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SOME MENTAL HEALTH PROBLEMS AND INFLUENTIAL FACTORS OF SECONDARY SCHOOL STUDENTS IN HANOI, VIETNAM

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SUMMARY

Recently, amidst growing global awareness of high incidence and prevalence of mental health problems across populations, there has been an associated increase of interest in the social and emotional well being of adolescents. Not only the increasing rates of suicide among adolescents in many countries including Vietnam have given rise to particular concern, but also high levels of depression and anxiety, or low levels of self esteem have been reported. However, these problems have not been prioritized for research in Vietnam. This research aims to describe the distribution of mental health (MH) problems and mental disorders, and risk and protective factors for those problems among students age 12 – 14 years. This is the baseline survey of a pilot intervention program which was implemented to promote MH in 2 secondary schools in Hanoi. The total of 972 school students from grade 6 to grade 8 answered the questionnaires without respondent's name. Univariate, bivariate and multivariate analysis were employed to describe mental health problems and influential factors. The results showed that some family and school factors such as gender, pubescent signals, bad study results, school connectedness; bullying regulation, bullying, depression, and the level of involving in risk behaviors are some factors associated with depression and anxiety. These factors need to change in a positive way to improve mental health in schools. The study results are consistent with those from previous studies in the field of improving the mental wellbeing of the young generation. It is essential to consult with school boards and educational psychology experts in order to develop and implement MH intervention programs in schools.

***Key words**: Mental health problems, influential factors, secondary schools*

1. Introduction

Mental health problems and mental disorders among children and adolescents constitute a significant burden of disease in the population of many nations. There is world-wide concern about the seeming growth of incidence and prevalence of mental health problems and severe mental disorders.

According to the World Health Organization, five of the leading causes of health

problems are mental disorders. Mental heatlh problems such as depression, suicide and attempt suicide are increasing, but health care has not met needs in correspondence. Health problems occuring during the adolescent period will have influence on the adulthood and may increase the burden of disease for the society .

Schools are social and physical environment in which most children spend many of their formative years. The interactions among children, between children and their teachers, between the schools, parents and the wider community that play a significant role in shaping children's physical, socio-psychological development throughout their lives. Children who are well prepared to meet life's challenges are more likely to achieve good health, higher levels of academic performance, and school engagement. Furthermore, the physical environment of the school plays a major role in shaping children's choices – thus, for example, the size and safety of the playground, the availability of supervised playing or outdoor recreation spaces, the quality of the sport equipment or playing fields, all play some parts in shaping children's healthy life choices. This means that there are multiple ways in which schools influence children's and adolescents' health. Conversely, there are multiple ways in which the health of children and young people influences their academic performance – the likelihood that they are able to enter and participate fully in school life, and the likelihood of completing their schooling. Healthy children are more likely to participate in education easily and to achieve at higher levels. A common example of the relationship between health and education is that hungry children find it difficult to concentrate in the classroom and to learn. While children who have been excluded from their peer group for any reason find it difficult to retain their interest in school life and to continue to participate in school-based activities.

The National School Health Program in Vietnam was developed by the Ministry of Health and the Ministry of Education and Training to identify the minimum programs and services that must be available for school students to promote, protect, and maintain their health and wellbeing. To date, the greatest emphasis of the programs and services established under the auspice of the National School Health Program has been on physical health through the developmental stages of childhood and adolescence – life skills, reproductive health, oral health, injury, nutrition and hygiene. Based on evidence of need, a growing number of schools have been implementing evidence-based interventions to address these significant physical health issues. However, to date, not many actions have been focused on either identifying and reducing symptoms of mental health problems or mental illness among children and adolescents or promoting positive mental health and wellbeing of children and adolescents.

In recent years, many mental health related problems have been emerging among school students such as: stress related disorders, anxiety disorders, obsession, depression, attempt suicide and suicide. In Vietnam, the National Institute of Mental

Health (NIMH) survey in 1994 showed that behavior disorder prevalence of adolescent (from 10 to 17 years old) ranged from 0.3 to 3.7%, 2.8% of total population has mental health problems, 2.6% of total population has anxiety problems and behavior disorder among adolescent accounted for 0.9% of total population. The survey also showed that depression rate in females were 3 times higher than that in male and female's anxiety disorders prevalence was also approximately 2.5 times higher than male's prevalence.

