both of them thought that a school should have a school nurse. | | |
| <ul style="list-style-type: none"> • <i>About students</i> | <ul style="list-style-type: none"> - Primary students were active and vulnerable (*) | <ul style="list-style-type: none"> - There was a lot of change in the recent 10 years: in student's disease pattern (mental disorder, obesity, communicable diseases: flu, measles, etc); in student's thought (**) |
| <ul style="list-style-type: none"> • <i>About school health services in school</i> | <ul style="list-style-type: none"> - Some school health activities and programs were ineffective: checking up student's health annually, <u>protecting injury accident</u>. - Some school activities were very passive and must cooperate with health center. | <ul style="list-style-type: none"> - Some school health programs and activities were ineffective: annual checking up student's health, <u>examining some school diseases</u>. - Some school health activities and services were difficult to implement without the help of health sector and the cooperation with health centre. |
| <ul style="list-style-type: none"> • <i>About policy</i> | <ul style="list-style-type: none"> Lacking of policy about the right, duty and application of school nurse, school nurse did not know whether some activities can be done or not (*). | <ul style="list-style-type: none"> Policy announcing about setting of school nurse in school and school nurse's roles should be implemented (**). |
| Expectation about school nurse's roles and school health services | | |
| <ul style="list-style-type: none"> • <i>About skill development</i> | <ul style="list-style-type: none"> - Creating the guideline book for school nurse services, - Increasing the content and time of the course <u>focusing on nursing skills</u> | <ul style="list-style-type: none"> - Creating the guideline book for school nurse services, - Increasing the content and time of the course <u>focusing on skills of consulting, managing and plan making</u>. |

Table 4. Summary of knowledge and opinion of school nurse towards students' health and school health services (cont.)

| | School nurse | School health staff |
|---|---|---|
| Expectation about school nurse's roles and school health services (cont.) | | |
| <ul style="list-style-type: none"> • About roles and task of school nurse | <ul style="list-style-type: none"> - Providing a sanitary school environment, - Organizing checking up student's health annually - Supervising support lunch at the canteen of the school. - Managing student health record, - Providing health education(*) - Providing first aid and emergency care for student at school (*) - Providing medicine for students and teachers (*) | <ul style="list-style-type: none"> - Providing a sanitary school environment, - <u>Planning, managing, and organizing</u> checking up student's health annually, - Controlling support lunch to student at school's canteen - Managing student health record, - Consulting for teacher, students and parents (**) - Bridging the gap between community and health center (**) |
| <ul style="list-style-type: none"> • About Policy | <ul style="list-style-type: none"> - Setting school nurse into school personnel, - Giving a list of roles of school nurse. - Issuing a policy about the right, duty and application of school nurse (*) | <ul style="list-style-type: none"> - Setting school nurse into school personnel. - Having a guideline and a list of roles and tasks of school nurse and school health staff. |
| <ul style="list-style-type: none"> • About their work | <ul style="list-style-type: none"> - Providing lunch to students and teachers, - Checking up student's health - Providing fresh water and sanitary environment. - Maintaining student's health record (*) - Providing medicine for students and teacher (*) | <ul style="list-style-type: none"> - Providing lunch to students and teachers, - Checking up student health - Providing teaching-learning and playing environment for students and teachers |

**, ** and underline showed the different ideas and details of school nurse and school health staff*

Table 4 showed the difference of backgrounds of subjects. Their knowledge, opinions and expectations about their works towards school health were different. Beside the difference on tasks, there was also different participation to training. The school nurse has participated to all retraining short courses of school health services in 4 years, while the school health staff has participated not all but only 2 short courses in 2 years.

4.1.1. Knowledge of school nurse and school health staff towards students' health and school health services

Table 5. On the school health programs following the issuing of MoH and MoET

| | School nurse | School health staff |
|---|--------------|---------------------|
| 1. Primary health care for student (annual checking up, examine of school disease or disable as myopia, health education) | X | X |
| 2. Preventing communicable diseases | | X |
| 3. Preventing anemia | | |
| 4. Preventing nutrition | | |
| 5. School dental program | X | X |
| 6. School eye program | X | |
| 7. Preventing HIV/AIDS | X | |
| 8. Preventing injury accident | X | |
| 9. Providing Fresh water and environmental sanitation | X | X |
| 10. School Health Insurance | X | X |
| 11. Vaccination | X | X |

Table 5 showed the result of checking knowledge of SN and SHS on the 11 school health programs issued by Ministry of Education and Training and Ministry of

Health. Each correct answer of the school nurse and the school health staff correspond to a sign in the table. The school nurse can list correctly 8 programs, whereas the school health staff can list correctly only 6 programs.

All of these programs could not be implemented in the both schools. The policy implementation depended on the support of the Ministry of Education and Training and the Ministry of Health as well as the economic conditions of the schools themselves.

Table 6. On the school health activities following the issuing of DoH and DoET

| No | School health activities | School nurse | School health staff |
|----|--|--------------|---------------------|
| 1 | Annual checking up | X | X |
| 2 | Communicate Health education | X | X |
| 3 | First aid | X | |
| 4 | Preventing school diseases for student (myopia,) | | |
| 5 | Preventing injury accident | X | |
| 6 | Maintain student health records | X | |
| 7 | Counseling student health | | |
| 8 | Provide fresh water and environmental sanitation in school | X | X |
| 9 | Vaccination | X | X |
| 10 | School health insurance | X | X |

Table 6 summarized the result of checking knowledge on the 10 school health activities set up for BacNinh schools. Each correct answer corresponded to a sign in the table. The school nurse can list 8 activities, while the school staff could answer only 5 activities.

Both of them did not know exactly about the decree No. 73/ 2007/MoET and the circular No. 35/2006/ MoET-MoIA. The school nurse said *“I had never known about these policies”*. Whereas, the school health staff said *“I knew that MoET had issued a decree about setting school nurse for schools but I don’t know exactly the contents”*

4.1.2. Scope of their daily work

Their daily works also were different because of the difference of tasks. Both said that their works were inconsiderable and unclear, they cannot determine exactly about their activities. Following them, their activities varied in each working day and required much of carefulness.

In the school SN, the school nurse described *“With school nurse work, it is very difficult to tell correctly, because it belongs on the time and the specific conditions. I must stay at school all learning time, starting 30 minutes before the time opening until 1 hour after closing. I take care of the child play and do inside the school and near to the school”*.

In the school SHS, the school health staff said *“I am very busy all day at school and can not leave the school in the learning time. If I have to go outside of the school for the department or meetings, I must discuss with the president then to make plans and schedules. In every learning day, the president and I assign the tasks for the division of work and responsibility in order to take care of all students. In my school, we provide lunch to students who take, so we must check the hygiene and safety of food and help the other teachers organizing lunch for their students. We need one professional school nurse to help us in order to contribute wholly to our administrative and teaching work”*.

There were actually common activities for them with different level of actions. In the both schools, PS Company held and supported a dental care program for students following which each student take care himself in brushing teeth and rinsing mouth every day. Depending on the condition of each school, the president chose how many days per week to take care of student's oral hygiene. In the school SN, students were taken care in all learning days, whereas there were only 3 days per week in the school SHS.

In each school, the preparation of fresh water and cups for children and the management of oral hygiene were on the responsibility of the school health services. Both of the school nurse and the school health staff was responsible for the same work. But the school nurse fulfilled this work alone, while the school health staff worked with the assistance of the other teachers.

In every month, health center offered talk about health education. All concepts were supported by both MoH and MoET, and the topics were quite profound, for examples preventing HIV/AIDS, carrying out personal hygiene, protecting students against some school diseases such as myopia, skin diseases. For the school SHS, they organized for health staff of health center to be invited speaker to instruct students. For the school SN, the health education took part in the work of school nurse.

In every year, the checking up of student health was organized once or twice at school by health staffs of health centers. The school nurse and school health staff considered the plan, sent to health care center then cooperated with health center for enforcement.

4.1.3. Opinion of school nurse about their work and school health services

Student health

Because of different working experience in primary schools, their ideas about current student health were different. The school nurse said that student health has more relationship to their age group and behaviors. Following him, *“Because it is a primary school, every primary student is at first a children. It is normally that they are very playful and active, so they can join to dangerous games which can cause accidents, even sometimes they fight each to others. Therefore, some accidents can occur at school. The last school year, there were 5 students who got hard accidents such as broken hand, bleeding head and we must take them to hospital”*. For convincement, he showed his record book in which he took notes of the date of the accidents, the names of students, the causes of problems, and how the school nurse did for his/ her treatment as the first aid, took styptic to stop the bleeding, then called the child’s parent and take the child to hospital. He also had carefully taken notes of all the dates of checking up of students’ health; the total students participated; number students got health problems; the frequency of type of problems.

The opinion of the school health staff related to environment. She said *“In the present time, student disease pattern now has changed a lot and vary in comparison to 10 years ago. In this past time, the diseases were simple, some student got the flu, and others got myopia. But now, there are many types of diseases, including mental disorder, obesity, communicable diseases such as flu, measles, etc”*

School health services in school

Both of them estimated some school health activities and programs actually ineffective, but their ideas about the ineffectiveness were different. According to the school nurse, the ineffective activities and programs were annual health checking for students, protecting students from injury by accidents. Whereas, the school health

staff thought *“Some school health programs and activities implemented are ineffective, such as annual checking up student’s health, examining some school diseases”*

Some school health activities and services were difficult to implement by only the school. They were very passive and need the help of health sector and the cooperation with health centre.

Policy

School nurse and school health staff were lacking of information about the policies, their opinion reflected the belief that the setting of school nursing was necessary and the social need implied that each school ought to have disposed a professional school nurse as a regular staff of the school personnel to be responsible of school health services. The school nurse said *“I don’t know about the decrees. In my opinion, I think the school should have a school nurse in the school personnel. At school, I am a contracted staff, so I don’t have the right to work as a regular staff of the school personnel. Besides, the interests and obligation of school nurse are not registered clearly in the contract of labor. So it is difficult for me to work. All decrees and guideline relating school health, the president received, read then send to me to perform. So sometime, I was on the defensive.”* Following the contract, he had to look after students, did some school health programs as teach some health education lessons, and connect to health center to organize checking up students’ health

The school health staff said *“I have heard about the decrees the last school year that the school with the same number of student as my school can have the right to set 1 school nurse and 1 health clinic. Because provincial budget was limited, so it could not set school nurse for all schools together at the same time. I am a managing*

staff; I understand the problem of my province. I try to dispose a teacher to work as school health staff, but it is very difficult. The personnel of my school were very little. All teachers must work more than 10 hours per day. So the president and I try to share the time to take care of student's health. Not only in my school, but the other school also faced to the same situation. I think it is the common big problem of many schools in my province and other provinces.”

Because there was no policy implementation in the province about the setting of school nurse and school nurse's roles as well as the right, duty and application of school nurse, the school nurse hesitated and did not know whether some activities can be done or not. The school health staff showed that she knew not correctly the decrees and their implementation in the province. Following her, if the DoET could not set school nurse for schools, the difficulty belonged to the strategy of Province People Committee.

4.1.4. Expectation about school nurse's roles and school health services

Both of them wanted to increase the content and time of re-training courses. But there were some different details. The school nurse wanted to focus on nursing skills (such as give pharmacy following prescriptions, etc.) and set up nursing skills in the school nurse roles. Following him, *“Every year, before school year starting (September), all school nurses and school health staffs of BacNinh city schools were trained some school health programs by both departments about the school health programs. Each year there was one or two courses. Each course lasted 2 to 5 days. In 2008, the 5 days - course said about preventing injury accident, food safety hygiene and preventing HIV/AIDS. It was too much information in the short time.”*

In the different thinking, the school health staff emphasized to train the skills of consulting, managing and plan making for school nurse. She said *“A school nurse needs have consulting skill to consult student health problem for student, teacher and parent. He/ she also must know about student health problem. Now, the student disease change, there are some student can get mental disorder. They need to consult form a specialist. In Vietnam, there is not consultant and not consultant setting in school as the developed country. We need some one who can help us in the roles. I think school nurse can do that. Beside, the school nurse needs have skill of managing as administrator and plan making. In school, he/ she manages student health record and makes plan checking up student health annually, implementing some school health program. Sometimes, the school nurse must work independently”*

Both of school nurse and school health staff thought that the MoET and MoH should create a guideline book for school nurse services. In which, the policy maker should write clearly about roles and tasks of the school nurse and school health staff what they had done in school every day.

About roles and task of school nurse

Both of them give some ideas about roles and task of school nurse. Their ideas had some same points as:

- Providing a sanitary school environment,
- Supervising support lunch at the canteen of the school.
- Planning, managing, and checking up student’s health annually,

But the school health staff gave some other roles difference from school nurse:

- Providing health education
- Consulting for teacher, students and parents about children health

- Bridging the gap between community and health center

While, school nurse gave the other more roles as:

- Providing first aid and emergency care for student at school
- Managing student health record,
- Providing necessary medicine for students and teachers,

About school health services

They thought about the policy and programs support for implementing school health services in their schools and other school in BacNinh. The first that, they thought both of ministries need to create school health services exactly and the school health services need to fix to school nurse's roles. The second, they gave some school health services need to set in a primary school as:

- Providing lunch to students and teachers,
- Checking up student's health
- Maintaining student's health record
- Providing medicine for students
- Providing fresh water and sanitary environment.
- Providing teaching-learning and playing environment for students and teachers

4.2. *Parents/ caregiver's perception of school nurse and the services they provide*

According to the objective 2, the subjects were parents/caregivers of students in 2 primary schools in BacNinh City. The sample consisted of 580 parents/caregivers, and was divided into 2 selected schools. In one of these schools, there was a school nurse (school SN) and the other, there was no school nurse but a school health staff (school SHS). Of those respondents, 49.5% were from the school SN and the remaining 50.5% were from the school SHS.

4.2.1. Social demographic feature of respondents who takes care of the child

This part showed about frequency and percentage distribution of selected variables which described following background characteristics of respondents.

