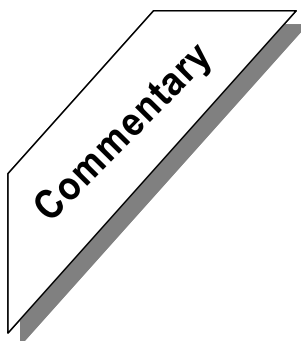

Data obtained from the study were presented using descriptive statistics. Though these were helpful in giving the readers an idea as to what proportion of the tested population actually presented with low back pain is and the factors related to it, correlational statistics could have provided statistical basis for establishing the association of various factors to LBP.

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This study provided valuable data on work-related low back pain that may be utilized for improving working conditions for a healthier workforce. The driver's seat should be appropriately designed to decrease discomfort and stress over the spine and ultimately improve over-all performance and productivity of the person. But the optimal ergonomic design for drivers of public utility vehicles has not been found yet. The use of low back support tended to limit the increase in LBP during driving though it was found to have no effect on low back and neck-shoulder subjective fatigue and neck-shoulder pain.⁴ Since public utility drivers comprise quite a big number of our local workforce, high quality clinical studies should be conducted to establish effective ergonomic modifications that would reduce the development of work-related musculoskeletal disorders, such as low back pain, in this population. This move would definitely contribute to a more productive manpower for our society.

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PREVALENCE OF BACK PAIN AMONG ADOLESCENTS IN THE CITY OF MANILA AND ITS ASSOCIATION TO BACKPACK USE

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ABSTRACT

Objective: To determine the prevalence of back pain among adolescent students in the city of Manila, the viability of the contributing factors to adolescent back pain, and the association of back pain to backpack use. **Methods:** Students aged 12 to 18 years old, recruited from different schools in the city of Manila were included in this study. Subjects were asked to answer a questionnaire regarding their health, activities, and bag use. Subjects' weight, height and bag load were also measured. Percentage of subjects with back pain defined the prevalence of back pain in this population. **Results:** One thousand six hundred eighteen students participated in the study, 40.11% of which reported to have back pain with the greater proportion in girls of 14 years of age. Independent t-tests showed that students with back pain seemed to be older, with higher BMI values, and carried heavier bag loads than those without back pain. Seventy-one percent of participants used back packs in school and there seems to be a significant association between presence of back pain in adolescents and use of back packs based on the chi-

square values. **Conclusions:** There is a considerable prevalence of back pain among adolescent students in the city of Manila, majority of which were girls aged 14, with higher BMI valued and heavier daily back pack loads. A direct relationship exists between the use of back packs and the development of back pain in these students. There is a need to conduct an information campaign that will help reduce the incidence of adolescent back pain in our school children.

Keywords: back pain, adolescents, backpack

COMMENTARY

In the Philippines, very little attention is given to musculoskeletal injuries that afflict children and adolescents. Most studies deal with infectious diseases and malnutrition. This paper with a cross-sectional design sought the prevalence of back pain among adolescents in the city of Manila and the factors associated with its occurrence. Thus, revising the title to encompass all these factors may help provide a better perspective of what the study is all about.

The study's target population were adolescents of the city of Manila. It was clear that the actual respondents were to be taken from public and private schools within the city but it was not specified how the total sample size was computed. However, a large sample size was utilized and random selection of schools was used to identify the sampling units to be included for this study. Sample size computation will determine how many respondents were actually needed for the study and will provide support on how externally generalizable the results were.

Pilot testing of the questionnaire was a good way to ensure clarity of the questions though it might have been better if no time limit was given to the respondents. The length of time needed to answer the questionnaire could have been one of the things noted during the pilot test and this becomes the basis for setting the time limit in the administration of the final questionnaire. Furthermore, providing information on the reliability of measurements was ensured and calibration of instruments was maintained for each testing session.

The study limited inquiries on presence of back pain for the previous month, probably in consideration of the accuracy of recall of children in this age group. However, this information failed to delineate the disparity between acute and chronic types of back pain.

The study showed that there is a considerable population among adolescents who suffer from back pain which should not be taken for granted by the health professionals in the Philippines. Proper body mechanics should be taught to both children and adolescents to prevent the widespread occurrence of back pain. Likewise, school administrators should initiate pertinent measures and policies to minimize children's and adolescents' load on their backpacks.

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