

A Comparison of Health Education and Physical Activity Practice in Four Regions of the Hawaiian Island of Oahu

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Abstract

English:

The purpose of this study was to compare four distinct Hawaiian districts on the island of Oahu regarding their efforts in presenting quality health education and physical activity. The ethnic groups represented in this study included Hawaiian, Pacific Islander, Asian and Caucasian. Questionnaires based on the Action for Healthy Kids Healthy Schools Summit Survey were sent to 168 schools on Oahu. The return response of the surveys was 79% with 132 schools either returning the survey or being interviewed by a follow-up phone call. Statistical analysis utilizing ANOVA identified any significant differences among the districts, school levels, and ethnic groups. Further analysis using Tukey's Honestly Significant Difference Post Hoc Test indicated specific differences after significant ANOVA was found. Based on data collected in this study, it would appear that fewer than half of the schools were in the process of making health and physical education culturally sensitive, and that state health education standards were mostly being implemented at the middle and high school level. Elementary schools that were "in progress" for implementing health standards and adopting physical education standards should be given assistance from the district level. Additional assistance should also be given to elementary schools that were "in progress" for testing health topics and providing uniform assessment in physical education. Hawaiian schools on Oahu were contributing to the physical activity of students by offering physical education classes, however, this could be greatly improved by inclusion of daily physical education taught by certified instructors at all levels especially elementary.

Spanish:

el propósito de este estudio era comparar cuatro distritos hawaianos distintos en la isla de Oahu con respecto a sus esfuerzos en la presentación de la educación y de la comprobación de salud de la calidad actividad. Los grupos étnicos representados en este estudio incluyeron a hawaiano, Isleño, asiático y caucásico pacíficos. Cuestionarios basados en la acción para La encuesta sobre sana la cumbre de las escuelas de los cabritos sanos fue enviada a 168 escuelas en Oahu. La respuesta de vuelta de los exámenes era el 79% con 132 escuelas cualquiera el volver examen o siendo entrevistado con por una llamada telefónica de la carta recordativa. Análisis estadístico utilizar ANOVA identificó cualquier diferencia significativa entre los distritos, niveles de la escuela, y grupos étnicos. Análisis adicional usando Tukey honesto La prueba hoc del poste significativo de la diferencia indicó diferencias específicas después ANOVA significativo fue encontrado. De acuerdo con datos recogió en este estudio, él aparezca que menos que la mitad de las escuelas estaban en el proceso de hacer salud y educación física cultural sensible, y esa educación de salud del estado los estándares eran puestos en ejecucio'n sobre todo en el nivel de la High School media y secundaria. Escuelas primarias que estaban "en marcha" para poner estándares de la salud en ejecucio'n y adoptar estándares de la educación física se debe dar ayuda del nivel del distrito. La ayuda adicional se debe también dar a elemental escuelas que estaban "en marcha" para los asuntos de prueba de la salud y uniforme del abastecimiento gravamen en la educación física. Las escuelas hawaianas en Oahu contribuían a la actividad física de estudiantes ofreciendo la educación física clasifica, sin embargo, esto se podía mejorar grandemente mediante la inclusión diariamente de la comprobación educación enseñada por los instructores certificados en todos los niveles especialmente elementales.

Keyword(s): health education, physical activity, ethnicity

Introduction

American children and youth are heavier today than at any time in our history. There are over 5 million school aged children and youth who are overweight. This represents more than 15 percent of that age group's population (National Institutes of Health, 2002). Excess body fat is associated with a higher risk of developing a variety of illnesses (Chai, Kaluhiokalani, Little, Hetzler, Zhang, Mikami, & Ho, 2003; Pateman, Shoji, Serna, & Distajo, 2002). Some of these illnesses, such as Type 2 diabetes, high blood pressure, and coronary heart disease have severe implications on the quality of life and longevity. A major goal for the nation is to reduce the number of obese and overweight children and youth by more than 50% by the year 2010 (Ogden, Flegal, Carroll & Johnson, 2002).

Factors associated with obesity include genetics, nutrition and exercise patterns. Therefore, in order to reduce or diminish the rates of child and youth obesity it would seem important to monitor both the exercise and activity patterns of the young as well as to examine their eating habits and behaviors. Although the health and well being of children is the primary responsibility of parents, the schools have a critical role to play in these matters. Schools contribute to effective and health promoting behavior that diminishes the likelihood of obesity in three major ways: 1) School lunch, breakfast, snacks and the foods made available at school activities have both an immediate impact on caloric and nutrient content as well as a long-range influence by demonstrating and reinforcing eating behaviors. 2) The physical education and associated programs in recreation and sports play a role. Also the availability of the school's physical facilities for after-school, weekend and holiday play offers great potential to increase caloric expenditure and promote weight management. 3) Schools may contribute to healthy body weight via the programs made available in comprehensive school health education programs. One goal of comprehensive school health education is to develop health literacy, which will enable students to engage in critical thinking and problem solving concerning health matters (Centers for Disease Control and Prevention, 1996). National health education standards seek to develop students capable of accessing health information, practicing health-enhancing behaviors, demonstrating goal-setting, and comprehending information pertaining to such health-related matters as weight control and management.