Table 7. Social – demographic characteristics of primary parents/ caregivers

| Characteristics | Number (Percentage) | | Total 580 (100%) |
|--|-----------------------------|------------------------------|---------------------|
| | School SN 287 (49.5%) | School SHS 293 (50.5%) | |
| Gender | | | |
| Male | 168 (58.5) | 140 (47.8) | 308 (53.1) |
| Female | 119 (41.5) | 153 (52.2) | 272 (46.9) |
| Age (range 25 to 60) | | | |
| <=35 | 96 (33.4) | 124 (42.3) | 220 (37.9) |
| 36-45 | 158 (55.1) | 149 (50.9) | 307 (52.9) |
| 45+ | 33 (11.5) | 20 (6.8) | 53 (9.2) |
| Means \pm SD | 38.2 \pm 5.67 | 36.8 \pm 5.55 | 37.5 \pm 5.65 |
| Relationship | | | |
| Parents | 287 (100.0) | 291 (99.3) | 578 (99.7) |
| Guardians (grandparents) | 0 (0.0) | 2 (0.7) | 2 (0.3) |
| Marital status | | | |
| Marriage | 265 (92.4) | 280 (95.6) | 545 (94.0) |
| Widow/ widower | 11 (3.8) | 5 (1.7) | 16 (2.7) |
| Divorced/ separated | 11 (3.8) | 10 (2.7) | 19 (3.3) |
| Education Achievement | | | |
| Uncompleted high school* | 50 (17.4) | 60 (20.5) | 110 (18.9) |
| High school | 91 (31.7) | 124 (42.3) | 215 (37.1) |
| Occupational degree | 89 (31.0) | 60 (20.5) | 149 (25.8) |
| Bachelor degree | 57 (19.8) | 49 (16.7) | 106 (18.2) |
| Occupation | | | |
| Government officer | 118 (41.1) | 100 (34.1) | 218 (37.6) |
| Private company | 57 (19.9) | 42 (14.3) | 99 (17.1) |
| Household work | 50 (16.4) | 61 (20.8) | 111 (19.1) |
| Farmer | 11 (3.8) | 58 (19.8) | 69 (11.9) |
| Other (Home business, motor taxi driver..) | 51 (17.8) | 32 (10.9) | 83 (14.3) |
| House setting | | | |
| Urban | 266 (92.7) | 194 (66.2) | 460 (79.3) |
| Suburban and Rural | 21 (7.3) | 99 (33.8) | 120 (20.7) |
| Action on Participate to Parent Association | | | |
| Action | 25 (8.7) | 43 (14.7) | 68 (11.7) |
| No action | 262 (91.3) | 250 (85.3) | 512 (88.3) |

Uncompleted high school: all respondents' education achievement is primary school and secondary school.*

Bachelor degree: all respondents' education achievement is graduate and undergraduate degree.

The table 9 revealed that socio-demographic characteristics of primary school parents/ caregivers such as gender, age, relationship to students, marital status, education achievement, occupation, house setting and action on participate to parent association. They were divided by 2 selected schools.

Gender of the respondents

Among the total subjects of 580 parents/ guardians collected from the study, the percentage of male respondents (53.1%) was higher than of female (46.9%). There were more male than female in school SN while more female in school SHS.

Age

The age of the respondent ranged from 25 to 60 years old with the mean age was approximately 37.5 years with standard deviation (SD) was 5.65. The mean age in school SN was slightly higher than school SHS (38.2 ± 5.67 vs. 36.8 ± 5.55)

Especially, 52.9% of the participants were ages from 36 to 45 years, 37.9% were from 25 to 34 years and 9.2% were over 45 years.

Relationship with student

Almost respondents (99.7%) were parents of students. There were only 2 cases grandparents (0.3%), and they were in school SHS.

Marital status

Among the respondents, the majority of them were married (94.0%), 2.4% were widowed and 3.3% were separated/ divorced.

Education

For education achievement, about one-third of parents/ caregivers of both schools (37.1%) completed high school. Following by that, it was the group of occupational degree (25.8%). The percentage of parents/ guardians of the uncompleted high school group (18.9%) were equal to the percentage of who were bachelor degrees.

Approximately half of the respondents (50.8%) of school SN had occupational degree and bachelor degree, and it was higher than of school SHS (37.2%).

Occupation

The highest percentage of respondents was the group subjects working for the government (37.6%) and the second highest group was private company employee group (17.1%). Following by these were household work group (19.1%), home businesses who owned a small shop at home or in central market, or motor-taxi drivers (14.3%) and farmer (11.9%).

House setting

The third- four of participates' houses (79.3%) set in urban and 20.7% houses setting in suburban and in rural. In the school SN there were more houses setting in urban than of school SHS.

Action on Participate to Parent Association.

Almost parents/ guardians (88.3%) were no acting on Parent Association.

Table 8. Monthly income per person (VND)

| Monthly income per person | Number (Percentage) | | Total N=580 (%) |
|----------------------------|--------------------------------|--------------------------------|----------------------------|
| | School SN N= 287 (49.5%) | School SHS N=293 (50.5%) | |
| Income groups (VND) | | | |
| Lower than 338,000 | 33 (11.5) | 79 (27.0) | 112 (19.3) |
| 338,000-1,000,000 | 216 (75.3) | 181 (61.8) | 397 (68.5) |
| Higher than 1,000,000 | 38 (13.2) | 33 (11.3) | 71 (12.2) |
| Means (VND) | 658,421 (\$39) | 539,074 (\$32) | 598,130 (\$36) |
| SD | 333,260 | 283,972 | 333,260 |
| Median | 625,000 | 500,000 | 500,000 |
| Rang (Min-Max) | 250,000 - 3,333,330 | 100,000 - 2,142,860 | 100,000 - 3,333,330 |

16,800 VND = \$US 1

The table 10 showed about the monthly income per person of the respondent's households. The average monthly income was 598,130 VND (around \$36) per person with the median was 500,000 VND.

According to Ministry of Labour – Invalids and Social Affairs, it said that the family having monthly income per person under 338,000 VND (\$20) was a poor family (MoLISA, 2008). The table showed that nearly 80% of student's households had the average income of person per month higher than 338,000VND. About 19% of respondents' households had average monthly income of person under than 338,000VND, the poor family.

Table 9. The number children that Parents having and of parents having their children study in the same school

| Parents have | Number (Percentage) | | Total (N = 580) |
|---|---------------------|----------------|--------------------|
| | SN (N=287) | SHS (N=293) | |
| Number children the parents have | | | |
| 1 child | 67 (23.3) | 56 (19.1) | 123 (21.2) |
| 2 children | 189 (65.9) | 193 (65.9) | 382 (65.9) |
| >=3 children | 31 (10.8) | 44 (15.0) | 75 (12.9) |
| Number of parents having more than 1 child study in the school | | | |
| | 8 (2.8) | 12 (4.1) | 20 (3.4) |

Among the respondents, more than 65% the parents had 2 children and about 21% of them had 1 child. There were 12.9% of the parents having more than 2 children.

There were 20 parents (3.4%) who had more than 1 child studying in the same school.

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4.2.2. The knowledge and satisfactory of parents/ caregivers about school health services and school nurse exiting in 2 selected schools

Table 10. Knowledge of Parents about setting of health clinic and school nurse in their children school

| Knowledge of Parents about setting of | Number (percentage) | | | χ^2 | p-value |
|--|----------------------|-----------------------|--------------------|----------|---------|
| | School SN (N=287) | School SHS (N=293) | Total (N = 580) | | |
| Health clinic | | | | | |
| Correct | 219 (76.3) | 107 (36.5) | 326 (56.2) | 93.25 | < 0.001 |
| Not correct | 67 (23.3) | 133 (45.4) | 200 (34.5) | | |
| Don't know | 1 (0.3) | 53 (18.1) | 54 (9.3) | | |
| School nurse | | | | | |
| Correct | 272 (94.8) | 189 (64.5) | 461 (79.5) | 81.45 | < 0.001 |
| Not correct | 15 (5.2) | 32 (10.9) | 47 (8.1) | | |
| Don't know | 0 (0.0) | 72 (24.6) | 72 (12.4) | | |

In the questionnaire, the questions were “Do you know there is a health clinic in your child’s school?” (Question B.1) and “Does your child’s school have school nurse” with 3 choices: Yes, No and Not sure (Question B.3). In the fact, school SN had school nurse and health clinic, but in school SHS did not have both school nurse and school health clinic. There was a medical corner with a medical box and some posters about dental and TB program.

In school SN, if parents answered “Yes” for both questions, then it was evaluated “Correct”; if “No” it was “Not correct”. In school SHS there was contrary, if parents responded “Yes”, then it was “Not correct”; if responded “No” then it was “Correct”. In both school, if parent responded “Not sure” there means “Don’t know”.

Setting health clinic

More than a half of parents (56.2%) correctly knew setting health clinic in the child's school. One-third (34.5%) of them said incorrectly and 9.3% said did not know about this.

The correct percentage of school SHS parents (76.3%) was higher than of school SN (36.5%) with the strongly significant ($p < 0.001$)

Setting school nurse

Approximately four-fifth of the parents (79.5%) said correctly their child school having or not having school nurse. There were 8.1% of them said incorrectly and 12.4% said don't know.

Likely the data of parent knew about setting health clinic, the correct percentage of school SHS parents was 94.8% higher than of school SN (64.5%) with the strongly significant $p < 0.001$.

Table 11. Parents know about Checking up student health annually service and the result of the newest examination of their children

| Parent know about | Number (percentage) | | Total (N = 580) |
|--------------------|------------------------|-------------------------|--------------------|
| | School SN (N = 287) | School SHS (N = 293) | |
| Checking up | | | |
| Know | 287 (100.0) | 284 (96.9) | 571 (98.4) |
| Don't know | 0 (0.0) | 9 (3.1) | 9 (1.6) |
| The result | | | |
| Know | 287 (100.0) | 283 (99.6) | 570 (99.8) |
| Don't know | 0 (0.0) | 1 (0.4) | 1 (0.2) |

Both school organized checking up health for students annually and sent the results to parents. Totally, mostly parents (98.4%) knew about that. Only 1.6% (9 cases) said “don’t know”. All the cases were in school SHS.

Among of parent knowing about checking up student health annually service, most of them (99.8%) said “*know*” the result and respond on newest checking up health result of their child. 100% of parents of school SN knew about checking up and the newest result of checking up.

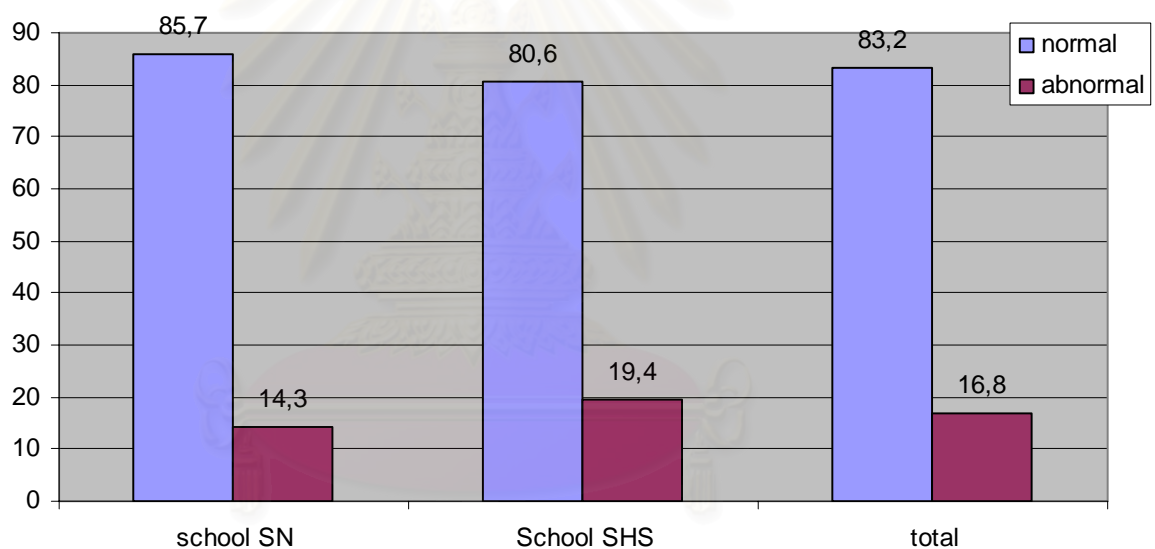


Figure 4. The newest results of student's health

More than four-fifths of children of the respondents got the normal result of their children health. There were 96 students (16.9%) getting health problem (abnormal).

Table 12. The health problems of children from the newest result (multi choices question)

| Health problems of children from the newest result | Number (percentage) | | Total No. (%) |
|--|---------------------|------------------|-------------------|
| | School SN | School SHS | |
| Total students get health problems | 41 (42.7) | 55 (57.3) | 96 (100.0) |
| Dental disease | 33 (80.5) | 43 (78.2) | 76 (79.2) |
| Short sighted | 23 (56.1) | 20 (36.4) | 43 (44.8) |
| Ear Noise and Throat (upper respirator) | 2 (4.9) | 7 (12.7) | 9 (9.4) |
| Nutritious disorder (nutrition and obesity) | 0 (0.0) | 6 (9.5) | 6 (5.4) |
| Skin | 0 (0.0) | 2 (3.6) | 2 (2.1) |

Among the student having health problem through the newest result, oral dental disease has the highest number of student get (79.2%). The second highest disease is eye problem (44.8%). All of them are short sighted. The third and the fourth are Ear noise and throat diseases (9.4%) and nutritious disorder (nutrition and obesity) (5.4%)

Table 13. Parents/ guardians' Awareness about school health programs

| Parents/ guardians know about health programs | Number (Percentage) | | |
|---|-----------------------|-----------------------|------------------|
| | School SN (N= 287) | School SHS (N=293) | Total (N=580) |
| Know | 260 (90.6) | 133 (45.4) | 393 (67.8) |
| Don't know | 27 (9.4) | 160 (54.6) | 187 (32.2) |

Two – thirds of parents/ caregivers (67.8%) said “*know*” about the school health services. The percentage of parents in school SN was higher 2 times than in school SHS (90.6% and 45.4%).