2. Methods:

Study participants:

This survey is one part of a pilot intervention study (pre and post study without control group) (See Figure 1) and data for this survey was from the quantitive part of the study which aimed to identify some risk and protective factors toward depression and anxiety. The sample of this survey is 2 selected secondary schools in urban (Chu Van An) and suburban areas of Hanoi with 972 pupils participated in answering a self-administered questionnaire on general information, family and school environment, and mental health situation.

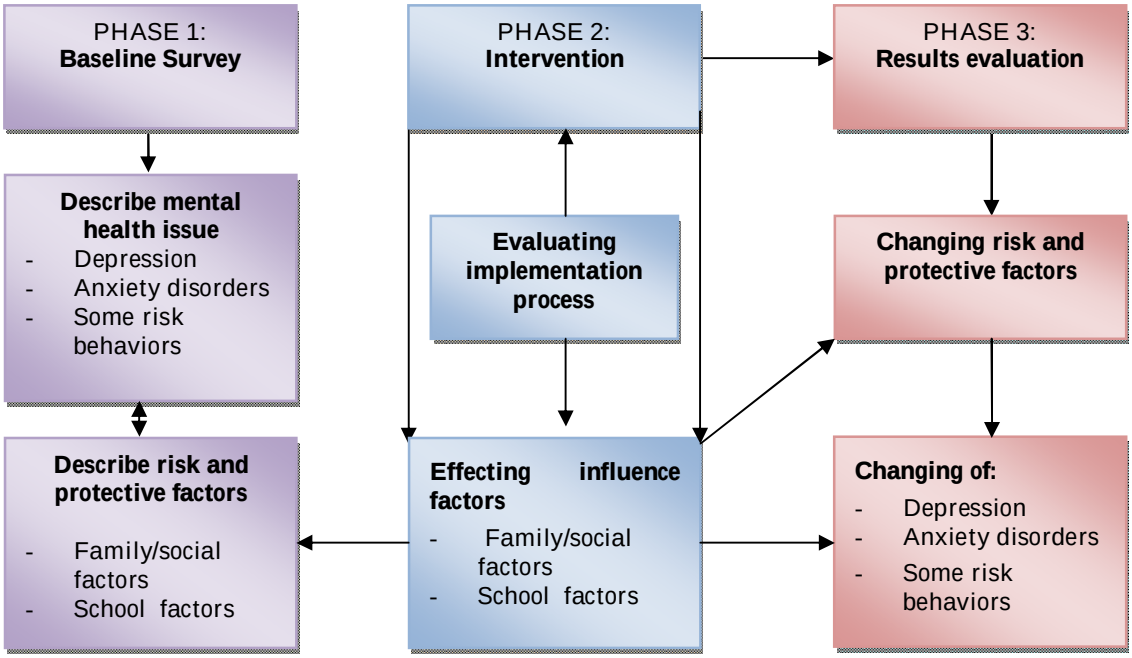

Figure 1. *Conceptual Framework*

Measurements:

The study used a variety of measures to assess the pupil's feelings about the parent-child relationship; school connectedness, school environment, bullying issue, anxiety disorders and depression problem.

The Parental Bonding Instrument (PBI) developed by Parker was designed to measure two principal dimensions: "care" and "control/overprotection.". Scale of care

dimension consists of 12 items (score ranges 0-36). Scale of control dimension consists of 13 items (score ranges 0-39). The cut-off point of mother's "care" is 27 and of father's "care" is 24. Those of mother's ''control" is 13,5 and of father's "control" is 12,5. These cut-off points were used to assess whether the level of "care" or "control" of parent was high or low.

