

## TEACHING USING THE DEMONSTRATION METHOD AT THE DENTAL BRUSH COMPLETELY COMPARED TO LEAFLET AND POSTER MEDIA ON SCORE DEBRIS INDEX STUDENTS ON CLASSROOMS BASIC STATE ELEMENTARY SCHOOL IN SOUTH JAKARTA

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### ABSTRAK

Persentase pencapaian pada pre-test sebelum intervensi dari media leaflet mencapai nilai yang memuaskan (88%) dan peningkatan pada hasil post test (100%) dengan selisihnya adalah (12%), persentase pencapaian dari pre-test tes sebelum penjangkauan media poster yang mencapai nilai memuaskan (68%) dan peningkatan hasil post-test (92%) dengan selisihnya adalah (24%). Indeks Debris untuk skor pertama dalam leaflet grup media (sekolah dasar 16) dengan nilai rata-rata (0,38) dan penilaian kedua (0,56) sedangkan skor Indeks Puing memilih pertama pada poster kelompok (sekolah dasar 08) dengan rata-rata (0,52) ), penilaian kedua bahwa nilai rata-rata (0,43) dengan perbedaan adalah (0,09). Hal ini dapat dibuktikan dengan hasil uji statistik skor pertama Indeks Debris penilaian siswa di sekolah yang dari rata-rata menurun menjadi rata-rata 1,044 pada peringkat Skor Debris skor penilaian kedua yang menghasilkan kolom dalam pasangan uji\_t Sig (2 tailed) p nilai = 0,000. Skor Indeks Debris memilih pertama dengan pengukuran kedua ketika tidak diperlakukan sebagai kelompok intervensi dan ketika dibandingkan dengan skor rata-rata, penilaian kedua Indeks Debris penilaian antara kelompok perlakuan murid sekolah dasar 09, 08, 16) adalah 0,372 dengan skor rata-rata peringkat Indeks Debris keduanya. siswa kelompok kontrol (Sekolah Dasar 14) adalah 0,611.

**Kata Kunci:** Pengajaran menggunakan metode demonstrasi, perbandingan media leaflet dan poster, skor Debris Murid

### ABSTRACT

*The achievement percentage in the pre-test before intervention of media leaflet reaches a satisfactory value (88%) and increase on the results of the post test (100%) with the difference is (12%), the achievement percentage of the pre-test before poster media outreach that reached a satisfactory value (68%) and increase in post-test results (92%) with the difference is (24%). Debris Index to score the first in the media group leaflet (primary school 16) with mean value (0.38) and the second assessment (0.56) while the score Debris Index first vote on the group posters (primary school 08) with a mean (0.52), the second assessment that the mean value (0.43) with difference is (0.09). It can be proved by the results of statistical tests Debris Index score first assessment of pupils at the school were from the mean decreases to mean 1.044 on ratings Debris Index score the second assessment which results in a column in pairs uji\_t Sig (2 tailed) p value = 0.000. Debris Index score first vote with a second measurement when not treated as an intervention group and when compared to the mean score Debris Index second assessment between pupils treatment groups primary school 09, 08, 16) was 0.372 with a mean score of Debris Index ratings both control-group students (Primary School 14) is 0.611.*

**Keyword:** Teaching Using The Demonstration Method, Compared To Leaflet and Poster Media, Debris Index

### PRELIMINARY

Elementary school age is an ideal time to practice a child's motor skills, including brushing exercises. The ability to brush teeth properly and correctly is an important factor as an effort to maintain oral health (Riyanti, 2005). One of the factors that influence dental and oral hygiene is the knowledge of tooth brushing which includes the frequency of brushing teeth, how / techniques to brush it, and the shape of the toothbrush used (Faizah, Nur et al, 2007) so that plaque is one of the main causes of dental disease can be prevented as early as possible. Outlines in the delivery of dental health counseling activities there are two methods, namely one way method and two way method. One way method emphasizes