Table 14. School health services which are known by parents/ guardians (multi choice question)

| School health services | Number (Percentage) | | Total (N=580) |
|---|----------------------|-----------------------|------------------|
| | School SN (N=287) | School SHS (N=293) | |
| 1. Checking up student health | 287 (100.0) | 280 (96.6) | 567 (98.3) |
| 2. Protecting teeth and oral at school | 286 (99.7) | 264 (91.0) | 550 (95.3) |
| 3. Food safety hygiene | 280 (97.6) | 246 (84.8) | 526 (91.2) |
| 4. Providing fresh water and environmental sanitation | 277 (96.5) | 244 (84.1) | 521 (90.3) |
| 5. Check Oral | 280 (97.6) | 238 (82.1) | 518 (89.8) |
| 6. Vaccine | 249 (86.8) | 228 (78.6) | 477 (82.7) |
| 7. Check eye | 278 (96.9) | 141 (48.6) | 419 (72.6) |
| 8. Health Education | 158 (55.1) | 73 (25.2) | 231 (40.0) |
| 9. Check hearing | 34 (11.8) | 53 (18.3) | 87 (15.1) |
| 10. Sex education | 22 (7.7) | 41 (14.1) | 63 (10.9) |
| 11. EQ test | 29 (10.1) | 20 (6.9) | 49 (8.5) |

The 5 highest services which were known by respondents were *Checking up student health annually* (98.3%), *Protecting teeth and oral for primary student at school* (95.3%), *Food safety hygiene* (91.2%), *Providing fresh water and environmental sanitation* (90.3%) and *Check oral* (89.8%).

Three lowest services were *EQ test* (8.5%), *Sex education* (10.9%) and *Adolescent health* (15.1%). There was no difference between school (SN) and school SHS about the 5 highest answer services and the 3 lowest ones.

There was difference among 2 schools in the checking eye services. The percentage of parents of school SN knowing about checking eye services was higher than of school SHS (96.9% and 48.6%).

Table 15. How parents/ guardians get information about the school health services and programs (multi choice question)

| Sources of Information | Number (Percentage) | | |
|--|----------------------|-----------------------|------------------|
| | School SN (N=287) | School SHS (N=293) | Total (N=580) |
| School | 257 (89.5) | 165 (56.9) | 422 (73.1) |
| Radio | 170 (59.2) | 182 (62.8) | 352 (61.0) |
| Parent Association | 102 (35.5) | 104 (35.9) | 206 (35.7) |
| Newspaper | 56 (19.5) | 66 (22.5) | 122 (21.0) |
| Colleague/ friend | 42 (14.6) | 54 (18.6) | 96 (16.6) |
| Internet | 3 (1.0) | 10 (3.4) | 13 (2.3) |
| Other (from child and talking with child at home about the school stories) | 6 (2.0) | 20 (6.7) | 26 (4.6) |

Nearly three-fourths of the respondents (73.1%) knew about the school health services through School/ Teacher. The second highest resource from which they got information was Radio (61.0%). They also could get information from other resources as *Parent Association* (35.7%), *Newspaper* (21.0%), *Colleague/ friends* (16.6%) and *Internet* (2.3%). Some parents got information from their child (4.6%).

The number parents/ guardians getting information from school/ teachers in school SN was higher than in school SHS while the number parents/ guardians getting information by talking with their child about school story was higher in school SHS.

There were some differences between two schools. In the school SN, the highest percentage parents got information from school (89.5%), followed by from *radio* (59.2%), *Parent Association* (35.5%), *Newspaper* (19.5%). Whereas, in the school SHS, the highest was from *radio* (62.8%), followed by from *school* (56.9%), *Parent Association* (35.9%), *Newspaper* (22.5%).



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Table 16. Percentage, mean and SD of Parents'/ guardians' satisfactory with some school health services existing in the school

| School health services and school health programs | School (N) | Percentage | | | | Mean | SD |
|--|--------------------|-----------------|----------------------|-------------|-----------------------|-------------|--------------|
| | | Not satisfy (1) | Somewhat satisfy (2) | Satisfy (3) | Extremely satisfy (4) | | |
| Teeth sanitary care | SN (287) | 0.0 | 10.1 | 35.2 | 54.7 | 3.45 | 0.671 |
| | SHS (278) | 2.5 | 16.9 | 55.4 | 25.2 | 3.03 | 0.723 |
| | Total (565) | 1.2 | 13.5 | 45.1 | 40.2 | 3.24 | 0.727 |
| Check oral | SN (287) | 0.0 | 12.2 | 36.9 | 50.9 | 3.39 | 0.695 |
| | SHS (267) | 2.6 | 16.1 | 61.0 | 20.2 | 2.99 | 0.685 |
| | Total (554) | 1.3 | 14.1 | 48.6 | 36.1 | 3.19 | 0.718 |
| Vaccination | SN (286) | 0.0 | 5.9 | 51.7 | 42.3 | 3.36 | 0.593 |
| | SHS (242) | 1.7 | 17.8 | 61.2 | 19.4 | 2.98 | 0.663 |
| | Total (528) | 0.8 | 11.4 | 56.1 | 31.8 | 3.19 | 0.653 |
| Providing fresh water and environmental sanitation | SN (287) | 0.0 | 7.3 | 54.0 | 38.7 | 3.31 | 0.602 |
| | SHS (286) | 1.4 | 16.1 | 61.9 | 20.6 | 3.02 | 0.651 |
| | Total (573) | 0.7 | 11.7 | 57.9 | 29.7 | 3.17 | 0.644 |
| Food safety hygiene | SN (286) | 0.0 | 7.3 | 55.6 | 37.1 | 3.30 | 0.597 |
| | SHS (281) | 1.1 | 17.8 | 61.6 | 19.6 | 3.00 | 0.646 |
| | Total (567) | 0.5 | 12.5 | 58.6 | 28.4 | 3.15 | 0.640 |
| Checking up school children's health annually | SN (287) | - | 15.0 | 39.0 | 46.0 | 3.31 | 0.718 |
| | SHS (290) | | 21.7 | 59.3 | 19.0 | 2.97 | 0.638 |
| | Total (577) | | 18.4 | 49.2 | 32.4 | 3.14 | 0.699 |
| Check eye | SN (286) | 0.0 | 21.7 | 42.7 | 35.7 | 3.14 | 0.746 |
| | SHS (154) | 8.4 | 20.8 | 52.6 | 18.2 | 2.81 | 0.833 |
| | Total (440) | 3.0 | 21.4 | 46.1 | 29.5 | 3.02 | 0.793 |
| Health education | SN (193) | 0.0 | 26.4 | 44.0 | 29.5 | 3.03 | 0.749 |
| | SHS (212) | 2.8 | 25.9 | 57.5 | 13.7 | 2.82 | 0.693 |
| | Total (405) | 1.5 | 26.2 | 51.1 | 21.2 | 2.92 | 0.727 |
| Check hearing | SN (191) | 0.5 | 27.7 | 48.2 | 23.6 | 2.95 | 0.731 |
| | SHS (122) | 8.2 | 23.8 | 50.8 | 17.2 | 2.77 | 0.831 |
| | Total (313) | 3.5 | 26.2 | 49.2 | 21.1 | 2.88 | 0.775 |
| EQ test | SN (12) | 0.0 | 8.3 | 33.3 | 58.3 | 3.50 | 0.674 |
| | SHS (76) | 13.2 | 36.8 | 38.2 | 11.8 | 2.49 | 0.872 |
| | Total (88) | 11.4 | 33.0 | 37.5 | 18.2 | 2.62 | 0.914 |

From table 16, some activities which were implemented in both schools got over 80% *satisfy* and *extremely satisfy* with the mean score of the parents'/ guardians' satisfactory were *Teeth sanitary care* (85.3% and 3.24), *check oral* (84.7% and 3.19), *Vaccination* (87.9% and 3.19), *Providing fresh water and environmental sanitation* (87.6% and 3.17), *Food safety hygiene* (87% and 3.15), *Checking up school children's health annually* (81.6% and 3.14).

The services getting lowest percent satisfy from parent were *health education* (72.3% and 2.92), *Check hearing* (70.3% and 2.88) and *EQ test* (65.7% and 2.62).

4.2.3. Health status of children

Table 17 Children health status in 2 recent years

| Children Health | Number (Percentage) | | Total |
|-----------------|---------------------|-------------------|--------------------|
| | SN | SHS | |
| Total | 287 (49.5) | 293 (50.5) | 580 (100.0) |
| Very well | 96 (33.4) | 82 (28.0) | 178 (30.7) |
| Well | 184 (64.1) | 198 (67.6) | 382 (65.9) |
| Not well | 7 (2.4) | 13 (4.4) | 20 (3.4) |

Almost the children of respondents were “*well*” and “*very well*” health status in 2 recent years (65.9% and 30.7%).

There were only 3.4% of the children not well.

Table 18. The level illness of children in 2 recent years

| Not well | Number (Percentage) | | |
|---------------|---------------------|---------------|-----------------|
| | SN (n=7) | SHS (n=13) | Total (n=20) |
| Minor illness | 6 (85.7) | 13 (100.0) | 19 (95.0) |
| Major illness | 1 (14.3) | 0 (0.0) | 1 (5.0) |

In the children getting “*not well*”, there was 1 case (5%) get major illness.

Table 19. Chronic diseases and the kind of the disease (multi choice question)

| Chronic diseases | Number (Percentage) | | |
|---|---------------------|----------------|-----------------|
| | School SN | School SHS | Total |
| Total | 11 (3.8) | 5 (1.7) | 16 (2.6) |
| Respiratory disease (Asthma, Bronchitis...) | 6 (54.5) | 2 (40.0) | 8 (50.0) |
| Nutritious disorder (Malnutrition, Obesity...) | 2 (18.2) | 2 (40.0) | 4 (25.0) |
| Heart disease (Congenital defects, Rheumatic fever with heart damage) | 2 (18.2) | 1 (20.0) | 3 (18.8) |
| Gastrointestinal disease (Diabetes mellitus, Hypothyroidism) | 2 (18.2) | 1 (20.0) | 3 (18.8) |

Totally, there were 2.6% of the children get chronic diseases. With the parents, some child got more than one chronic disease. The highest disease was *respiratory disease* (50%). The second was *Nutritious disorder* (25%). The percentage of children getting *Heart disease* and *Gastrointestinal disease* were equal (18.8%).

Table 20. Taking vaccinated of children

| Vaccine | Number (Percentage) | | Total (n=580) |
|--------------------|----------------------|-----------------------|------------------|
| | School SN (n=287) | School SHS (n=293) | |
| Take vaccine | 273 (95.1) | 268 (91.5) | 541 (93.3) |
| Don't take vaccine | 14 (4.9) | 25 (8.5) | 39 (6.7) |

There were 93.3% of children take vaccine out of extended inoculation to protect child's health. There were no significant difference between taking vaccine and school.

4.2.4. The parents/ caregivers perceived importance of school nurse's role and the health services in the school

Table 21 The need for setting school health clinic and school nurse of the parents

| The need for setting school health clinic and school nurse | Number (Percentage) | | Total (N=580) |
|--|----------------------|-----------------------|------------------|
| | School SN (n=287) | School SHS (n=293) | |
| 1. School health clinic | 287 (100.0) | 269 (91.8) | 556 (95.9) |
| 2. Need school nurse | 287 (100.0) | 289 (98.6) | 576 (99.3) |

More than 90% of parents/ caregivers think that it is needed to set a school health clinic (95.9%) and a school nurse (99.3%)

Table 22. The regime that school nurse work at school

| Regime work of school nurse | Number (Percentage) | | Total (n=576) |
|-----------------------------|---------------------|--------------------|---------------|
| | School SN (n=287) | School SHS (n=289) | |
| Full-time | 276 (96.2) | 241 (83.4) | 517 (89.8) |
| Part-time | 11 (3.8) | 48 (16.6) | 59 (10.2) |

Nearly 90% of parents thought that the school nurse should work full time (all learning day and all day) at school for all levels of schools. And 10.2% of them thought need the part-time school nurse.

Table 23. Type of school need start to have a school nurse

| Type of school | Number (Percentage) | | |
|---------------------------|---------------------|--------------------|-----------------|
| | School SN (n=287) | School SHS (n=289) | Total (n =5760) |
| Kindergarten | 284 (99.0) | 257 (88.9) | 541 (93.9) |
| Primary school | 3 (1.0) | 32 (11.1) | 35 (6.1) |
| Secondary and high school | 0 (0.0) | 0 (0.0) | 0 (0.0) |

More than 93.9% of respondents thought there needed to have a school nurse from kindergarten school and 6.1% from primary school. No parents thought start setting school nurse from secondary school and high school.

Parents think about importance of school nurse' role

All respondents give their idea about how importance of school nurse's roles in primary school.

The question asking respondents “*What do parents think about importance of school nurse' roles?*” which have 25 items following 5 groups: **Supervising student health status** (7 items), **Providing health education** (5 items), **Improving the school environment** (3 items), **Controlling health issues in school and communicating to community health center** (6 items) and **Providing counseling on children health issues** (6 items). In each group there consist of some positive and negative aspects. For each question, there are four scales of importance: (1) for “*not important*”, (2) for “*somewhat important*”, (3) for “*important*” and (4) for “*extremely important*”. The detail data of each item is showed in the appendix D.

