

ABSTRACT

Stress is necessary for positive adaptation to the changing environment and better achievements of life. However, negative stress causes psychological and emotional responses ranging from tiredness to severe depression or suicidal ideation. This study considered the negative stress.

The screening instrument to identify stress is not available and the instruments, which are used in other countries, may not be applicable for the Sri Lankan context. Therefore development and validation of instruments are crucial for the country.

This cross sectional comparative study attempts to develop and validate the self administered questionnaire as a screening instrument to use in schools in the Gampaha district to assess stress, stressful life events, associated factors and coping strategies among a cohort of 15 to 19 years old school going adolescents. A sample of 406 students was used for the scoring of life event scale and validation of the study instrument was carried out among 127 students. A sample of 845 students were selected for the prevalence study using cluster sampling technique and clusters were identified according to the probability proportionate to the size of the sample (PPS). A comparison was made among a sample of 424 students with and without stress who had been identified from the prevalence study to detect associated factors and coping strategies. The study period was twelve months. Reliable and valid study instruments were developed; namely, Adolescents Life Event Scale (ALES) and Stress Sensation Inventory (SSI), to assess stressful life events and prevalence of stress among students respectively and Coping Strategy Check List (CSCL) and Perceived Self-efficacy Assessment Questionnaire (PSAQ) to detect coping strategies and perceived self efficacy of students.

Scoring of life events were carried out and higher scores (median of 70 to 80) for all the items of peer relationships were obtained. Life events were categorized into six domains; relationships, academic, socio-economic status, abuse, discipline and self esteem. Relationship domain was subdivided into family, peer and school. Stress Sensation Inventory (SSI) has stress symptoms which were divided into three domains, psychosomatic, emotional and cognitive.

The prevalence of stress among O' Level and A' Level students was 41% and 38% respectively. Prevalence of stress among boys was 42% and they were more stressed than girls (38%). A higher prevalence of stress was identified among O' Level boys (42%) compared to girls (40%). Similarly among A' Level students 41% of boys and 35% girls were stressed. However, these differences were statistically not significant ($p>0.05$).

Stress symptoms in the cognitive domain (39%) greatly contributed to overall stress compared to the other two domains. The prevailing psychosomatic domain symptom was tiredness (39%) whereas for the emotional domain it was getting episodes of uncontrollable anger (48%). Lack of confidence, difficulties in taking decisions and concentrating on studies were equally common symptoms (31%) in the cognitive domain.

Except students who perceived religion as very valuable, majority of others were stressed and the difference was statistically significant ($p<0.05$). If a student was an only child, his or her stress was less. In contrast there was a statistically significant difference between stress levels and number of siblings in the family ($p<0.05$). A higher prevalence of stress was seen among students who were not living with both parents. The difference of stress and living conditions was statistically significant ($p<0.05$). Association between stress levels and family relationship was statistically significant ($p<0.05$). Majority of students who were in the middle social class were not stressed compared to other social classes and the difference was statistically not significant ($p>0.05$). Similarly, among the students who perceived that their wealth was average, the majority was not stressed. Prevalence of stress was higher among the students with high and low perceived self-efficacy. But the difference between stress and perceived self-efficacy was statistically not significant ($p>0.05$). There was a positive relationship between frequency of life events and stress. A statistically significant difference between stress and frequency of life events was seen in the domains of family and peer relationships and the domain of discipline. Attending tuition classes, co-curricular activities and the work load at school were not stressful for adolescents. Prevalence of stress was less among the students (51%) who had high skills of coping. Both problem focused coping and avoidance coping strategies were preferred by girls than boys while more emotion focused coping strategies were used by boys.

This study concludes that stress is a foremost public health problem among the students aged 15 to 19 years in the Gampaha district. Despite its limitation of subjectivity and bias

towards measuring stress, it is recommended that Adolescents Life Event Scale (ALES) and Stress Sensation Inventory (SSI) should be used in school among students in the above age category. Furthermore, it is recommended to initiate and strengthen support services including effective counselling services at school level and to intervene for the major issues identified by the current study.