School connectedness: This part includes two scales. The school connectedness scale consists of 7 items using 5-point scale (never, rarely, sometimes, often, always) with cumulative scores ranging from 7 to 35; the higher the score, the more the school connectedness. This scale was used in California Healthy Kids Survey 2004 conducted by the California Department of Education, USA. The other scale includes 28 items asking about pupil's assessment about their school environment (friendly and supportive environment; regulation for bullying; pupil entertainment; teacher's behavior). This 4 – point scale from 1 to 4 (Not at all (1); A little (2); Quite a lot (3); Very much (4), delivered by WHO in 2003. The higher the score, the more positive assess about school.

Bullying exposure scale consists of 5 items using a 3-point scale (*No, Sometime, Often*) measuring if the children were exposed to bullying at school in the previous month. The score can range from 5 to 15 with the higher the score, the more bullying exposure

Anxiety scale consists of 13 items using a 3-point scale (*never, sometimes, often)* was validated in Vietnam. The score ranges from 13 to 39 and the higher the score, the more seriousness of anxiety.

Depression scale of the Centre for Epidemiological Studies-Depression Scale including 20 items was used in this study to measure depressive symptoms. Cumulative score ranges from 0 to 60; the higher the score, the higher the depression.

Data analyses*:* Data were entered into Epidata and analyses were performed with SPSS 12.0 software. The descriptive analysis, comparative analysis and also multiple regression models were performed.

3. Results

Sample characteristics

In sum, there were 972 eligible sixth to eighth grade students at the 2 selected schools. The response rate of the original sample size that completed the self administered questionnaire was 95.9%. The final student sample size for the study was 934 including 478 boys (51.2%) and 456 girls (48.8%). 42.5% male students have pubescent signals and the rate for female students was 57.5%. At the time of study, 8.8% of students whose parents do not live together (due to divorce, separate or other reasons). Educational level of Chu Van An students' parents are higher than that of Ta Thanh Oai students' parents and most of Chu Van An students' parents are officers.

Among 12.7% of students who were disciplined in the previous semester, 9.3% have bad conduct (medium and low) and 22.4% have study results at the medium and low level.

Family environment:

10% of students reported that their father/mother is alcoholic and 1% of them reported that their father/mother is drug user. When students faced with difficulties or psychological/mental issues, they usually sought help or sharing from their friends (36%) or from their mother (19.4%).. 15.2% of students just stayed silent (not share with anybody) when they have problems. 15.8% of students played game on the internet everyday. The percentage of students who usually chatted with their friends on the internet is 13.1%. More than half of them had an idol and nearly half of them reported that they used to be disappointed with their idols.

Table 1. *Comments on family's happiness (at 3 levels)*

Comments	Chu Van An		Ta Thanh Oai		Total	
	Quantity	%	Quantity	%	Quantity	%
Unhappy	41	8.4	16	3.6	57	6.1
Happy	381	78.4	341	76.1	722	77.3
Don't know	64	13.2	91	20.3	155	16.6
Total	486	100.0	448	100.0	934	100.0

About 6.1% of students believed that their family is unhappy. If we include the *Don't know* responds, the percentage will reach 22.7%. And the rate of the urban school students feeling that their family is unhappy is higher than that of their counterparts at the suburban school significantly. ($p<0.05$)

Students' feeling about their father/mother's attitude and behavior toward themselves based on the risk and protective factors:

The score of mother care was 28.03 and that of father care was 26.76 which were higher than the cut-off point (correlatively 27 for mother and 24 for father). Score of "over protection" of mother was 8.48 and that of father was 18.1 which were much higher than the recommendation levels of the author (13.5 for mother and 12.5 for father). It was recognised that students felt that they had their parents' care but they also think that it was over protection. There was significant difference between 2 schools' students in the mean score of mother's care ($p< .05$). There were no significant difference in the mean score of father's care as well as score of "over protection" of parents between 2 schools ($p> .05$).

School environment:

Students' feeling about their schools was presented in Table 2. It showed their positive feeling about the school. Especially, at Ta Thanh Oai school, the students' assessment about school connected, friendly and support environment, and bullying situation were reported at higher positive feeling than their friends at Chu Van An school. Red numbers highlighted the statistic significant difference between two schools.