Table 24. Parents'/ Caregivers' Perceived Importance of School Nurse's Roles in the Primary school (with the means of all items in each group)

| The role of school nurse toward | School SN (N=287) | School SHS (N=293) | Total (N=580) | p-value |
|---|----------------------|-----------------------|------------------|-------------------|
| I. Supervising student health status (7 items) | | | | 0.361 |
| Means | 3.0 | 3.0 | 3.0 | |
| SD | 0.36 | 0.41 | 0.38 | |
| II. Providing health education (5 items) | | | | 0.004 |
| Means | 2.8 | 2.7 | 2.7 | |
| SD | 0.39 | 0.48 | 0.43 | |
| III. Improving the school environment (3 items) | | | | 0.005 |
| Means | 3.0 | 2.9 | 2.9 | |
| SD | 0.55 | 0.50 | 0.43 | |
| IV. Controlling health issues in school and communicating to community health center (6 items) | | | | < 0.001 |
| Means | 2.9 | 2.8 | 2.8 | |
| SD | 0.57 | 0.47 | 0.52 | |
| V. Providing counseling on children health issues (4 items) | | | | 0.107 |
| Means | 2.8 | 2.8 | 2.8 | |
| SD | 0.55 | 0.48 | 0.51 | |
| Total (25 items) | | | | <0.001 |
| Means | 2.9 | 2.8 | 2.9 | |
| SD | 0.39 | 0.48 | 0.37 | |

Using significant at 0.05 Mann-Whitney test

The mean score \pm standard deviation of all items of each group and of total were showed in the table 24.

For the total, the mean \pm standard deviation was 2.9 ± 0.37 . In the *Supervising student health status groups* (7 items) the mean score \pm standard deviation of both schools was 3.0 ± 0.38 . The group of *Providing health education* (5) there was mean score \pm standard deviation of both schools was 2.7 ± 0.43 . *Improving the school environment group* (3) had mean score \pm standard deviation of both schools was 2.9 ± 0.53 . The mean score \pm standard deviation of *Controlling health issues in school and*

communicating to community health center (6) was 2.8 ± 0.52 and the last group about *Providing counseling on children health issues* (6) get 2.8 ± 0.51 .

In the total and the means of 5 groups of two selected schools, there were differences between parents' important score with statistical significance about groups of *Providing health education* (p value = 0.004), *Improving the school environment* (p value = 0.005), *Controlling health issues in school and communicating to community health center* (p value < 0.001) and the total groups (p value < 0.001). These mean ranks of school SN has higher than of school SHS. It meant that the parents/caregivers of school SN emphasized these roles' group of school nurse more important than of school SHS.



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Table 25. The top ten roles of highest mean score of importance chosen by the parents (SN: 287, SHS: 293 and total: 580)

| No. | The role of school nurse in | Percentage | | | | Mean | SD |
|--|-----------------------------|---|---------------------------|------------------|----------------------------|-------------|--------------|
| | | Not important (1)(American Cancer Society) | Somewhat important (2) | Important (3) | Extremely important (4) | | |
| I. Supervising student health status | | | | | | | |
| 1. Provide first aid and emergency care to students (Ques. D406) | SN | - | - | 1.4 | 98.6 | 3.99 | 0.117 |
| | SHS | 0.7 | 1.0 | 10.6 | 87.7 | 3.85 | 0.433 |
| | Total | 0.3 | 0.5 | 6.0 | 93.1 | 3.92 | 0.325 |
| 2. Perform health screenings (vision, dental, etc.) (Ques. D401) | SN | - | 0.3 | 28.9 | 70.7 | 3.70 | 0.465 |
| | SHS | - | 5.1 | 35.2 | 59.7 | 3.55 | 0.593 |
| | Total | - | 2.8 | 32.1 | 65.2 | 3.62 | 0.539 |
| 3. Prevent and control common and infectious diseases (Ques. D402) | SN | - | 0.3 | 35.9 | 63.8 | 3.63 | 0.490 |
| | SHS | 1.4 | 9.2 | 29.7 | 59.7 | 3.48 | 0.719 |
| | Total | 0.7 | 4.8 | 32.8 | 61.7 | 3.56 | 0.621 |
| II. Providing health education | | | | | | | |
| 4. Teach students about health issues (Ques. D408) | SN | 0.1 | 2.4 | 59.2 | 36.2 | 3.30 | 0.620 |
| | SHS | 1.4 | 15.7 | 59.4 | 23.5 | 3.05 | 0.608 |
| | Total | 1.7 | 9.1 | 59.3 | 29.8 | 3.17 | 0.655 |
| III. Improving the school environment | | | | | | | |
| 5. Helps create a positive school environment (Ques. D413) | SN | 1.0 | 8.7 | 22.0 | 68.3 | 3.57 | 0.695 |
| | SHS | 0.3 | 8.9 | 45.1 | 45.7 | 3.36 | 0.656 |
| | Total | 0.7 | 8.8 | 33.6 | 56.9 | 3.47 | 0.683 |
| 6. Monitor sanitation of school environment (Ques. D414) | SN | 2.1 | 9.4 | 38.3 | 50.2 | 3.37 | 0.740 |
| | SHS | 0.7 | 5.5 | 56.7 | 37.2 | 3.30 | 0.602 |
| | Total | 1.4 | 7.4 | 47.6 | 43.6 | 3.33 | 0.674 |
| IV. Controlling health issues in school and communicating to community health center | | | | | | | |
| 7. Identify health problems for students (Ques. D416) | SN | 1.0 | 16.4 | 39.7 | 42.9 | 3.24 | 0.759 |
| | SHS | 0.7 | 9.9 | 57.7 | 31.7 | 3.20 | 0.635 |
| | Total | 0.9 | 13.1 | 48.8 | 37.2 | 3.22 | 0.699 |
| 8. Maintain health records and perform physical exams (Ques. D417) | SN | 2.1 | 11.1 | 42.2 | 44.6 | 3.29 | 0.747 |
| | SHS | 1.0 | 13.7 | 61.4 | 23.9 | 3.08 | 0.641 |
| | Total | 1.6 | 12.4 | 51.9 | 34.1 | 3.19 | 0.703 |
| V. Providing counseling on children health issues | | | | | | | |
| 9. Provide counseling to parents and other teachers to solve children's concerns and problems (Ques. D424) | SN | 1.7 | 11.5 | 47.4 | 39.4 | 3.24 | 0.722 |
| | SHS | 1.0 | 10.9 | 59.4 | 28.7 | 3.16 | 0.643 |
| | Total | 1.4 | 11.2 | 53.4 | 34.0 | 3.20 | 0.684 |
| 10. Provide counseling to parents in children health issues (Ques. D423) | SN | 12.2 | 3.8 | 49.8 | 34.1 | 3.06 | 0.931 |
| | SHS | 2.7 | 5.8 | 64.8 | 26.6 | 3.15 | 0.641 |
| | Total | 7.4 | 4.8 | 57.4 | 30.3 | 3.11 | 0.749 |

From 25 items of school nurse roles, we selected 10 roles which had highest mean scores to compare between 2 schools. The mean score of important level of each role related to the high important level. The important levels were shown by the percentage of parents/ guardians' assessment about "*Extremely Important*" and "*Important*". All the 10 highest roles were from the 5 groups.

In the first group *supervising student health status*, it contained 3 items. For the first item of *provide first aid and emergency care to student*, its mean score was 3.92 ± 0.325 , and related to the highest important level of "*Extremely Important*" (with 93.1% of respondents) and of "*Important*" (with 6.0% of approval) The second one *perform health screening (dental, vision, etc)* with mean score of 3.62 ± 0.539 , we saw 65.2% of parent estimating "*Extremely Important*" and 32.1% of "*Important*". The third item *Prevent and control common and infectious diseases* got mean score of 3.56 ± 0.621 with the 61.7% of respondents for "*Extremely Important*" and 32.8% for "*Important*". For all of these three items, the percentage of parents/ guardians marking "*Extremely Important*" were higher than those of "*Important*"

In the second group *Providing health education*, the respondents thinking the school nurse has responsibility for *teaching student about health issues* got the mean score 3.17 ± 0.655 . The number of parents/ guardians thought that it was "*Extremely Important*" (59.3%) was smaller than those of "*Important*" (29.8%).

In the third group *Improving the school environment*, there were 2 items. The first *Helps create a positive school environment* had mean score 3.47 ± 0.683 with the important level 56.9% of "*Extremely Important*" and 33.6% of "*Important*". The other *Monitor sanitation of school environment* took 3.33 ± 0.674 for the mean score, and 43.6% of "*Extremely Important*" and 47.6% of "*Important*" for important levels.

In the fourth group *Controlling health issues in school and communicating to community health center*, there were 2 items get highest mean score with associated important levels of “*Extremely Important*” and “*Important*” .The one was *Identify health problems for students* (3.22 ± 0.699 , 37.2% and 48.8%, respectively) and the other was *Maintain health records and perform physical exams* (3.19 ± 0.703 , 34.1% and 51.9%, respectively). Both of them took the level of “*Important*” higher than of “*Extremely Important*”.

In the fifth group *Providing counseling on children health issues*, there were 2 items getting highest means and important levels. On the first *Provide counseling to parents and other teachers to solve children’s concerns and problems*, the mean was 3.20 ± 0.684 , the levels of important were 34.0% for “*Extremely Important*” and 53.4% for “*Important*”. On the second *Provide counseling to parents in children health issues*, the mean and important levels were 3.11 ± 0.749 , 30.3% and 57.4% respectively.

With each of ten these roles the percentage of parents/ guardians in school SN thinking “*extremely important*” was higher than in school SHS.

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Table 26 The services and programs should implement in primary school following parents/ guardians' idea

| | | Percentage) | | |
|---|--------------------|--------------|-------------|-------------|
| | | Need | No need | Don't know |
| 1. Checking up school children's health annually | SN (287) | 100.0 | 0.0 | 0.0 |
| | SHS (293) | 100.0 | 0.0 | 0.0 |
| | Total (580) | 100.0 | 0.0 | 0.0 |
| 2. Teeth sanitary care every day | SN (287) | 100.0 | 0.0 | 0.0 |
| | SHS (293) | 99.7 | 0.0 | 0.3 |
| | Total (580) | 99.8 | 0.0 | 0.2 |
| 3. Check oral | SN (287) | 100.0 | 0.0 | 0.0 |
| | SHS (293) | 97.6 | 0.7 | 1.7 |
| | Total (580) | 98.8 | 0.3 | 0.9 |
| 4. Providing fresh water and environmental sanitation | SN (287) | 100.0 | 0.0 | 0.0 |
| | SHS (293) | 97.6 | 1.7 | 0.7 |
| | Total (580) | 98.8 | 0.9 | 0.3 |
| 5. Food safety hygiene | SN (287) | 100.0 | 0.0 | 0.0 |
| | SHS (293) | 96.9 | 1.7 | 1.4 |
| | Total (580) | 98.4 | 0.9 | 0.7 |
| 6. Check eye | SN (287) | 100.0 | 0.0 | 0.0 |
| | SHS (293) | 96.2 | 1.7 | 2.1 |
| | Total (580) | 98.1 | 0.9 | 1.0 |
| 7. Check hearing | SN (287) | 99.7 | 0.0 | 0.3 |
| | SHS (293) | 95.9 | 1.4 | 2.7 |
| | Total (580) | 97.8 | 0.7 | 1.6 |
| 8. Vaccination | SN (287) | 96.9 | 2.8 | 0.3 |
| | SHS (293) | 92.8 | 2.7 | 4.4 |
| | Total (580) | 94.8 | 2.8 | 2.4 |
| 9. Health education | SN (287) | 96.5 | 0.7 | 2.8 |
| | SHS (293) | 92.8 | 4.4 | 2.7 |
| | Total (580) | 94.7 | 2.6 | 2.8 |
| 10. EQ test | SN (287) | 88.2 | 3.5 | 8.4 |
| | SHS (293) | 82.3 | 5.1 | 12.6 |
| | Total (580) | 85.2 | 4.3 | 10.5 |
| 11. Sex education | SN (287) | 77.0 | 8.0 | 15.0 |
| | SHS (293) | 82.3 | 10.2 | 7.5 |
| | Total (580) | 79.7 | 9.1 | 11.2 |
| 12. Hair cutting | SN (287) | 0.3 | 99.7 | 0.0 |
| | SHS (293) | 1.9 | 90.1 | 0.0 |
| | Total (580) | 1.9 | 97.9 | 0.2 |

There were nine highest school health services and programs (more than 90%) which should implement in primary school following to parents/ guardians' idea were: "checking up school children's health annually" with 100% of respondents

think that should have. Following by *Teeth sanitary care every day* (99.8%), *Check oral* (98.8%), *Providing fresh water and environmental sanitation* (98.8%), *Food safety hygiene* (98.4%), *Check eye* (98.1%), *Check hearing* (97.8%), *Vaccination* (94.8%) and *Health education* (94.7%)

Sex education program got the lowest accepting percentage of respondents (79.7%). The second lowest program was EQ test (85.2%).

Only, 1.9% parents/ guardians thought setting hair cutting services in school.

Table 27 Agreement to support to school health services

| Agreement and willing to pay of parents | Number (Percentage) | | |
|---|----------------------|-----------------------|------------------|
| | School SN (N=287) | School SHS (N=293) | Total (N=580) |
| Agreement to support to school health services | | | |
| Strongly Agree | 271 (94.4) | 160 (54.6) | 431 (74.3) |
| Agree | 16 (5.6) | 102 (34.8) | 118 (20.3) |
| Somewhat agree | 0 (0.0) | 27 (9.2) | 27 (4.7) |
| Not agree | 0 (0.0) | 4 (1.4) | 4 (0.7) |
| Willing to pay | | | |
| Yes | 287 (100.0) | 278 (94.9) | 565 (97.4) |
| No | 0 (0.0) | 15 (5.1) | 15 (2.6) |

Almost parents agreed support to school health services (99.3%) with “agree” (20.3%) and “strongly agree” (74.3%).

Most of parents willed to pay for school health services (97.4%) when the schools had clearly budgeted for each activity. Only 2.6% of them did not will to pay.