active educators, targets are not given the opportunity to be active. The two way method guarantees a two-way communication between the educator and the target. One way methods include methods with lectures, film screenings, leaflets and exhibitions. Two way methods include interviews, demonstrations, plays, simulations, brainstorming, roll playing and question and answer. Tooth and mouth disease is an irreversible disease, which cannot return to normal as before, so that it will carry over a lifetime and affect the quality of life and health of their body in general (Maulani C, 2005). A similar result was obtained by the Indonesian Dental Health Foundation who reported a decrease in the value of DMF-T after the children were given knowledge about dental and oral health materials and joint toothbrushing activities (Darwita, 2011). A similar study is also a study of the relationship of tooth brushing with the level of dental and oral hygiene of students of the Imambukhari Integrated Islamic Elementary School by Eriska Riyanti et al (2005) whose results show changes in the level of dental and oral hygiene as measured by a decrease in plaque index in students who previously received proper and good brushing education. This shows that the dental health program provided with counseling in the form of an effective demonstration in supporting the improvement of dental and oral hygiene in elementary school children.

### RESEARCH DESIGN

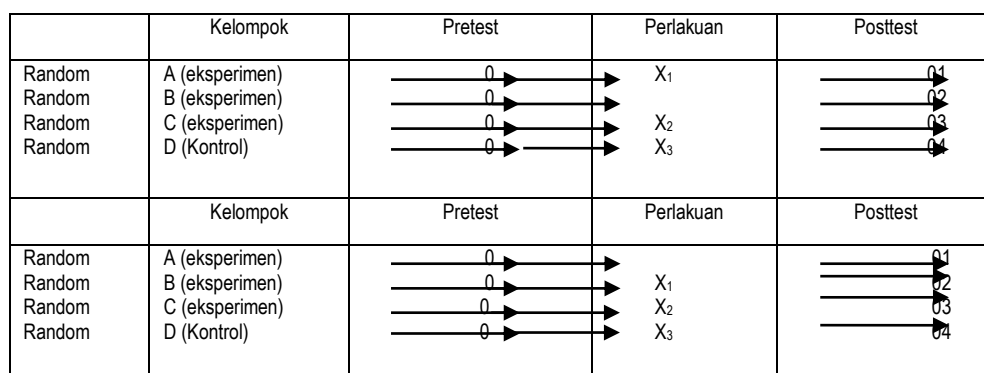
In a true experiment (true experiment) testing independent variables and dependent variables are carried out on the experimental group and the control group. Subjects studied in all three groups (also in each group) were taken randomly. In conducting research, the similarity of the characteristics of the subject is indeed made the same or equalized through testing / through testing.

Many experimental research design models that can be used, the basic design is a randomized test pretest control group design, this research design used is the experimental design of the pretest and posttest design with control group. In a true experiment (true experiment) testing independent variables and dependent variables are carried out on the experimental group and the control group. Subjects studied in all three groups (also in each group) were taken randomly. In conducting research, the similarity of the characteristics of the subject is indeed made the same or equalized through testing / through testing.

Many experimental research design models that can be used, the basic design is a randomized test pretest control group design, this research design used is the experimental design of the pretest and posttest design with control group.

The treatment group and control group were formed randomly. The intervention was only carried out in the treatment group which could be visualized as follows;

There are Models 3 experimental groups and 1 control group :



## RESULT

**Table 1.1**  
Distribution characteristics of subjects (N = 100)

| characteristics of subjects | Frequency (n) | Percent (%) |
|-----------------------------|---------------|-------------|
| Primary School 09           | 25            | 25%         |
| Primary School 16           | 25            | 25%         |
| Primary School 08           | 25            | 25%         |
| Primary School 14           | 25            | 25%         |
| Gender                      | 50            | 50%         |
| Man                         | 50            | 50%         |
| female                      |               |             |
| The intervention group      | 75            | 75%         |
| Treatment                   | 25            | 25%         |
| Control                     |               |             |

*Source: Primary Data*

Table 1.1 shows the distribution characteristics of the study subjects had a total number of 100 people consisting of Primary School 09,16,08,14 South Jakarta each - each is 25 students with a number of men - men and women alike many