Oahu is an island approximately 23 miles in length and 12 miles in width comprised of four

distinct regions. These geographic regions are determined by two mountain ranges, the Koolau Range on the Windward side and the Waianae Range on the Leeward side. The Honolulu region on the south shore is the most populous and is a center for commerce. In the Honolulu School District there are 28 Elementary Schools, 8 Middle Schools, and 6 High Schools. The Windward side contains the cities of Kailua and Kaneohe, the Marine Corps Base of Hawaii, and many rural communities along the northeast shore. In the Windward School District there are 19 Elementary Schools, 2 Middle Schools, and 4 High Schools. The central district encompasses the cities of Mililani and Wahiawa as well as major army and air force bases. It has been Oahu's main agricultural area. In the Central School District there are 21 Elementary Schools, 6 Middle Schools, and 6 High Schools. The fourth region is the Leeward side, which is the driest portion of the island. The Leeward side is comprised of many small communities. In the Leeward School District there are 22 Elementary Schools, 4 Middle Schools and 6 High Schools.

Hawaii is a very ethnically diverse state. This diversity produces a population where there is no true majority and minorities are readily accepted. Ethnic diversity was of interest to the authors because certain regions tend to be populated by higher proportions of one or another ethnic group. Therefore the ethnicity of students was considered as well as physical education and activity facility accessibility and health education efforts found in the schools in each of the four regions of the island. Items used in this study were based upon a survey designed by the Action For Healthy Kids Project and modified to meet the needs of this study (Partnership for Prevention, Priorities in Prevention, 2000).

Purpose

The purpose of this study was to compare four distinct regions on the island of Oahu regarding their efforts in presenting quality health education and physical activity.

Method

Survey

All data was collected through a survey developed by Action for Healthy Kids to determine the status of health education, physical activity, and nutrition/food services in the schools throughout the U.S. (Partnership for Prevention, Priorities in Prevention, 2000). The initial survey was quite extensive, and so the information was condensed to a two-page version of the survey (Appendix A). The survey developed by Action for Healthy Kids was divided into three sections. Due to the extent of the information collected and data analysis in this study,

students providing lifelong fitness, the researchers need further analysis.

Of importance to the researchers were the specific “yes-responses” of the survey questions that fell below 55%. First of all only 39% of the schools provided culturally sensitive instruction in health education, and 33% in physical education. With the many ethnic groups in Hawaii other than Caucasian, teachers on Oahu should provide culturally sensitive instruction in health and physical education to better meet the needs of all students. Secondly, the provision of physical activity in the schools has been suspect. Elementary students should be receiving at least 30-60 minutes of physical activity and upwards of several hours daily (Siedentop, 2001). According to findings in this study, only 14% of the schools on Oahu, mainly middle schools, received daily physical education, and 85% of the elementary schools had physical education once a week. In addition 48% of the schools offered intramurals for all students and 33% offered sport clubs. In order to meet the dose-response of physical activity necessary for the health of children, it is therefore important especially at the elementary level that extended and coordinated physical activity programs be offered to supplement the once a week physical education program. In support of an extended physical activity program findings in this study did show that elementary and middle schools on Oahu offered recess time where students were able to participate in free activity. Although recess cannot take the place of physical education, it does offer additional opportunity for students to be active if they choose.

Conclusions

Based on data collected in this study, it would appear that:

1. Although the population of the schools on Oahu is very international in nature, fewer than half of the schools were in the process of making health and physical education culturally sensitive.
2. Two-thirds of schools on Oahu have implemented standards that follow state health education guidelines, but mostly at the middle and high school level.
3. High schools and/or middle schools did better in adopting physical education standards, testing health topics, and providing uniform assessment in physical education than the elementary level.
4. Hawaiian schools on Oahu are contributing to the physical activity of students by offering

physical education classes, however, this could be significantly improved by inclusion of daily physical education taught by certified instructors at all levels especially elementary.

5. Health education and daily physical activity can be an effective force in addressing the obesity epidemic in the U.S. generally and Oahu specifically.

Recommendations

1. With the multi-ethnicity of international cultures in Hawaii, the schools in Oahu should be more culturally sensitive in their instruction in health and physical education.
2. Elementary schools that are “in progress” for implementing health standards and adopting physical education standards should be given assistance from the district level. Additional assistance should also be given to elementary schools that are “in progress” in testing health topics and providing uniform assessment in physical education.
3. It is strongly recommended that the principals in the Windward District, especially at the elementary level look seriously at hiring certified physical education specialists.
4. A secondary issue related to the hiring of physical education specialists, is the scheduling of daily physical education in the schools on Oahu. All things said, until such a time comes when the nation, Hawaii included, sees the need for daily physical activity, principals should be responsible for an extended and coordinated program of physical activity where creative implementation of physical activity is scheduled before, during and or after school assisted by school staff and faculty, parents, and the community at large including businesses, government agencies, and the health and recreational industry.
5. Studies have shown that obesity is a problem with school-age children in Hawaii especially in the elementary schools and those of Hawaiian descent (Chai et al., 2003). In the Windward District the mean percent of Hawaiian ethnicity is 43%, closely followed by the Leeward District with a mean of 27%. Health education, nutritional guidance, and the scheduling of daily physical activity would be a step in the right direction in helping to resolve the issue of hypokinesia and childhood obesity in Hawaii.

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Appendix A

Appendix B

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