Table 28. Amount of money that parents willing to pay per year for the school health services

| Amount of money | Number (Percentage) | | Total N=580 (%) |
|--------------------|---------------------|---------------------|-----------------------|
| | School SN N= 287 | School SHS N=293 | |
| Mean \pm SD | 32,820 \pm 10,447 | 23,133 \pm 12,850 | 28,000 \pm 12,670 |
| Median | 30,000 | 20,000 | 30,000 |
| Lower than 20,000 | 8 (2.8) | 20 (6.8) | 28 (4.8) |
| 20,000-40,000 | 264 (92.0) | 258 (88.1) | 522 (90.0) |
| Higher than 40,000 | 15 (5.2) | 15 (5.1) | 30 (5.2) |

A majority of parents/ guardians (90%) willed to pay from 20,000 to 40,000 VND (\$1.5-2.5) per year for school health services with the median was 30,000 VND.

Table 29 How to pay for the school health services

| The way to pay for the school health services | Number (Percentage) | | |
|---|----------------------|-----------------------|------------------|
| | School SN (N=287) | School SHS (N=293) | Total (N=580) |
| Directly | 260 (90.6) | 200 (71.9) | 460 (81.4) |
| Though school fee | 4 (1.4) | 36 (12.9) | 40 (7.1) |
| Through insurance company | 23 (8.0) | 41 (14.7) | 64 (11.3) |
| Other | 0 (0.0) | 1 (0.4) | 1 (0.2) |

More than 81% of parents wanted to pay directly to school. About 10% paid through insurance company as current way. And 7.1% wanted to pay through school fee. There was 1 case (0.2%) want to pay directly for each activity.

CHAPTER V

DISSCUSION

The aim of this research was to examine opinions and expectations of school nurses towards their work with children and the perceptions of primary parents/ guardians of school nurse's role and health services which will be provided by school nurses to children. From the findings, there could be some recommendations or necessary interventions to improve the effectiveness of the role of school nurses and school health services in BacNinh province.

5.1. Opinions of the school nurse and school health staff about their work, which focus on school health services with children

The findings of study showed the difference of backgrounds between school nurse and school health staff. One of the school health staff was also a vice president of a primary school, so her viewpoint started from the management background of school nurse and school health services, whereas the other school nurse graduated from BacNinh Medical School. Their main work at school was also different, and their knowledge about school health programs was not the same. The school nurse answered correctly 8/11 programs and 8/10 activities, which were more than the school health staff (6/11 programs, 5/10 activities) and both of them could not list all the programs and activities. The first reason of the difference maybe was that the school nurse had regularly participated to all short training courses that the DoET organized for 4 years, while the school health staff eventually participated to these courses (only 2 sessions in the recent 5 years). The other reasons maybe were both schools could not implement all school health programs and activities and both of

them also did not know concretely the decrees No.73/2007/MoET on contents of school health programs. All the activities and programs listed by school nurse were done at school having school nurse, because the programs and activities he did directly every year, while in the school having school health staff she could not do all the school health programs, she could help and manage the other teachers implementing these.

Besides that, both of them did not know No.35/2006/MoET-MoIA on setting school health services and school nurse for schools. The school nurse did not know anything about the decree. He did everything following the contract between him and the school. But following the ideas of the school health staff, she explained that the economic limitations did not allow the DoET to implement the concepts of these decrees into all schools in BacNinh. The result was the same as the result of a MoH report (ChuVanThang, LeThanhXuan, & et al., 2009)

About their daily work, both persons were responsible for taking care of student's health. Because of the difference of tasks, their daily work was also different. However, there were a lot of common features. They maintained their work in strenuous conditions, with various and dispersing activities. Their activities varied daily and with high responsibility. They went to school every learning day early and came back home much later than the closing time. Because both of them did not want their students got some problems at school such as accident, injury... They could not determine exactly about their activities in school, they just gave opinion that their works were hard and required much of carefulness.

Although different background and main work, both of them thought that a school should have a school nurse to take care of student health at school with

different reasons. The school nurse thought that the primary school children can subject to get health problems, such as accidents or injury, whereas in the school health staff opinions, the children now easily got some communicable diseases. She also thought that the current health status of primary student's health had changed in 10 years recently in the way which revealed more relationship to their age groups and behaviors. The ideas of them were the same as the ideas of the other Vietnamese teacher of a Chu Van Thang study (ChuVanThang et al., 2009) and the school nurse of an another primary school in Hanoi (ThanhNien, 2004).

About the school health services now existing in their school, both of schools could not implement all school health activities. Form their ideas, because some activities and services which the schools can not do without help of health centers and health sector. But in their opinion, some school health activities and programs were ineffective such as checking up student health, examining some school disease, preventing injury accident, etc. These activities needed the help of health center, but it made their school passive. They also pointed out the difficulty and restraints in carrying out and maintaining some school health activities/services independently which made passive the school health activities. The activities/ services needed to cooperate with health centre and called for the help of health sector such as checking up student health annually, checking oral, examine school disease (myopia).

Although they had the same opinions about school health promotion, the roles and tasks of school nurse or school health staff in protecting school children health, there were some different details in their ideas. Perhaps, these differentiations were impacted by the effect of gender, because the gender could effect to the ideas towards jobs. The men expected their job differed from the women. The men liked the

technical, strong and creative work, whereas the women prefer careful and patient jobs as nursing, education, law, etc. (Warr, 2007). Moreover, an another study about nursing job pointed out that “women are more suitable to work as a *nurse* than men” (Tastsoglou & Dobrowolsky, 2006).

Expectation toward school nurse’s roles and school health services

Regarding to policy, both persons wanted to have the official setting of school nurses as regular members of school personnel to be responsible for school health services. Concerning to the life, they wanted to get worthy treatment according to their contribution. They expected that the both Ministries of Health and of Education and Training established and issued standards of responsibility, obligation and interests for the school nursing and early implemented these decrees for schools to have the opportunity to implement school health services well. They suggested and were waiting for a guideline book of school nursing and school health services in which were written the roles and task of school nurse and school health staff. It was not in the subject’s expectation. Creating a guideline book of school nurse and school health services also was the ideas of almost manager of schools and head teachers in Vietnam (ChuVanThang et al., 2009; Tran Van Dan et al., 2005).

From their ideas about roles and task of school nurse, the study found and made their list including same points as: (1) Providing first aid and emergency care to student; (2) Providing a sanitary school environment; (3) Supervising support lunch at the canteen of the school; (4) Planning, managing, and checking up student’s health annually; (5) Managing student health record; (6) Consulting for teacher, students and parents; (7) Bridging the gap between community and health center; (8) Providing

health education. Their idea about the roles were the same the Chinese school nurse opinion (XiaomingYu, 2002).

They also gave some ideas about the school health services which they can provide as (1) Providing lunch to students and teachers, (2) Checking up student's health and Maintaining student's health record, (3) Providing necessary medicine for students and teachers, (4) Providing fresh water and sanitary environment, (5) Providing teaching-learning and playing environment for students and teachers.

All the above school nurse's roles and school health services also correlated to the some concepts of school health in Act.4 of decree No.73 (MoET, 2007a) and the roles of school nurse of NASN (NASN, 2002a).

5.2. Parents/ caregiver's perception of school nurse and the services which are provided by school nurses

5.2.1. *The socio-demographic characteristics of respondents*

This part aims to determine the perception of 580 primary school parents/guardians of school nurse's role and health services provided by school nurses, including both categories of schools which have school nurse and do not have school nurse. There was a 50.5% of parent/ guardians coming from school SHS and a 49.5% coming from school SN.

From the study, more males than females responded the questionnaire (53.1% vs. 46.9%). It seemed that fathers look after student's learning more than mothers did. This idea was shared by Le Truong Phat, an expert of Vietnamese culture, in a study about dividing responsibilities in a family (LeTruongPhat, 1998). In Vietnamese families, men are the breadwinners; hence fathers always take care of children's learning, and mothers take over this responsibility when fathers are away.

From the result of study, the age of the respondents ranged from 25 to 60 years old. More than 50% of them aged from 36 to 45, 37.9% were from 25 to 35 years and 9.2% were over 45 years. The mean age was approximately 37.46 with standard deviation (SD) is 5.649. The mean age of respondents in school SN was slightly lower than in school SHS.

Most of them were the parents (99.7%) and were married (94.0%). It showed that almost children were looked after by both parents. There were only 2 cases taken care of by grand parents. The grandparents looked after the children for their parents only when the parents passed away or worked far away from home (KeTrungTRan, 2000).

Regarding to education achievement, there were about 44% of parents/caregivers of both schools having occupational degree and graduate degree. These groups of school SN (50.8%) were higher than of school SHS (37.2%).

The parents/ guardians working for the government and private companies was more than 60% in the school SN, while the same group in school SHS occupied 48.4%. In the school SHS, the farmer and household work group (40.6%) was of higher percentage than of school SN (16.4%).

About house setting, there were approximately 80% of participant's houses setting in urban area and about 20% setting in suburban and rural area. In the school SN, there were no responder's houses were setting in rural area. The number of student's houses setting in urban area of school SN (92.7%) was more than of school SHS (66.2%).

Nearly 90% of respondents did not participate in Action of Parent Association. Because in one class there were 3 to 5 parents participated in the Action of Parent

Association. So the number of parents participating in Action of Parent Association was smaller than the rest.

Regarding to the number of children that each pair of parents has, there were more than 80% parents having 1 or 2 children. It was correlated with Population Ordinance, 1991 which mentioned that each Vietnamese family should have 1 or 2 children (BacNinh People's Committee, 1998; Vietnamese Government, 1988). In the total subjects, there were 20 parents (3.4%) having more than one child studying at the same school. The number of children in the family studying at the same school did not effect to the decision of parents about support and willing to pay for school health services.

According to MoLIA, a poor family was determined as a family in which the average personal monthly income was lower than 338,000VND (MoLISA, 2008). The study found that approximately one – fifths of the respondent's families were poor, and there were more poor families in school SHS (27%) than in school SN (11.5%).

5.2.2. The knowledge and satisfactory of parents/ caregivers about school health services and school nurse exiting in 2 selected schools

About setting school health clinic and school nurse in the child's schools, in the result showed that nearly 60% of parents answered correctly about setting health clinic in their child's school. And about 80% parents said correctly that their children's school had or did not have school nurse. Comparing between the two schools, the number of parents of school SN knew correctly about in their children's school setting health clinic (76.3%) and school nurse (94.8%) more than the number of parents of school SHS (36.5% and 64.5%). Both of the factors, there were highly

statistically significant differences with p value < 0.001 . It means that the parents of school SN paid attention to school health activities in the child's school than the parents of school SHS or the school SN supported more information about school health activities to student parents.

In the school health activities following the decree No.73/ 2007/ MoET about checking up health for student annually, both school there organize checking up health every school year. Totally, most of parents (98.4%) know about that. There was 1.6% (9 cases) said "*don't know*" and all of them were in school SHS. In the group of parents who knew about checking up student health annually service, almost them (99.8%) knew the result and responded on newest checking up health result of their child. There was 1 case said "*don't know*" about the newest result, it also was of school SHS. There was small number of parents who did not know about the school health service. It correlated with the study of Tran Van Dan about the result of checking up schoolchildren health (Tran Van Dan et al., 2005). The result also showed that the school and the parent had good connection about school activities.

Among the parents knowing about the newest result of their child health, there were 83.2% respondent's children getting normal health. So there were 16.8% being 96 cases parent's children having health problems. Among of them, the most popular was oral dental diseases (about 80%), followed by eye problem with short sighted (44.8%). Some diseases were less exposure such as Ear Noise Throat (9.4%), nutrition disorder with malnutrition and obesity (5.4%) and skin disease (2.1%). The result of the study about dental diseases and eye problem correlated to the report about primary student's health of Ministry of Health (MoH, 2007b). In the report, there were 95% of

school children get oral and dental diseases and 24% having refraction problems in the total students examined.

With the respondent self-evaluation question about awareness towards school health program, there were 67.8% of respondents answered “know”. The number of parents answering “*know*” of school SN (90.6%) was more than of school SHS (45.4%).

There were 5 highest services which are known by more than 90% of respondents as *Checking up student health annually* (98.3%), *Protecting teeth and oral for primary students at school* (95.3%), *Food safety hygiene* (91.2%), *Providing fresh water and environmental sanitation* (90.3%) and *Oral check* (89.8%). And three lowest services were *EQ test* (8.5%), *Sex education* (10.9%) and *Adolescent health* (15.1%). There was no difference between school (SN) and school (SHS) about the 5 highest answer services and the 3 lowest ones except eye checking service. The percentage of parents of school (SN) knowing about *Eye checking services* was higher than of school (SHS) (96.9% and 48.6%) with $p= 0.035$. *EQ test* known by small number of parents was normal in all Vietnam and EQ test was new technical method to test on emotional intelligent. So that, rare parents correctly knew about the test. In Vietnam, Hanoi National University translated the tools and pre-test with pupils in some provinces including BacNinh province (HaiYen, 2008).

About the way of getting health service information, nearly three-fourths of the respondents (73.1%) knew the school health services through School/ Teacher and 4.6% from their children. The parents of school SN got information form school/ teacher more than of school SHS while the parents of school SHS talked to their child about school health activities more than of school SN. On the other hand, there was

relationship between the parents'/ caregivers' knowledge about school health services and the willingness to pay for school health services.

Almost parents/ guardians thought that it was “*satisfy*” and “*extremely satisfy*” (more than 80%) with *teeth sanitary care, check oral, vaccination, providing fresh water and environmental sanitation and food safety hygiene*. The school health service/ program getting the lowest satisfy of parents was *EQ test*. The result also correlated with the result of this study about the number of parents knowing about the school health service and program.

So that, the results of the study about school health clinic, school nurse which set in their child's school and sources from that parents get information showed that parents of school SN connected with their child school better than school SHS.

Almost the parents/ guardians of the two schools thought that the school their children studying should have a school nurse working full time and a health clinic to keep medicine and for students who were ill take a rest at school. It correlated to the idea of US parents/ caregivers of Gregg study (Gregg et al., 2005).