**Table 1.2**  
Debris Index score distribution respondent before the extension brushing for the treatment group (3 Primary School) and 1 control group

| Group  | Debris Index score |          |         | Total     |
|--|--------------------|----------|---------|-----------|
|  | Good               | moderate | Bad     |           |
| Extension methods of demonstration (Primary School 09) | 8 (32%)            | 13 (52%) | 4 (16%) | 25 (100%) |
| Media outreach leaflet (Primary School 16)             | 16 (64%)           | 9 (36%)  | 0 (0%)  | 25 (100%) |
| media outreach poster (Primary School 08)              | 17 (68%)           | 8 (32%)  | 0 (0%)  | 25 (100%) |
| Control (Primary School 14)                            | 2 (8%)             | 20 (80%) | 3 (12%) | 25 (100%) |

*Source: Primary Data*

Table 1.2 shows the distribution of scores Debris Index respondents before the extension with the recent criteria of the treatment group Primary School 09 is 4 people (16%), that of 3 people in the control group (12%). Being with the criteria of the control group 20 people (80%)

**Table 1.3**  
Debris Index Score Distribution Respondents After Counseling Brushing For The Treatment Group (3 Primary School) And 1 Control Group

| Group  | Debris Index score |          |     | Total     |
|--|--------------------|----------|-----|-----------|
|  | Good               | moderate | Bad |           |
| Extension methods of demonstration (Primary School 09) | 23 (92%)           | 2 (8%)   | -   | 25 (100%) |
| Media outreach leaflet (Primary School 16)             | 15 (60%)           | 10 (40%) | -   | 25 (100%) |
| Media Outreach Poster (Primary School 08)              | 19 (76%)           | 6 (24%)  | -   | 25 (100%) |
| (Primary School 14)                                    | 16 (64%)           | 9 (36%)  | -   | 25 (100%) |

Source: Primary Data

Table 1.3 shows the distribution of respondents score Debris Index after counseling or group treatment (counseling methods demonstration on grade students of Primary School 09 with criteria Good number of 23 people (92%) more than the number of student groups other treatments (counseling with media leaflets and posters) with the criteria of recent there are no longer even in the control-group students which is a group with no treatment given extension services how to brush teeth properly

#### 1.4 Extension Brushing Demonstration Method

The frequency distribution of the respondents were given counseling brushing demonstration method was 10 years old by sex in class V students of Primary School 09 is presented in the following table:

**Table 1.4**  
The frequency distribution of respondents extension brushing method of demonstration which was 10 years old by sex

| No. | Gender       | Frequency | Percentage |
|-----|--------------|-----------|------------|
| 1   | Man          | 15        | 0.15%      |
| 2   | female       | 10        | 0.1%       |
|     | <b>Total</b> | 25        | 0.25%      |

Source: Primary Data

Table 1.4 shows that the age distribution of respondents aged 10 years-sex male - male was (0.15%), female sex was (0.1%)

#### 1.5 Extension Brushing With Tools Leaflet

The frequency distribution of respondents was 10 years old by sex given extension means brushing with leaflets on grade students of Primary School 16 is as in the following table:

**Table 1.5**

The frequency distribution of respondents extension brushing with tools leaflet 10 and older by sex

| No. | Gender       | Frequency | Percentage |
|-----|--------------|-----------|------------|
| 1   | Man          | 10        | 0.1%       |
| 2   | female       | 15        | 0.15%      |
|     | <b>Total</b> | 25        | 0.25%      |

Source: Primary Data

Table 1.5 shows that the distribution of respondents aged 10 years-sex male - male was (0.1%), female sex was (0.15%).

