

Evaluation of StartSmart@school.hk Pilot Project

Executive Summary

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Background

Childhood obesity is a significant public health problem in Hong Kong. The obesity rate for Primary One students has risen from 11.3% in 1996/97 to 16.6% in 2009/10. As the average weight at birth remained stable over the same period, it could reasonably be inferred that the overweight problem had started as early as preschool age. To address the childhood obesity problem, the StartSmart@school.hk Pilot Project (“Pilot Project”) was launched in the 2010/11 school year by the Department of Health (DH), with the aim to improve knowledge towards healthy eating and physical activity among school personnel, food providers, parents and care-givers; as well as to create a supportive environment for healthy living in pre-primary institutions (PPIs).

Objective

The objective of this study was to evaluate the feasibility, acceptability and effectiveness of the Pilot Project.

Methodology

All 30 pilot PPIs were invited to participate in this cross-sectional study conducted between June and July 2011. Structured self-administered questionnaires in Chinese were disseminated to four target groups, namely principals or supervisors, teachers, parents, and meal arrangement/preparation staff.

Key Findings

Among 30 participating pilot PPIs, 29 (96.7%) returned their questionnaires. A total of 26 principal questionnaires, 244 teacher questionnaires, 3714 parent questionnaires and 26 meal arrangement/ preparation staff questionnaires were collected, with response rates of 90%, 84%, 71% and 90% respectively.

Principals’ survey

(a) Healthy eating

Most principals (88.5%) claimed that they had already established a healthy eating policy at school but only one of them (4.3%) had a written document in

place. Among schools with an established healthy eating policy, about half (52.2%) had set up a working group to formulate or implement the policy at school. All members in the working group were staff members of the PPI.

Regarding the Nutritional Guidelines for Children Aged 2 to 6 Years (Nutritional Guidelines), majority of principals (92.0%) reported that it was practical for their teaching staff to incorporate the contents into school activities. In addition, four-fifths (80.0%) agreed the ways suggested in the Nutritional Guidelines for encouraging home-school cooperation to improve healthy eating habits were workable. However, no school followed the recommendation of the Nutritional Guidelines to set up a working group with parents to formulate or implement the healthy eating policy at school.

(b) Physical activity

Similarly, most principals (92.0%) reported that they had established a physical activity policy at school and 17.4% of them had a written document in place. Among these schools, about half (52.2%) had set up a working group to formulate or implement the policy at school. Likewise, working group members were limited to staff members of the PPI.

Over four-fifths (84.0%) of the principals found that the Physical Activity Guide for Children Aged 2 to 6 Years (Physical Activity Guide) was practical for teaching staff to incorporate the contents into school activities. Also, 84.0% of principals agreed the ways suggested in the Physical Activity Guide for encouraging home-school cooperation to improve physical activity habits were workable. However, no school followed the recommendation of the Physical Activity Guide to set up a working group with parents to formulate or implement the physical activity policy at school.

(c) Impacts of the Pilot Project

After implementing the Pilot Project, improvements in dietary habits (83.3%) and physical activity habits (60.9%) among students were noticed. In general, majority of principals (96.6%) were satisfied with the Pilot Project. Majority of them (91.7%) considered participation in the Pilot project acceptable and affordable in manpower, time and money terms. Most of them (92.0%) shared the view that the Pilot Project could help students develop healthy eating and physical activity habits. More than three-fourths of principals (76.0%) stated that the Project could be recommended to other PPIs.

Teachers' Survey

Of 244 teacher respondents, about three quarters had read the Nutritional (75.8%) and the Physical Activity Guide (80.0%). Less than half of teachers had attended any workshop of the Pilot Project (40.3%) or visited the website of Pilot Project (www.startsmart.gov.hk) (44.6%).

(a) Healthy eating and physical activity

Over 80% of teachers who had read the Nutritional Guidelines perceived it was easy to comprehend (88.6%) and felt that sufficient topics had been included (82.6%). Moreover, 78.9% of teachers found the information provided in the Nutritional Guidelines was presented with adequate details. Similarly, for the Physical Activity Guide, most teachers who had read the Guide claimed that it was easy to comprehend (93.9%) and felt that sufficient topics had been covered (84.4%). Also, 77.7% teachers found the information provided in the Physical Activity Guide well presented with details.

(b) Thematic website

Regarding the Pilot Project website, more than four-fifths of teachers who had visited the website (83.3%) considered it user-friendly. Among them, over 80% of teachers stated that the topics on healthy eating habits and physical activity practice were sufficient and explained in sufficient details.

(c) Applicability of the knowledge

Over 90% of the teachers reported to have applied the knowledge of healthy eating or physical activity learnt from the Pilot Project in their teaching. Among them, less than one-fifth of teachers had encountered difficulties during the application process in relation to healthy eating (16.3%) and physical activity (13.2%) respectively. About three quarters of teachers said it was practical to follow the guidelines to encourage home-school cooperation for improving healthy eating habits (76.3%) and physical activity practice (75.4%) of students.