5.2.3. Health status of children

Most of the children of respondents (96.6%) were in good health status in 2 recent years and 2.6% of the children of respondents got chronic diseases. Few children got more than one chronic diseases. The highest disease is respiratory disease (50%), followed by Nutritious disorder with malnutrition and obesity (25%), Heart disease and Gastrointestinal disease (18.8%). The finding correlated with TranVanDan report about the situation of diseases of schoolchildren in Hanoi, which found that more than half of students got respiratory diseases every year specially the

upper respiratory diseases, and the percentage of students who got Nutritious disorder as obesity increased (Tran Van Dan et al., 2005). According to a MoH report about the schoolchildren disease, the number of children getting fraction disorder quickly increased in the recent 10 years (VietBao, 2007b).

There were 93.3% of children taking vaccine out of extended inoculation to protect child's health. It showed that almost children had a good health. And they were taken care of by their parents well. No any statistically significant difference between two schools. The percentage of children taking vaccines which were out of EI program correlated with the Hanoi Preventive Medicine Centre report about the number children under 10 years taken vaccine in 2008 was more than in 2007 and 2006 with types of vaccine hepatitis type B, Japanese B-Encephalitis and influenza (Hanoi Preventive Medicine Center, 2008).

5.2.4. The parents/ caregivers perceived importance of school nurse's role and the health services in the school

The vast majority of parents/ caregivers thought that the school their child attending needed to have a health clinic (95.9%) and a school nurse (99.3%). Almost of them thought that it should be provided from kindergarten (93.9%) and primary school (6.1%) by a full-time school nurse (89.8%) or a part-time school nurse (10.2%). It meant that the parents expected a full-time school nurse at school more than a part-time school nurse. It related to a study of Chu Van Thang which found that all parents who participated in the group discussion agreed a full-time school nurse working at school better than a part-time one (ChuVanThang et al., 2009).

When asked how important of each of school nurse roles, this study found that there were 10 roles chosen from 25 items about the importance of school nurse's role with highest mean scores of importance. The 10 roles were: (1) providing first aid and emergency care to student, (2) performing health screening (dental, vision, etc), (3) preventing and controlling common and infectious diseases, (4) teaching students about health issues, (5) helping create a positive school environment, (6) monitoring sanitation of school environment, (7) identifying health problems for students, (8) maintain health records and perform physical exams, (9) providing counseling to parents in children health issues and (10) providing counseling to parents and other teachers to solve children's concerns and problems. The roles "*Providing first aid and emergency care to student*" and "*Perform health screening (dental, vision, etc)*" were the highest evaluated "*important*" and "*extremely important*" by the parents/caregivers (99.1% and 97.2%). This finding correlated with Gregg Kirchofer (Gregg et al., 2005). In the study of Gregg, the result showed the ideas of US parents/caregivers about school nurse's roles. They identified the 2 most important health services provided by school nurse were *providing first aid and emergency care* (94.2%) and *communicating with parents, school, and health providers* (83.7%).

In the findings of the study, all respondents thought that the school health services should provide "*checking up school children's health annually*" (100%). It correlated with the finding about the satisfaction of parents/caregivers of school health services. Both of the findings showed that checking up student health annually and management of their health reports needed to set in not only primary school but also school levels.

In the 10 most important school nurse's roles were the highest evaluated "*important*" and "*extremely important*" by the parents/ caregivers, there were some roles correlating to the ideas of school nurse and school health staff in the part 1 of the study as (1) providing first aid and emergency care for student at school, (2) performing health screenings, (3) managing student health records, (4) providing a sanitary school environment, (5) consulting health issues for students, teachers and parents, (6) providing health education.... They also related to the school health contents of the decree No.73/2007/MoET (MoET, 2007a) and the components of school health promotion of NASN (NASN, 2002a).

Mostly parents agreed to support to school health services (94.6%) with multi level of agreement from agree (20.3%) to strongly agree (74.3%). Almost parents willed to pay for school health services (97.4) when the schools had clearly budget for each activity. More than 81% of parents wanted to pay directly to school, about 10% pay through insurance company as current way. Most of parents (90%) wanted to pay 20,000 -40,000 VND (about \$1.5 to \$2.5) per year for these services. It was the same following an another study, in which almost parents in discussion group agreed to pay for school health services in condition that the schools their children learnt had to report clear budget (ChuVanThang et al., 2009). The findings of the study also related with a study in US , which found out that a majority of the US parents/ caregivers also strongly agreed and agreed to pay for each service (Gregg et al., 2005).

CHAPTER VI

CONCLUSIONS AND RECOMMENDATIONS

6.1. Conclusion

1. *On the opinions of the school nurse and school health staff toward their works, focusing on school health services with children.*

With the different background and experience in school health, both of school nurse and school health staff thought that the school should have a school nurse and health clinic to take care school children based on student health. However, they also gave some different details to support these ideas. The school nurse expressed his operational viewpoint, and focused on the behavioral side in thinking that the children in primary school were very active, they were subjected to accident and injury in playing at school. The school health staff with the managing viewpoint stated the change of disease pattern of school children. Based on their experience and health care demand of their schoolchildren, they had given some ideas about school nurse's roles and some school health services that they could provide for children.

2. *The perceptions of primary school parents/ guardians of school nurse role and health services which are provided by school nurse including the both categories of schools, which have school nurse and do not have school nurse*

There was a difference between the two schools in regarding the connection between the parents and the school. The parents of school SN seemed to have better connection to the school than those of school SHS, they got information about the school health services and understood the disposition of school nurses and setting

health clinic in school ($p < 0.001$). But in the school SHS, the parents/guardians got information from talking with their children more than in school SN ($p < 0.001$)

Taking care of children health was being improved more and more. Most of children (93.3%) in the study were taken vaccine out of expand inoculation and school program and more than 95% student had good health status.

Almost parents/ caregivers thought that the school where their children studying should have a school nurse and a health clinic to take care of student's health at school. They also agreed to support and were willing to pay from 20,000 to 40,000 VND for school health services when the school could explain budget correctly and clearly.

3. From the findings, we can determine the unanimity between the school health care providers (school nurse, school health staff) and the sponsors of receivers (parents/caregivers). The major part of ideas of school nurse and school health staff concurred with the perception of parents/ guardians about school nurse roles and the services provided by school nurse. The 6 school nurse's roles were (1) providing first aid and emergency care for student at school, (2) performing health screenings, (3) managing student health records, (4) providing a sanitary school environment, (5) consulting health issues for students, teachers and parents and (6) providing health education.

And the 5 school health services were (1) checking up student's health and maintaining student's health record, (2) providing lunch to students and teachers, (3) providing necessary medicine for students and teachers, (4) providing fresh water and sanitary environment and (5) providing teaching-learning and playing environment for students and teachers.

6.2. Recommendation

6.2.1. For policy maker

According to the results about information sources from which parents/guardians got, the study showed that the parents/guardians in the school having SN got more information from school and better knowledge about school health programs than those in the school having SHS, so that schools should organize meetings for parents to discuss about school health programs. Parents should talk with their children about the school activities to give them more understanding about school health program as well as school activities.

In examining opinion of both school nurse and school health staff and perception of student's parents/guardians about setting school nurse in school, the study showed that the contents of both the decree No.73/2007/MoET and the circular No.35/2006/MoET-MoIA satisfied requirements of the current society. Both ministries of Health and Education and Training should early issue a new regulation which complete or improve the currents on contents of School health programs and services; roles, task, right and duty of School nurse; cooperation between education, health sectors and other. That regulation should follow 6 roles and 5 services above.

The provincial DoET and People's Committee should early set up these policies to schools. In implementing process, there are some difficulties about finance and human resource, the provincial DoET and People's Committee should implement step by step, and should not do for all schools at the same time. The province government should apply these regulations to school in city or provincial centre, and mobilize socialization (from support of student's parent) and evaluate the

effectiveness and effect of school nurse roles and the school health services after 3 years of intervention then extend to all over the province.

For the optimality of implementation, the People Committee and Departments should set priority for sectional areas to organize hierarchical deployment and evaluate outcomes. Due to restrained budget, the organization should be scheduled periodically and supervised carefully. The common strategic approach will follow the method of Gradually Spreading Oil Stain and mobilize social resources and community participation.

6.2.2. *For further study*

This study should continue with following orientation to increase the number of schools, school nurses and widen study area such as rural, mountainous, remote ...

For the policy implementation of setting services of school nurse, this study emphasized on only school nurse/ school health staff (provider) and the student's parents (receiver), further researches may study on managerial staff, head teachers and student on demand using school nurse and school health services at school.

The other investigation study will assess the effectiveness on implementing the roles of school nurse and school health services after that schools apply setting school nurse and school health services in 5 years. The study should use both qualitative and quantitative method with both provider group (teacher and school nurse) and receiver group (the parents and students).

The other should study about mobilization of social resources and community participation.

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APPENDICES

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APPENDIX A: MAP OF VIETNAM



10. What do you participate in Parent Association of the child's class or of the child's school?

1. Parent Association of class
2. Parent Association
3. Don't joint.

The questions using for the parents

11. How many children do you have?

.....

12. How many children among them do they study in this school?

.....

B. The knowledge of parents/ caregivers about school health services and school nurse

1. Do you know if there is a health clinic in your child's school?

1. Yes
2. No
3. Not sure

2. Your child has a checked up annually in school?

1. Yes
2. No

a. Did you know the result of examination?

1. Yes
2. No

b. How was the result of examination?

1. Normal
2. Abnormal

c. If abnormal, what is the newest result of examination?

1. Skin diseases
2. Eye disease (Shortsighted/longsighted)
3. Oral disease
4. Ear Nose Throat disease
5. Malnutrition/ Obesity
6. Other

3. Does your child's school have school nurse?

1. Yes
2. No
3. Not sure

If yes,

a. How many days a week is the school nurse at school?

1. Few days per week
2. All learning days
3. Don't know

b. If your child has some health problems (sickness, injury, etc.), how can he/ she get treatment from school nurse at school?

1. Easily
2. Difficultly
3. You don't know

4. Gastrointestinal disease: Diarrhea, worm infection....
 5. Nutritious disorder: Malnutrition, Obesity...
 6. Metabolic disease (Diabetes mellitus, Hypothyroidism)
 7. Mental disorder: Autism
 8. Other
3. Have your child been vaccinated?
1. Yes
 2. No
- o If yes, what kind of vaccine
1. Hepatitis vaccine,
 2. Influenza vaccine
 3. Other

D. The parents/ caregivers perceived importance of school nurse's role and the health services in the school

1. Do you think the school need to have a school health clinic?
 1. Yes
 2. No
2. Do you think the school need to have a school nurse to take care of students' health at school?
 1. Yes
 2. No
 - a. If yes, what do you think about the regime that school nurse work at school?
 1. Part-time
 2. Full-time
 - b. From which level does school need to have a school nurse?
 1. Kindergarten
 2. Primary school
 3. Secondary school
 4. High school
 5. Other school

Instruction: The following questions are about your opinion of importance of school nurse's. Please circle the number.

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3. What do you think about importance of school nurse' role following items below:

| The role of school nurse in | Not important | Somewhat important | Important | Extremely important |
|--|----------------------|---------------------------|------------------|----------------------------|
| Supervising student health status | | | | |
| Perform health screenings (vision, dental, etc.) | | | | |
| Prevent and control common and infectious diseases | | | | |
| Provide medical treatments to students and teachers with common diseases | | | | |
| Provide medical treatments to students with chronic health conditions (asthma, metabolic disease, heart disease) | | | | |
| Provide medical treatments to parents | | | | |
| Provide first aid and emergency care to students | | | | |
| Follow up on students who miss school | | | | |
| Providing health education | | | | |
| Teach students about health issues | | | | |
| Teach students about physical subjects | | | | |
| Educate teachers in the health requirements for students with special health care needs | | | | |
| Provide health education and services to school staffs | | | | |
| Work with school teams on health, safety, and educational issues | | | | |
| Improving the school environment | | | | |
| Helps create a positive school environment | | | | |
| Monitor sanitation of school environment | | | | |
| Improve teaching and learning facilities | | | | |
| Controlling health issues in school and communicating to community health center | | | | |
| Identify health problems | | | | |
| Maintain health records and perform physical exams | | | | |
| Provide referrals to local agencies and services | | | | |
| Conduct follow up on referrals to local agencies | | | | |

| | | | | |
|--|--|--|--|--|
| and services | | | | |
| Serve as a link between parents, students, community, and school about the needs of children | | | | |
| Working in hospital or health care centre | | | | |
| Providing counseling on children health issues | | | | |
| Provide counseling to children in need | | | | |
| Provide counseling to parents in children health issues | | | | |
| Provide counseling to parents and other teachers to solve children's concerns and problems | | | | |
| Provide counseling to children in do homework | | | | |

4. In your opinion, which are programs and services following in the school health services or school health programs?

| School health services and school health programs | Yes | No | Don't know |
|--|------------|-----------|-------------------|
| Checking up school children's health annually | | | |
| Eye check | | | |
| Ear check | | | |
| Oral check | | | |
| Sex education | | | |
| Health education | | | |
| QE test | | | |
| Vaccination | | | |
| Teeth sanitary care | | | |
| Food safety hygiene | | | |
| Providing fresh water and environmental sanitation | | | |
| Hair cutting | | | |
| Other | | | |

5. Are you satisfy with some school health services following that are implementing in your child's school

| School health services and school health programs | Not satisfy | Somewhat satisfy | Satisfy | Extremely satisfy | Don't have in the child school |
|--|-------------|------------------|---------|-------------------|--------------------------------|
| Checking up school children's health annually | | | | | |
| Eye check | | | | | |
| Ear check | | | | | |
| Oral check | | | | | |
| Gender education | | | | | |
| Health education | | | | | |
| QE test | | | | | |
| Vaccination | | | | | |
| Teeth sanitary care | | | | | |
| Food safety hygiene | | | | | |
| Providing fresh water and environmental sanitation | | | | | |

6. Which services and programs should implement in primary school?

1. Checking up school children's health annually
2. Eye check
3. Ear check
4. Oral check
5. Gender education
6. Health education
7. QE test
8. Vaccination
9. Providing fresh water and environmental sanitation
10. Teeth sanitary care
11. Food safety hygiene
12. Other

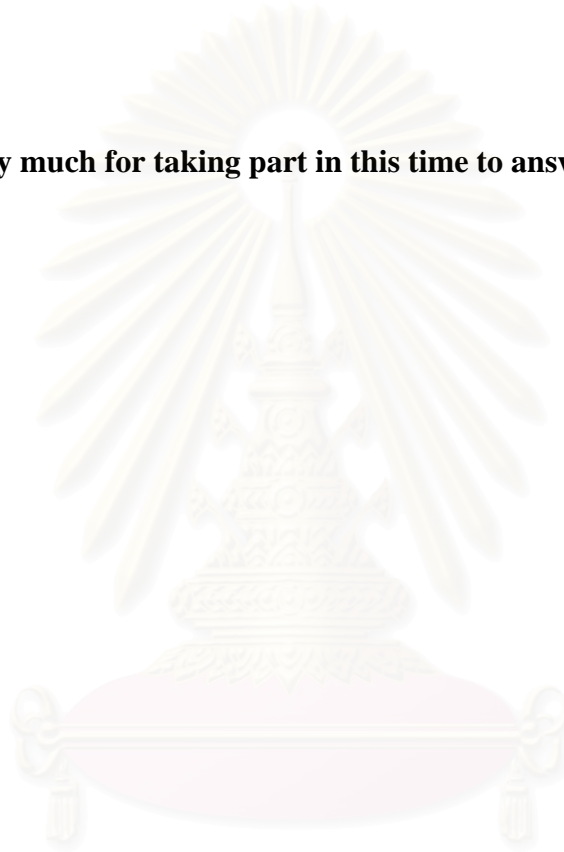
7. Do you agree to support to school health services?