### 1.6 Extension Brushing With Tools Poster

Extension brushing with the posters showed the distribution of respondents aged 10 years by sex in the following table:

**Table 1.6**

The frequency distribution of respondents extension brushing with tools 10-year-old poster by sex grade students of Primary School 08

| No. | Gender       | Frequency | Percentage |
|-----|--------------|-----------|------------|
| 1   | Man          | 9         | 0.09%      |
| 2   | female       | 16        | 0.16%      |
|     | <b>Total</b> | 25        | 0.25%      |

Source: Primary Data

Table 1.6 shows that the distribution of respondents aged 10 years-sex male - male was (0.09%), female sex was (0.16%)

## 2. Univariate Analysis

*Univariate* analysis was intended to describe the independent variables and the dependent variable, and the result of counseling intervention brushing properly as follows;

**Table 2.1**

Value Distribution Test Students' Ability In The Treatment Group (Primary School 09,08,&16)

|                                  | mean  | standard<br>Deviation | Minimal-maximal | 95% CI            |
|----------------------------------|-------|-----------------------|-----------------|-------------------|
| Test test<br>before<br>extension | 81.74 | 6.694                 | 60-100          | 80.20 to<br>83.28 |

Table 2.1 analysis we found the average value of the test results before the student test counseling was 81.74 (95% CI: 80.20 to 83.28), with a standard deviation is

6.694. From the estimation interval can be concluded that 95% believed that the average value of test test / capacity of students is between 80.20 until 83.28.

**Table 2.2**

The Frequency Distribution Of Scores Of *Pre-Test* Pupils Treatment Group (Primary School 09,08,&16) Before Counseling How To Brush Teeth Properly

| No. | Category scores | Frequency | Percentage |
|-----|-----------------|-----------|------------|
| 1   | satisfy         | 46        | 61.33%     |
| 2   | Good            | 24        | 32%        |
| 3   | Enough          | 5         | 6,67%      |
| 4   | Bad             | 0         | 0          |
| 5   | Very bad        | 0         | 0          |
|     | Total           | 75        | 100%       |

Source: Primary Data

Table 2.2 shows that the number of 46 pupils (61,33%) have achieved a score / answering questions correctly 33 to 40 grains Satisfactory category, some 24 pupils (32%) were able to answer questions correctly some 28 to 32 items or categories Good, and a number of 5 pupils (6.67%) were able to answer questions correctly a number of 57.5 up to 67.5 grains or category, please.

**Table 2.3**

The Frequency Distribution Of Scores Of *Post-Test* Pupils Treatment Group (Primary School 09, Primary School Primary School 08, &16) After Counseling How To Brush Teeth Properly

| No. | Category Knowledge | Frequency | Percentage |
|-----|--------------------|-----------|------------|
| 1   | satisfy            | 70        | 93.33%     |
| 2   | Good               | 4         | 5.33%      |
| 3   | Enough             | 1         | 1.33%      |
| 4   | Bad                | -         | 0          |
| 5   | Very bad           | -         | 0          |
|     | Total              | 75        | 100%       |

Source: Primary Data

2.3 The distribution of respondents by *post - test* (40 questions) after counseling how to brush teeth properly, as in the following table;

Table 2.3 shows that a total of 70 students (93.33%) score test the students' ability to answer questions correctly a number of 33 to 40 grains Satisfactory category, number 4 pupils (5.33%) were able to answer questions correctly a number of 28 to 32 rounds Good category, and number 1 pupils (1.33%) were able to answer questions correctly a number of 57.5 up to 67.5 grains category Enough

**Table 2.4**  
The Frequency Distribution Of Scores *Pre- Post Test* Group Students Counseling Demonstration Method (Primary School 09) That Is Based On Gender

| No. | Category scores | <i>pre test</i> |         | Frequency percentage | <i>post test</i> |     | percentage |
|-----|-----------------|-----------------|---------|----------------------|------------------|-----|------------|
|     |                 | lk              | pr      |                      | lk               | pr  |            |
|     |                 | 1               | satisfy | 4                    | 3                | 28% |            |
| 2   | Good            | 8               | 5       | 52%                  | 1                | 1   | 8%         |
| 3   | Enough          | 4               | 1       | 20%                  | 1                | 0   | 4%         |
| 4   | Bad             | 0               | 0       | 0%                   | 0                | 0   | 0%         |
| 5   | Very bad        | 0               | 0       | 0%                   | 0                | 0   | 0%         |
|     | Total 25 org    | 16              | 9       | 100%                 | 16               | 9   | 100%       |