(d) Impact of the Pilot Project

In general, about four-fifths of teachers considered that the Pilot Project was effective (75.9%) and very effective (3.0%) in facilitating teachers to improve dietary and physical activity practices of preschool children. Majority of teachers noticed that dietary habits (91.8%) and physical activity practices (88.0%) of their students improved after the Pilot Project. About 11% of the

teachers had encountered some difficulties in implementing the Pilot Project but almost all of them (99%) stated that they would recommended the project to other PPIs.

Parents' Survey

About two-thirds (64.0%) of 3714 responding parents had read the StartSmart Parent Guide (Parent Guide); while over half of them had read the "Letter-to-Parents" (56.2%) or used the Physical Activity Card for Children (58.6%) respectively. At the same time, only 13.3% and 23.6% of parents had attended the health talks of the Pilot Project or had visited the Pilot Project website respectively.

(a) Parent Guide

About three quarters of parents (75.5%) pointed out that the Parent Guide was easy to comprehend. Over 60% of parents agreed that the topics covered in the Parent Guide were sufficient in terms of healthy eating habits (69.8%) and physical activity practice (65.9%). In addition, two-thirds of parents found the information about healthy eating habits (66.9%) and physical activity practices (62.7%) explained in adequate details.

(b) Thematic website

Over 60% of respondents who had visited the website of the Pilot Project agreed that the website was user-friendly and the topics covered were sufficient. Among them, 65.9% and 62.7% found the information on healthy eating and physical activity explained in sufficient details respectively.

(c) Letter-to-Parents and Physical Activity Card

For parents who had read the Letter-to-Parents, most of them (85.6%) had taken part in the games or activities with their children. For parents who had used the Physical Activity Card, about 80% found it useful in encouraging children to do more physical activity.

(d) Impacts of the Pilot Project

After acquiring more health knowledge via multiple means under the Pilot Project, about half of the parents stated to have applied what they had learnt to improve their children's dietary habits (50.5%) and physical activity (48.9%) at home. Furthermore, about three quarters of parents (74.8%) had found that the dietary habits of their children have improved after the Pilot Project.

Similarly, for physical activity habits, 74.7% of parents reported that they noticed improvement among their children. Around two-thirds of parents suggested that the Pilot Project was effective (60.5%) or very effective (7.5%) in facilitating parents to improve dietary and physical activity practices of their kids.

Meal Arrangement/ Preparation Staff Survey

(a) Foods for birthday party

Among 26 respondents of the meal arrangement staff survey, 60% indicated that their PPIs had given advice to parents regarding the type of food to bring for school birthday parties. Moreover, majority of PPIs (92.0%) provided fresh fruit for preschool students during these parties.

(b) Practices of meal preparation

Regarding meal preparation for students, all respondents reported that they would remove the skin on poultry or fat on meat before cooking. Besides, all respondents would not provide deep-fried food to students. About three quarters of respondents (73.9%) would not use fatty cut of meat, processed or canned meat as the cooking ingredients of the menu (including ingredients for fried rice or fried noodles). About 70% of respondents (70.8%) would not use dehydrated, canned or preserved fruit / vegetables, or those with added sugar as cooking ingredients. Nearly 80% of respondents (79.2%) would not use monosodium glutamate, chicken powder, salty flavorings or instant sauces during cooking. At the same time, half of respondents would use full-cream or condensed dairy products as ingredients of the meals.

Besides water, near three quarters of PPIs (73.9%) would provide other drinks (e.g. Horlicks, Ovaltine and soybean milk, etc.) to students. Among them, 42.9% would add sugar into the drinks and 58.8% would add full-cream milk into the drinks.

Conclusion

The evaluation showed that overall effectiveness of the StartSmart@school.hk Pilot Project was high. Principals and teachers were generally satisfied with the pilot project. Many respondents, especially teachers, noticed improvements in the dietary habits and physical activity practices among preschool students after project implementation. Moreover, most of the

principals and teachers also recommended the StartSmart Pilot Project to other PPIs. As a whole, it was considered both feasible and acceptable to implement the StartSmart@school.hk Pilot Project in all PPIs in Hong Kong.

Recommendations

1. The StartSmart@school.hk Pilot Project was considered to be effective, acceptable and feasible in improving dietary habits and physical activity practices among preschool students. Further extension of the project to all PPIs in the future is recommended.
2. Future implementation of the StartSmart@school.hk Pilot Project, in form of a StartSmart@school.hk Campaign, can take reference from the groundwork carried out in the Pilot Project with respect to the content of health education materials and logistic arrangements.
3. Various means to encourage home-school cooperation should continue to be explored. Parents' education and mass publicity should be enhanced and strengthened.