1. Strongly agree
2. Agree
3. Somewhat agree
4. Not agree

If you choose 4, no need to answer the questions 8 and 9

8. How much can you be willing to pay for school health services per year?
..... VND
9. How will you pay?
- | | |
|---------------------------------------|-----------------------|
| 1. Directly to school health services | 2. Through school fee |
| 3. Through insurance company | 4. Other |
10. Could you give some recommendation to improve school health programs?

Thank you very much for taking part in this time to answer the entire questionnaire!



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APPENDIX D. RESULTS

Table D1. The Reliability of each dimension (Cronbach's Alpha coefficient)

| | Scale Variance | Corrected Item-Total Correlation | Squared Multiple Correlation | Cronbach's Alpha |
|--|-------------------|--|------------------------------------|---------------------|
| Perform health screenings (vision, dental, etc.) | 82.985 | .180 | .385 | .869 |
| Prevent and control common and infectious diseases | 82.033 | .233 | .403 | .868 |
| Provide medical treatments to students and teachers with common diseases | 77.132 | .534 | .464 | .860 |
| Provide medical treatments to students with chronic health conditions (asthma, metabolic disease, heart disease) | 77.535 | .394 | .277 | .865 |
| Provide medical treatments to parents | 82.531 | .221 | .235 | .868 |
| Provide first aid and emergency care to students | 83.443 | .252 | .279 | .868 |
| Follow up on students who miss school | 75.686 | .403 | .438 | .866 |
| Teach students about health issues | 80.215 | .379 | .378 | .865 |
| Teach students about physical subjects | 86.933 | -.164 | .190 | .882 |
| Educate teachers in the health requirements for students with special health care needs | 75.191 | .668 | .565 | .856 |
| Provide health education and services to school staffs | 79.315 | .313 | .255 | .868 |
| Work with school teams on health, safety, and educational issues | 76.080 | .627 | .530 | .857 |
| Helps create a positive school environment | 77.088 | .626 | .559 | .858 |
| Monitor sanitation of school environment | 77.165 | .629 | .594 | .858 |
| Improve teaching and learning facilities | 83.846 | .037 | .289 | .875 |
| Identify health problems | 79.948 | .368 | .294 | .865 |
| Maintain health records and perform physical exams | 76.463 | .658 | .654 | .857 |
| Provide referrals to local agencies and services | 72.431 | .706 | .680 | .853 |
| Conduct follow up on referrals to local agencies and services | 75.191 | .709 | .672 | .855 |
| Serve as a link between parents, students, community, and school about the needs of children | 75.407 | .612 | .554 | .857 |
| D421 Working at hospital or health care centre | 83.155 | .138 | .246 | .870 |
| Provide counseling to children in need | 77.156 | .632 | .610 | .858 |
| Provide counseling to parents in children health issues | 74.164 | .745 | .725 | .853 |
| Provide counseling to parents and other teachers to solve children's concerns and problems | 77.120 | .620 | .542 | .858 |
| Provide counseling to children in do homework | 81.991 | .236 | .319 | .868 |

Table D2. Parents'/ guardians' opinion of importance of school nurse's roles

| No | The role of school nurse in | | Not important | Somewhat important | Important | Extremely important | Mean |
|--|--|-------|---------------|--------------------|------------|---------------------|------|
| Supervising student health status | | | | | | | |
| 1 | Perform health screenings (vision, dental, etc.) | SN | | 1 (0.3) | 83 (28.9) | 203 (70.7) | 3.70 |
| | | SHS | | 15 (5.1) | 103 (35.2) | 175 (59.7) | 3.55 |
| | | Total | | 16 (2.8) | 186 (32.1) | 378 (65.2) | 3.62 |
| 2 | Prevent and control common and infectious diseases | SN | 0 (0.0) | 1 (0.3) | 103 (35.9) | 183 (63.8) | 3.63 |
| | | SHS | 4 (1.4) | 27 (9.2) | 87 (29.7) | 175 (59.7) | 3.48 |
| | | Total | 4 (0.7) | 28 (4.8) | 190 (32.8) | 358 (61.7) | 3.56 |
| 3 | Provide medical treatments to students and teachers with common diseases | SN | 2 (0.7) | 29 (10.1) | 143 (49.8) | 113 (39.4) | 3.28 |
| | | SHS | 21 (7.2) | 49 (16.7) | 148 (50.5) | 75 (25.6) | 2.95 |
| | | Total | 23 (4.0) | 78 (13.4) | 291 (50.2) | 188 (32.4) | 3.11 |
| 4 | Provide medical treatments to students with chronic health conditions (asthma, metabolic disease, heart disease) | SN | 59 (20.6) | 53 (18.5) | 150 (52.3) | 25 (8.7) | 2.49 |
| | | SHS | 37 (12.6) | 89 (30.4) | 96 (32.8) | 71 (24.2) | 2.69 |
| | | Total | 96 (16.6) | 142 (24.5) | 246 (42.4) | 96 (16.6) | 2.59 |
| 5 | Provide medical treatments to parents | SN | 203 (70.7) | 77 (26.8) | 7 (2.4) | 0 (0.0) | 1.32 |
| | | SHS | 228 (77.8) | 49 (16.7) | 14 (4.8) | 2 (0.7) | 1.28 |
| | | Total | 431 (74.3) | 126 (21.7) | 21 (3.6) | 2 (0.3) | 1.30 |
| 6 | Provide first aid and emergency care to students | SN | 0 (0.0) | 0 (0.0) | 4 (1.4) | 283 (98.6) | 3.99 |
| | | SHS | 2 (0.7) | 3 (1.0) | 31 (10.6) | 257 (87.7) | 3.85 |
| | | Total | 2 (0.3) | 3 (0.5) | 35 (6.0) | 540 (93.1) | 3.92 |
| 7 | Follow up on students who miss school | SN | 96 (33.4) | 10 (3.5) | 104 (36.2) | 77 (26.8) | 2.56 |
| | | SHS | 44 (15.0) | 36 (12.3) | 101 (34.5) | 112 (38.2) | 2.96 |
| | | Total | 140 (24.1) | 46 (7.9) | 205 (35.3) | 189 (32.6) | 2.76 |
| Providing health education | | | | | | | |
| 8 | Teach students about health issues | SN | 6 (0.1) | 7 (2.4) | 170 (59.2) | 104 (36.2) | 3.30 |
| | | SHS | 4 (1.4) | 46 (15.7) | 174 (59.4) | 69 (23.5) | 3.05 |
| | | Total | 10 (1.7) | 53 (9.1) | 344 (59.3) | 173 (29.8) | 3.17 |
| 9 | Teach students about physical subjects | SN | 193 (7.2) | 44 (15.3) | 40 (13.9) | 10 (3.5) | 1.54 |
| | | SHS | 170 (58.0) | 66 (22.5) | 48 (16.4) | 9 (3.1) | 1.65 |
| | | Total | 363 (62.6) | 110 (19.0) | 88 (15.2) | 19 (3.3) | 1.59 |
| 10 | Educate teachers in the health requirements for students with special health care needs | SN | 10 (.5) | 25 (8.7) | 72 (25.1) | 180 (62.7) | 3.47 |
| | | SHS | 7 (2.4) | 45 (15.4) | 138 (47.1) | 103 (35.2) | 3.15 |
| | | Total | 17 (2.9) | 70 (12.1) | 210 (36.2) | 283 (48.8) | 3.31 |

| | | | | | | | |
|---|--|-------|------------|------------|------------|------------|------|
| 11 | Provide health education and services to school staffs | SN | 47 (16.4) | 110 (38.3) | 95 (33.1) | 35 (12.2) | 2.41 |
| | | SHS | 20 (6.8) | 78 (26.6) | 138 (47.1) | 57 (19.5) | 2.79 |
| | | Total | 67 (11.6) | 188 (32.4) | 233 (40.2) | 92 (15.9) | 2.60 |
| 12 | Work with school teams on health, safety, and educational issues | SN | 15 (5.2) | 35 (12.2) | 128 (44.6) | 109 (38.0) | 3.15 |
| | | SHS | 7 (2.4) | 54 (18.4) | 172 (58.7) | 60 (20.5) | 2.97 |
| | | Total | 22 (3.8) | 89 (15.3) | 300 (51.7) | 169 (29.1) | 3.06 |
| Improving the school environment | | | | | | | |
| 13 | Helps create a positive school environment | SN | 3 (1.0) | 25 (8.7) | 63 (22.0) | 96 (68.3) | 3.57 |
| | | SHS | 1 (0.3) | 26 (8.9) | 132 (45.1) | 134 (45.7) | 3.36 |
| | | Total | 4 (0.7) | 51 (8.8) | 195 (33.6) | 330 (56.9) | 3.47 |
| 14 | Monitor sanitation of school environment | SN | 6 (2.1) | 27 (9.4) | 110 (38.3) | 144 (50.2) | 3.37 |
| | | SHS | 2 (0.7) | 16 (5.5) | 166 (56.7) | 109 (37.2) | 3.30 |
| | | Total | 8 (1.4) | 43 (7.4) | 276 (47.6) | 253 (43.6) | 3.33 |
| 15 | Improve teaching and learning facilities | SN | 67 (23.3) | 164 (57.1) | 38 (13.2) | 18 (6.3) | 2.02 |
| | | SHS | 48 (16.4) | 185 (63.1) | 27 (9.2) | 33 (11.3) | 2.15 |
| | | Total | 115 (19.8) | 349 (60.2) | 65 (11.2) | 51 (8.8) | 2.09 |
| Controlling health issues in school and communicating to community health center | | | | | | | |
| 16 | Identify health problems | SN | 3 (1.0) | 47 (16.4) | 114 (39.7) | 123 (42.9) | 3.24 |
| | | SHS | 2 (0.7) | 29 (9.9) | 169 (57.7) | 93 (31.7) | 3.20 |
| | | Total | 5 (0.9) | 76 (13.1) | 283 (48.8) | 216 (37.2) | 3.22 |
| 17 | Maintain health records and perform physical exams | SN | 6 (2.1) | 32 (11.1) | 121 (42.2) | 128 (44.6) | 3.29 |
| | | SHS | 3 (1.0) | 40 (13.7) | 180 (61.4) | 70 (23.9) | 3.08 |
| | | Total | 9 (1.6) | 72 (12.4) | 301 (51.9) | 198 (34.1) | 3.19 |
| 18 | Provide referrals to local agencies and services | SN | 41(14.3) | 23 (8.0) | 145 (50.5) | 78 (27.2) | 2.91 |
| | | SHS | 54 (18.5) | 63 (21.6) | 132 (45.2) | 43 (14.7) | 2.56 |
| | | Total | 95 (16.4) | 86 (14.9) | 277 (47.8) | 121 (20.9) | 2.37 |
| 19 | Conduct follow up on referrals to local agencies and services | SN | 9 (3.1) | 49 (17.1) | 142 (49.5) | 87 (30.3) | 3.07 |
| | | SHS | 4 (1.4) | 82 (28.1) | 146 (50.0) | 60 (20.5) | 2.90 |
| | | Total | 13 (2.2) | 131 (22.6) | 288 (49.7) | 147 (25.4) | 2.98 |
| 20 | Serve as a link between parents, students, community, and school about the needs of children | SN | 14 (4.9) | 45 (15.7) | 55 (19.2) | 173 (60.3) | 3.35 |
| | | SHS | 7 (2.4) | 42 (14.3) | 142 (48.5) | 102 (34.8) | 3.16 |
| | | Total | 21 (3.6) | 87 (15.0) | 197 (34.0) | 275 (47.4) | 3.25 |

| | | | | | | | |
|---|--|-------|------------|------------|------------|------------|------|
| 21 | Working in hospital or health care centre | SN | 185 (64.5) | 99 (34.5) | 2 (0.7) | 1 (0.3) | 1.37 |
| | | SHS | 136 (46.4) | 128 (43.7) | 29 (9.9) | 0 (0.0) | 1.63 |
| | | Total | 321 (55.3) | 227 (39.1) | 31 (5.3) | 1 (0.2) | 1.50 |
| Providing counseling on children health issues | | | | | | | |
| 22 | Provide counseling to children in need | SN | 6 (2.1) | 13 (4.5) | 89 (31.0) | 179 (62.4) | 3.54 |
| | | SHS | 2 (0.7) | 22 (7.5) | 149 (50.9) | 120 (41.0) | 3.32 |
| | | Total | 8 (1.4) | 35 (6.0) | 238 (41.0) | 299 (51.6) | 3.43 |
| 23 | Provide counseling to parents in children health issues | SN | 35 (12.2) | 11 (3.8) | 143 (49.8) | 98 (34.1) | 3.06 |
| | | SHS | 8 (2.7) | 17 (5.8) | 190 (64.8) | 78 (26.6) | 3.15 |
| | | Total | 43 (7.4) | 28 (4.8) | 333 (57.4) | 176 (30.3) | 3.11 |
| 24 | Provide counseling to parents and other teachers to solve children's concerns and problems | SN | 5 (1.7) | 33 (11.5) | 136 (47.4) | 113 (39.4) | 3.24 |
| | | SHS | 3 (1.0) | 32 (10.9) | 174 (59.4) | 84 (28.7) | 3.16 |
| | | Total | 8 (1.4) | 65 (11.2) | 310 (53.4) | 197 (34.0) | 3.20 |
| 25 | Provide counseling to children in do homework | SN | 178 (62.0) | 105 (36.6) | 4 (1.4) | 0 (0.0) | 1.39 |
| | | SHS | 168 (57.3) | 99 (33.8) | 21 (7.2) | 5 (1.7) | 1.53 |
| | | Total | 346 (59.7) | 204 (35.2) | 25 (4.3) | 5 (0.9) | 1.46 |