Source: Primary Data

2.4 The frequency distribution of the capacity of students through the test results through *pre* and *post - test* (40 questions) before and after counseling how to brush teeth properly, as in the following table;

2.5 From table 2.4 frequency distribution test scores *pre-post test* pupils treatment group (Primary School 09) showed an increase in the percentage of achievement scores Satisfy of pupil sex male of 4 students to grow at a score of *post test* 14 students to answer a total of 33 to 40 questions

**Table 2.5**  
The Frequency Distribution Of Scores *Pre- Post Test* Pupils Treatment Group Counseling With Media Leaflet (Primary School 16) By Sex

| No. | Category scores | <i>pre test</i> |         | Frequency percentage | <i>post test</i> |     | percentage |
|-----|-----------------|-----------------|---------|----------------------|------------------|-----|------------|
|     |                 | lk              | pr      |                      | lk               | pr  |            |
|     |                 | 1               | satisfy | 14                   | 8                | 88% |            |
| 2   | Good            | 1               | 2       | 12%                  | 0                | 0   | 0%         |
| 3   | Enough          | 0               | 0       | 0%                   | 0                | 0   | 0%         |
| 4   | Bad             | 0               | 0       | 0%%                  | 0                | 0   | 0%         |
| 5   | Very bad        | 0               | 0       | 0%                   | 0                | 0   | 0%         |
|     | Total 25        | 15              | 10      | 100%                 | 14               | 11  | 100%       |

Source: Primary Data

2.5 The frequency distribution of the capacity of students through the test results through *pre* and *post - test* (40 questions) before and after counseling how to brush teeth properly leaflet media as in the following table; Table 2.5 distribution frequency score *pre-post test* pupils treatment group (Primary School 16) showed an increase in the percentage of achievement score of Excellent, an increase of students are female *pre - test* 8 students to 11 students at the *post test* that is able to answer a number of 33 to 40 questions.



**Table 2.6**  
The frequency distribution of scores *pre- post test* pupils treatment group media outreach poster (Primary School 08) by sex

| No. | Category scores | <i>pre test</i> |         | Frequency<br><i>percentage</i> | <i>post test</i> |     | <i>percentage</i> |
|-----|-----------------|-----------------|---------|--------------------------------|------------------|-----|-------------------|
|     |                 | lk              | pr      |                                | lk               | pr  |                   |
|     |                 | 1               | satisfy | 6                              | 11               | 68% |                   |
| 2   | Good            | 4               | 4       | 32%                            | 0                | 2   | 8%                |
| 3   | Enough          | 0               | 0       | 0%                             | 0                | 0   | 0%                |
| 4   | Bad             | 0               | 0       | 0%                             | 0                | 0   | 0%                |
| 5   | Very bad        | 0               | 0       | 0%                             | 0                | 0   | 0%                |
|     | Total           | 10              |         | 100%                           | 12               | 13  | 100%              |
|     | 25 people       |                 | 15      |                                |                  |     |                   |

Source: Primary Data

2.6 Distribution frequency through the test results of students' ability through *pre* and *post - test* (40 questions) before and after counseling how to brush teeth properly and correctly media poster , as in the following table;

From table 2.6 frequency distribution of test scores *pre-post test* pupils treatment group (Primary School 08) showed an increase in the percentage of pupils achieving the score Satisfying sex male students is from 6 to 12 students to answer a total of 33 to 40 questions.