Table 2. *Pupil's assessment about their school environment*

School		School connected (*)	Friendly and support env. (*)	Regulation on bullying	Student entertainment (*)	Teacher and school behaviors	Bullying situation (*)
CVA	Average	26.33	29.17	16.57	18.04	18.95	6.31
TTO	Average	28.24	30.16	16.76	19.72	19.23	6.55
Total	Average	27.24/35	29.64/36	16.66/20	18.84/24	19.08/24	6.42/15

(*): significant difference ($p<0.05$)

Bullying problem

3.4% of students reported that they usually were bullied, and about 8.1% of them were annoyed. Boys believed that they were bullied or annoyed more than girls (their mean score is 6.75 compare with 6.08 of girls).

Students' mental health problems

The mean score of anxiety situation at two schools is 20.18/39 score. The Chu Van An school's situation (17%) is more significant than that of Ta Thanh Oai school and the difference is statistic significant. Gilrs expressed their level of anxiety is higher than their children males.

The mean score of depression at two schools is 14.93/60 score. The Chu Van An school's situation (15.4%) is also more serious than that of Ta Thanh Oai school and it has a statistic significant difference. There is no difference between gender and among grades.

Health risk behaviors

Some health risk behavior of students showed in the table 3:

Table 3. *Health risk behaviors*

Behaviors	School		Total
	Chu Van An	Ta Thanh Oai	
Thinking of suicide (*)	16.0%	4.5%	10.5%
Attempted suicide (*)	9.3%	3.1%	6.3%
Smoking	2.9%	1.6%	2.2%
Drink alcohol (*)	8.0%	2.7%	5.5%
Drink beer (*)	18.5%	7.1%	13.1%
Drunk	10.1%	8.7%	9.4%
Using a knife or weapon	1.4%	1.8%	1.6%
Fighting	8.6%	6.5%	7.6%
Driving motorbike (*)	10.1%	5.4%	7.8%

(*) Significant difference (p<0.05)

Chu Van An school's many risk behaviors has higher significant percentage when compare with Ta Thanh Oai school. However, in general there have no differences with SAVY 1's results (2005)

Analyses based on the level engaged risk behaviors showed about 4.5% students who engaged in more than 3 risk behaviors, and 26.6% of them who engaged from 1 to 3 risk behaviors. This level is general phenomenon in Chu Van An school.

Some influenced factors of anxiety and depression problems

Mutivariate analyses of family and school environment factors showed that they influences to anxiety (32.6%) and depression (39.1%). It illustrates that there are many social and other factors influencing the anxiety disorder and depression status of pupils. (Presented in the table 4a and 4b)

Table 4a. *Briefing Model of anxiety related factors*

Model	R	R Square	Adjusted R Square	R Square Change	F Change	Sig. F Change
1	.411(a)	.169	.156	.169	13.165	.000
2	.571(b)	.326	.307	.157	17.403	.000

Table 4b. *Briefing Model of depression related factors*

Model	R	R Square	Adjusted R Square	R Square Change	F Change	Sig. F Change
1	.462(a)	.213	.201	.213	17.533	.000
2	.625(b)	.391	.373	.178	21.764	.000

The detailed results reveal that some factors such as: sex, whether parents do not live together, whether they do not live with parent, having quarrels with siblings, low study performances, school regulation of bullying, bullying, depression, and undertaking to risk behaviors, associate significantly with anxiety.

The factors such as: being at the age of puberty, witnessing parents quarrels, mother's behaviors/attitude, grades, study performances, school connection, bullying, anxiety and undertaking to risk behaviors associate significantly with depression.

4. Conclusion and Recommendation

This study has identified some remarkable mental health problems among secondary students such as anxiety, depression, and health risk behaviours. A number of factors related to personal, family and school, ie, sex, puberty phenomenon, parents do not live together, low study performances, school connectedness school's regulation of bullying, bullying status influenced tothe anxiety and depression status of pupils. These factors should be changed towards a positive way in order to contribute improving students' mental health status by a mental health promotion program in schoolsIn order to be successful in mental health promotion programmes, students, teachers, parents and edu-psychological expertsshould be encouraged to participate in activities of program.

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