APPENDIX D. SCHEDULE ACTIVITIES

| No | Activities | October | | | | November | | | | December | | | | January | | | | February | | | | March | | | | April | | | | May | | | | |
|----|-----------------------------|---------|---|---|---|----------|---|---|---|----------|---|---|---|---------|---|---|---|----------|---|---|---|--------|---|---|---|--------|---|---|---|--------|---|--------|---|--|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | |
| 1 | Writing proposal | ←————→ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | Submit for proposal exam | | | | | ←————→ | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | Proposal exam | | | | | | | | | ←————→ | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | Revise proposal | | | | | | | | | ←————→ | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | Pretest questionnaire | | | | | | | | | | | | | ←————→ | | | | | | | | | | | | | | | | | | | | |
| 6 | Revise questionnaire | | | | | | | | | | | | | | | | | ←————→ | | | | | | | | | | | | | | | | |
| 7 | Collecting data | | | | | | | | | | | | | | | | | ←————→ | | | | | | | | | | | | | | | | |
| 8 | Inputting data | | | | | | | | | | | | | | | | | | | | | ←————→ | | | | | | | | | | | | |
| 9 | Data analysis | | | | | | | | | | | | | | | | | | | | | ←————→ | | | | | | | | | | | | |
| 10 | Report writing | | | | | | | | | | | | | | | | | | | | | ←————→ | | | | | | | | | | | | |
| 11 | Submit for final defense | | | | | | | | | | | | | | | | | | | | | | | | | ←————→ | | | | | | | | |
| 12 | Thesis exam | | | | | | | | | | | | | | | | | | | | | | | | | | | | | ←————→ | | | | |
| 13 | Revision | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | ←————→ | | |
| 14 | Submit as the final product | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | ←————→ | | |

APPENDIX E. ADMINISTRATION COST

| No | Activities | Unit | Price (baht) | Unit (number) | Total Budget (Baht) |
|--------------------------------|--|--|--|---|---------------------------------------|
| 1. | Pre-testing - Photocopy - Stationery | Quest. Set | 0.5 300/set | 3 x 40 1 | 60 300 |
| 2 | Air fare : BKK - HAN - BKK | Trip | 8.500/tr | 2 x Trip | 17,000 |
| 3 | Data Collection - Photocopy - Interviewers per diem - Transportation cost - Data Processing | Quest. Person Trip/day Person | 0.5 400/p/d 200/p 300/p | 3 x 900 2 pr x 10day 2 pr x 10day 2 pr x 10day | 1,350 8,000 4,000 6,000 |
| DATA COLLECTING PROCESS | | | | | 36,710 |
| 4 | Document Printing - Paper + Printing - Photocopy - Stationery - Binding Paper (exam) - Binding Paper (submit) | Page Page Set Set Set | 5/page 0.5/pag 300/set 100/set 200/set | 600 pages 10 x 300 1 set 5 set 5 set | 3,000 1,500 300 500 1,000 |
| THESIS DOCUMENT PROCESS | | | | | 6,300 |
| TOTAL | | | | | 43,010 |

Note: a half of this expenditure will be provided by "TICA-Thailand International

Cooperation Agency" scholarship

APPENDIX F. CERTIFICATE OF APPROVAL

สถาบันวิทยบริการ
จุฬาลงกรณ์มหาวิทยาลัย



The Ethical Review Committee for Research Involving Human Research Subjects,
Health Science Group, Chulalongkorn University

Institute Building 2, 4 Floor, Soi Chulalongkorn 62, Phyat hai Rd., Bangkok 10330, Thailand,
Tel: 0-2218-8147 Fax: 0-2218-8147 E-mail: eccu@chula.ac.th

COA No. 007/2009

Certificate of Approval

Study Title No. 125.1/51 : DETERMINATION OF SCHOOL HEALTH STAFFS' OPINIONS TOWARD THEIR WORKS AND PARENTS' PERCEPTIONS OF SCHOOL NURSE'S ROLE AND HEALTH SERVICES IN BACNINH, VIETNAM

Principle Investigator : Ms. Phuong Hien Nguyen, Master of Public Health

Place of Proposed Study/Institution : College of Public Health Sciences,
Chulalongkorn University

The Ethical Review Committee for Research Involving Human Research Subjects, Health Science Group, Chulalongkorn University, Thailand, has approved, constituted in accordance with the International Conference on Harmonization – Good Clinical Practice (ICH-GCP), the above study project.

Signature: *Prida Tasanapradit, M.D.* Signature: *Nuntaree Chaichanawongsaroj, Ph.D.*
(Associate Professor Prida Tasanapradit, M.D.) (Assistant Professor Nuntaree Chaichanawongsaroj, Ph.D.)
Chairman Secretary

Date of Approval : 12 January 2009

Approval Expire date : 11 January 2010

The approval documents including

- 1) Research proposal
- 2) Patient/Participant Information Sheet and Informed Consent Form
- 3) Researcher
- 4) Data collection tool



เลขที่โครงการวิจัย 125.1 / 51
วันที่รับรอง 12 JAN 2009
วันหมดอายุ 11 JAN 2010

The approved investigator must comply with the following conditions:

1. The research/project activities must end on the approval expired date of the Ethical Review Committee for Research Involving Human Research Subjects, Health Science Group, Chulalongkorn University (ECCU). In case the research/project is unable to complete within that date, the project extension can be applied one month prior to the ECCU approval expired date.
2. Strictly conduct the research/project activities as written in the proposal.
3. Using only the documents that bearing the ECCU's seal of approval with the subjects/volunteers (including subject information sheet, consent form, invitation letter for project/research participation (if available); and return the first subject's copy of the above documents to the ECCU.
4. Report to the ECCU for any serious adverse events within 5 working days
5. Report to the ECCU for any change of the research/project activities prior to conduct the activities.
6. Final report (AF 03-11) and abstract is required for a one year (or less) research/project and report within 30 days after the completion of the research/project. For thesis, abstract is required and report within 30 days after the completion of the research/project.
7. Annual progress report is needed for a two- year (or more) research/project and submit the progress report before the expire date of certificate. After the completion of the research/project processes as No. 6

AF 04-09 updated on 14 July 2008
Patient/Participant Information Sheet

Name of the **ความคิดเห็นต่อปัจจัยตัวกำหนด และการทำงานของครูพยาบาล และ ความคิดเห็นของ ผู้ปกครอง ต่อบทบาทของครูพยาบาลและบริบริการสุขภาพสำหรับนักเรียน โรงเรียนประถมศึกษา จังหวัดบักนินห์ เวียดนาม (Thai)**

or.... **Determination of school health staffs' opinions toward their works and parents' perceptions of school nurse's role and health services in BacNinh, Vietnam(English)**

Name of principal investigator.....**Ms. Phuong Hien Nguyen.....**

Address..... **College of Public Health Sciences, Chulalongkorn University, Institute Building 3, Floor 10th, Soi Chulalongkorn 62, Phyathai Road, Patumwan, Bangkok 10330.....**

Office telephone..... Home telephone.....

Mobile.....**085-100-9665.....** Email address ...**nghien77@yahoo.com...**

To the attention of all research participants:

You are one of the volunteers who are invited to take part in the research **"Determination of school health staffs' opinions toward their works and parents' perceptions of school nurse's role and health services in BacNinh, Vietnam"**

1. This research is about **"the opinions of school health staffs of their works with children and of primary school parents'/ guardians' perceptions of school nurse's role and health services provided by school nurses to children in BacNinh, Vietnam"**
2. The objectives are:
 - 2.1. To explore the opinions of the school nurse and school health staff about their works, which focus on school health services with children.
 - 2.2. To determine the perceptions of primary school parents/ guardians of school nurse role and health services they provide including the both categories of schools, which have school nurse and do not have school nurse.

From the finding of the study, there could be some recommendations or necessary interventions to improve effectiveness of the role of school nurses and school health services in BacNinh province.

3. The research subjects are school nurse who have at least 2 years work at the school and in school health staff and primary school parents whose children learning in the school that school nurse work in BacNinh Province, Vietnam.

For the school parents, once you accept the invitation to join the research project, you will be explained by the researcher/assistant researcher about the project through this sheet which you can keep one copy for yourself. Upon your voluntary participation, you will be requested to sign on the informed consent form which one copy will be for you.

4. *With the school nurse and school health staff, your information will be kept confidential and presented on research result.*



เลขที่โครงการวิจัย ๑๒๕-๑/๕๑
วันที่รับรอง ๑ 2 JAN 2009
วันหมดอายุ ๑ 1 JAN 2010

With the parents/ guardians, you will answer and fill-out the all the question of the questionnaire which covers social demographic feature, the knowledge about school health services and school nurse, Health status of children, The parents/ caregivers perceived importance of school nurse's role and the health services in the school

5. *You will have no risks when take part in this project. The interview time will take about 20-30 minutes*
6. Your participation in this research project is **voluntary** and you have the right to **refuse** this participation or to **withdraw** at any given time with no harm on your benefit.
7. Should you be treated not according to the patient/participation information sheet, you may make a complaint at of the Ethical Review Committee for Research Involving Human Research Subjects, Health Science Group, Chulalongkorn University, 4th floor, Institute Building 2, Soi Chulalongkorn 62, Payathai Road, Patumwan District, Bangkok 10330, telephone: 02-218-8147 facsimile 02-218-8147 or email address: eccu@chula.ac.th.
8. *No any cost for taking part in the research.*
9. This research duration is January to June 2009, a total of 6 months
10. This total subjects are expected to be a school nurse and a school health staff (objective 1) and 450 primary school parents (objective 2) in BacNinh Province, Vietnam.

Thank you very much for your kind cooperation.



เลขที่โครงการวิจัย ๑๒๕.๑/๕๑
วันที่รับรอง ๑๒ JAN 2009.
วันหมดอายุ ๑๑ JAN 20๑0

.....
(Ms. Phuong Hien Nguyen)
Principal investigator

สถาบันวิทยบริการ
จุฬาลงกรณ์มหาวิทยาลัย

Informed Consent Form

Name of research project ความคิดเห็นต่อปัจจัยตัวกำหนด และการทำงานของครูพยาบาล และ
 ความคิดเห็นของผู้ปกครอง ต่อบทบาทของครูพยาบาลและบริการสุขภาพสำหรับนักเรียน โรงเรียน
 ประถมศึกษา จังหวัดบักนิน เวียดนาม (Thai) or

**... Determination of school health staffs' opinions toward their works and
 parents' perceptions of school nurse's role and health services in BacNinh,
 Vietnam(English)**

I, who sign here below on this informed consent form, have been **clearly explained with satisfaction** from the researcher whose name is.....Ms Phuong Hien Nguyen...address... **College of Public Health Sciences, Chulalongkorn University, Institute Building 3, Floor 10th, Soi Chulalongkorn 62, Phayathai Road, Patumwan, Bangkok 10330..telephone...085-100-9665..**regarding the research objective (s) and steps in the research, including risk/danger and benefit which occur from this research project.

I take part in this research project with **willingness** and I have the **right** to withdraw from this research project at any time according to my will with no need to give reason. This withdrawal will not impact me by all means.

I agree to record all information on the tape that we discuss in the in-depth interview. The tape will be kept safely, the information will be used for this research only and deleted after.

I have been certified that the researcher will treat me according to the patient/participant information sheet and my data will be **kept confidential**.

I am willing to take part in this research project under the above stated conditions as appear in the patient/participant information sheet.

I have received one copy of the patient/participant information sheet and this informed consent form already.

.....
 Place/date Name of research subjects

.....
 Place/date (Ms. Phuong Hien Nguyen)

.....
 Principal researcher

.....
 Place/date ()
 Witness



เลขที่โครงการวิจัย 195.1/51
 วันที่รับรอง 12 JAN 2009
 วันหมดอายุ 11 JAN 2010

BIOGRAPHY

Ms. Nguyen Phuong Hien was born on the 09 February, 1977, in Hanoi, Vietnam. She received a Medical Doctor Degree in 2000 from Hanoi Medical University, Vietnam. After graduated, from July 2000 to December 2005, she worked as an assistant lecturer of Department of Environmental Health in Faculty of Public Health, Hanoi Medical University, Vietnam. From December 2005 to May 2008, she worked as an expert of Department of Higher Education, Ministry of Education and Training, Vietnam. She continued her study for a Master of Public Health in Health Systems Development supported by Thailand International Development Cooperation Agency (TICA) in College of Public Health Sciences, Chulalongkorn University in 2008 and completed the program in 2009.



สถาบันวิทยบริการ
จุฬาลงกรณ์มหาวิทยาลัย