**Table 2.7**  
The frequency distribution Debris Index score the first and second votes in the control group students (Primary School 14) by sex

| No. | Category scores | <i>IN -pre</i> |       | Frequency<br><i>Percentage</i> | <i>DI-post</i> |     | <i>Percentage</i> |
|-----|-----------------|----------------|-------|--------------------------------|----------------|-----|-------------------|
|     |                 | lk             | pr    |                                | lk             | pr  |                   |
|     |                 | 1              | GGood | 2                              | 4              | 24% |                   |
| 2   | moderate        | 7              | 10    | 68%                            | 4              | 4   | 32%               |
| 3   | Bad             | 2              | 0     | 8%                             |                |     |                   |
|     | Total           | 11             | 14    | 100%                           | 0              | 0   | 0%                |
|     | 25 people       |                |       |                                | 14             | 11  | 100%              |

Source: Primary Data

2.7 The frequency distribution Debris Index score the first and second vote on student group control as in the following table;

From table 2.7 frequency distribution score Debris Index before and after the student group Control (Primary School 14) showed an increase in the percentage of achievement score Debris Index first assessment with good category of pupil sex male is from 2 to 10 people and the female of 4 to 7 people. And the percentage



score tops the ratings Debris Index Average category of pupil sex male from 7 to 4 people and female sex from 10 to 4 vote, although without counseling / intervention.

### 3. Analysis Bivariat

Results Uji- *t* -test the ability of respondents answered about how to brush teeth properly and correctly use the demonstration method is as follows:

**Table 3.1**  
Mean and standard deviation of 3 treatment groups  
counseling brushing (Primary School 09,16, 08)

| No. | variable         | mean                                  |                                 |                                   | N  | Statistic test   |
|-----|------------------|---------------------------------------|---------------------------------|-----------------------------------|----|--|
|     |                  | Demonstration<br>Primary<br>School 09 | leaflet<br>Primary<br>School 16 | Poster<br>Primary<br>School<br>08 |    |  |
| 1   | <i>pre test</i>  | 77.76                                 | 85.20                           | 82.26                             | 25 | 0,000<br>(Primary School<br>09)                                    |
| 2   | <i>post test</i> | 86,50                                 | 85.30                           | 88.38                             | 25 | 0,000<br>(Primary School<br>08)<br>0.901<br>(Primary School<br>16) |

Source: Primary Data

Table 3.1 shows the results uji- *t* paired in group counseling how to brush teeth properly with the method of demonstration, leaflets and posters.

Known to test the students' ability in *pre-test* counseling brushing is good and true method of demonstration and the media poster as the statistical test is  $p = 0.0001$  ( $p < 0.05$ ), then  $H_0$  is rejected and  $H_a$  accepted means that there are differences in the ability of the students at the time before and after counseling how to brush teeth correctly in class V student of Primary School 09 treatment group counseling and Primary School 08.

#### 3.2 Differences answered extension materials testing capability brushing properly with media leaflet.

##### Results

Uji- *t* -test the ability of respondents answered about how to brush teeth properly use leaflet media are as follows;

**Table 3.2**  
Values mean and standard deviation counseling brushing  
with media leaflet graders of Primary School 16

| No. | variable          | mean  | N  | Statistic test |
|-----|-------------------|-------|----|----------------|
| 1   | <i>pre - test</i> | 85.20 | 25 | 0.901          |
| 2   | <i>post test</i>  | 85.30 | 25 |                |

Source: Primary Data

Known in table 3.2 test the students' ability in the pre-test prior leaflet extension with a media value - average is 85.20, while the post-test average is 85.30.

In Uji- *t* paired visible difference in mean values between *pre-test* and *post-test* of 0.10. The difference in value is tested by uji- *t* pairs and generate value  $p = 0.901$  (the value of  $p > 0.05$ ), then  $H_0$  is rejected and  $H_a$  accepted, meaning that there are no differences in the ability of the students at the time before and after counseling how to brush teeth properly with the help of props / media leaflets at grade V Primary School 16 treatment groups.

