

3636772 PPH/D : MAJOR: PUBLIC HEALTH ADMINISTRATION; Dr.P.H.
KEY WORD : SURVEILLANCE SYSTEM / COST-EFFECTIVENESS / SPACE-
MAINTAINER.

SEE-ARON CHINPRATEEB: THE COST-EFFECTIVENESS OF SPACE MAINTENANCE SURVEILLANCE SYSTEM AFTER PRIMARY SECOND MOLAR LOSS FOR PRIMARY SCHOOL CHILDREN IN RACHABURI PROVINCE. THESIS ADVISORS: DUSANEE SUTTAPREYASRI, MD, Dr. P.H. WATHANA MATHURASAI, DDS, and MDS. THAVATCHAI VORAPONGSATHORN, B.Sc., Ph.D. NAWARAT SUWANNAPONG, B.Sc., Ph.D. SUPASIT PANNARUNOTHAI, MD, Ph.D., 284p. ISBN 974-663-716-9

Malocclusion, a dental public health problem, causes permanent defect of the temporomandibular joint. The purpose of this study is to show the cost per unit of an effective space maintainer, which was provided in a surveillance system in order to prevent malocclusion.

The study was conducted in 1997 to 1999 in four parts. Part 1 compared the cost-effectiveness of 2 training methods provided for teachers in the existing surveillance system in order to help them select the children who needed space maintainer service. Part 2 compared the cost-effectiveness of 2 types of space maintainer service, BL-SM current and B-SM a new type. Part 3 compared the cost of a child travelling with a parent or with a teacher to receive space maintainer service in hospitals. Part 4 measured the acceptance of individuals at 5 levels to the new type of space maintainer. The research methodology was a quasi-experimental research design. The space maintainer service intervention was provided to 122 children from 40 schools with a control group of 26 children. Tools comprise 1) a handbook for self-instruction, 2) document forms for cost reporting, 3) questionnaires for measurement of acceptance. Tools were inspected and validated by several experts. Data was analysed using the paired t-test, the t-test for independent groups and the one-way ANOVA statistic.

The results of the study were as follows. Part 1 the cost-effectiveness for providing lecture training was 40 Baht per subject while for self-instruction-training method was 5 Baht per subject. Part 2 the cost-effectiveness to service provider was 501 Baht per subject for BL-SM service and 250 Baht per subject for B-SM service. Part 3 the cost for a child travelling with parents to receive BL-SM service was 1,088 Baht per subject and 502 Baht per subject to B-SM service. However, with teachers, it was 266 Baht to BL-SM service and 349 Baht per subject to B-SM in the year 1997. Part 4 the new type of space maintainer met the acceptance of individuals at a high level.

These findings suggest, the space maintenance sub-system should be added to the existing system. The system should comprise 1) providing self-instruction training for teachers, 2) providing bonded space maintainer service 3) children being brought to receive the SM service by teachers. These findings will assist policy decisions on space maintenance service and existing dental health surveillance systems in primary schools.