#### 4. Uji- *t* Dependent

*Paired t-test / related or couples where the sample is dependent if the groups being compared have the same subject.* The results of the t-test on the measurement index score Debris first and second graders V Primary School 09 as follows;

**Table 4.1**  
Distribution average score Debris Index according to the first  
measurement and second graders V Primary School 09

| variable              | mean | SD   | SE    | P value | N  |
|-----------------------|------|------|-------|---------|----|
| Debris Index<br>Score |      |      |       |         |    |
| measurement I         | 1.23 | .563 | 0,113 |         |    |
| measurement II        | 0.13 | .230 | 0,046 | 0,000   | 25 |

Source: Primary Data

Table 4.1 shows that the average score Debris Index on the first measurement was 1.23 with a standard deviation of 0.563. In the second pengukuran obtained an average score of Debris index was 0.31 with a standard deviation of 0.230. Seen the mean difference between the first and second measurements was 1.095 with a standard deviation of 0.609. Statistical test results obtained value of 0.001 we can conclude there is a significant difference between the scores Debris Index first and second measurements. The results of the t-test on the measurement index score Debris first and second grade students of Primary School 16 as following;

**Table 4.2**  
Distribution Average Score Debris Index According To  
The First Measurement And Second Graders Of Primary School 16

| <i>variable</i>    | <i>mean</i> | <i>SD</i> | <i>SE</i> | <i>P value</i> | <i>N</i> |
|--------------------|-------------|-----------|-----------|----------------|----------|
| Debris Index Score |             |           |           |                |          |
| measurement I      | 0.38        | 0.519     | 0.10      | 0.119          | 25       |
| measurement II     | 0.56        | 0.519     | 0.10      |                |          |

*Source: Primary Data*

Table 4.2 shows that the average score Debris Index on the first measurement was 0.38 with a standard deviation of 0.519. At the second measurement obtained an average score of Debris index was 0.56 with a standard deviation of 0.519. Seen the mean difference between the first and second measurements was 0.179 with a standard deviation of 0.554. Statistical test results obtained value of 0.119, it can be concluded there was no significant difference between the scores Debris Index first and second measurements.

Results uji- *t* on the score Debris Index on the first and second measurements of class V students of Primary School 08 as following:

**Table 4.3**  
Distribution average score Debris Index first and second measurements  
on pupils class V Primary School 08 as follows:

| <i>variable</i>    | <i>mean</i> | <i>SD</i> | <i>SE</i> | <i>P value</i> | <i>N</i> |
|--------------------|-------------|-----------|-----------|----------------|----------|
| Debris Index Score |             |           |           |                |          |
| measurement I      | 0.52        | 0.47      | 0.09      | 0.306          | 25       |
| measurement II     | 0.43        | 0.36      | 0.07      |                |          |

*Source: Primary Data*

Table 4.3 shows that the average score Debris Index on the first measurement was 0.52 with a standard deviation of 0.47.

At the second measurement obtained an average score of Debris index was 0.43 with a standard deviation of 0.36. Seen the mean difference in the first and second conduction measurement was 0.089 with a standard deviation of 0.425. Statistical test results obtained value of 0.306, it can be concluded there was no significant difference between the scores Debris Index first and second measurements.

## 5. Test -*t* Dependent

Test - *t* paired / related or couples where the sample is dependent if the groups being compared have the same subject. Test Results - *t* -test the ability of *pre-post* test measurements of first and second grade students of Primary School 09 as follows:

**Table 5.1**  
Average distribution test of the ability of pre-post test according to the first assessment and the second on student demonstration method

| variable             | mean  | SD    | SE    | P value | N  |
|----------------------|-------|-------|-------|---------|----|
| Test-test capability |       |       |       |         |    |
| Rating I             | 77.76 | 8.872 | 1,774 | 0,000   | 25 |
| Rating II            | 86,50 | 6.038 | 1,208 |         |    |

Source: Primary Data

Table 5.1 shows that the average pre-test test capability on the first vote was 77.76 with a standard deviation of 8.872.

At the second assessment obtained on average test of the ability of *post test* is 86.50 with a standard deviation of 6.038. Seen the mean difference between the first and second assessment is 8.74 with a standard deviation of 9.908. Statistical test results obtained from test - *t* paired generate value *p* (column *sig 2-tailed*) value of 0,000, it can be concluded that there are significant differences between the test the ability of *the pre-test* students between the first vote by *post test* second assessment

#### 5.2 The Result Of *T* -Test The Ability Of *Pre - Post Test* Votes On The First And Second Graders V Primary School 08 As Follows:

**Table 5.2**  
Average Distribution Test Of The Ability Of Pre-Post Test First Assessment And Second In Grade Five Students With Posters:

| Variabel           | mean  | SD    | SE     | P value | N  |
|--------------------|-------|-------|--------|---------|----|
| Debris Index Score | 82.26 | 4.451 | 0, 890 | 0,000   | 25 |
| I ratings          | 88.38 | 4,433 | 0,887  |         |    |
| II ratings         |       |       |        |         |    |

Source: Primary Data

Table 5.2 shows that the average pre-test test capability on the first vote was 82.26 with a standard deviation of 4.451.

At the second assessment obtained on average test of the ability of *post test* is 88.38 with a standard deviation of 4.433. Seen the mean difference between the first and second assessment was 6.120 with a standard deviation of 5,999. Statistical test results obtained from test - *t* paired generate value *p* (column *sig 2-tailed*) value of 0,000, it can be concluded that there are significant differences between the test the ability of *the pre-test* students between the first vote by *post test* second assessment

#### 5.3 The result of *t* -test the ability of *pre - post test* votes on the first and second grade five Primary School 16 as follows:

**Table 5.3**  
Average Distribution Test Of The Ability Of *Pre-Post Test* According To The First Assessment And Second Graders V With Media Leaflet:

| Variable                 | Mean  | Sd    | Se    | P Value | N  |
|--------------------------|-------|-------|-------|---------|----|
| Test / test capabilities |       |       |       |         |    |
| I ratings                | 85.20 | 3.221 | 0.644 |         | 25 |
| II ratings               | 85.30 | 3,559 | 0.712 | 0.901   |    |

Source: Primary Data

Table 5.3 shows that the average test of the ability of *the pre-test* on the first vote was 85.20 with a standard deviation of 3.221. At the second assessment obtained on average test of the ability of *post test* is 85.30 with a standard deviation of 3.559. Seen the mean difference between the first and second vote was 0,100 with a standard deviation of 3.984. Statistical test results obtained from the *t-test* paired generate value *p* (column 2 *Sig-tailed*) value of 0.901, it can be concluded there was no significant difference between the test the ability of *the pre-test* students between the first vote by *post test* the second assessment.

## 6. Test - t Independent

*T-test* is a data group that one is independent of other groups. The results of *T-test* independent Debris Index scores after treatment (counseling method demonstrations, media leaflets and posters by comparing the student control group (without treatment Primary School 14) as follows:

Table 6.1  
Distribution average score Debris index measuring both pupils treatment group (Primary School 09, 08, 16) and the control group (Primary School 14)

| variable            | mean  | SD    | SE    | P value | N  |
|---------------------|-------|-------|-------|---------|----|
| Debris Index Score  |       |       |       |         |    |
| The treatment group | 0.372 | 0.424 | 0,049 | 0,023   | 25 |
| The control group   | 0.611 | 0.508 | 0.508 |         |    |

Source.: Primary Data

Table 6.1 shows that the average score Debris Index measurements both in the treatment groups was 0.372 with a standard deviation of 0.424 whereas for the control group average score Debris its index was 0.611 with a standard deviation of 0.508. Statistical test results obtained value of  $p = 0.023$  significant at alpha 5% seen no significant difference in the average score Debris Index between the group treated with the control group.

**Table 6.2**  
Distribution average score Debris index measuring both pupils demonstration method of treatment group compared with the control group (Primary School 14)

| Variable                                | Mean  | Sd    | Se    | P Value | N  |
|---|-------|-------|-------|---------|----|
| Debris Index Score                      |       |       |       |         |    |
| Group demonstration (Primary School 09) | 0.131 | 0.230 | 0,046 | 0,000   | 25 |
| The control group                       | 0.611 | 0.508 | 0.101 |         |    |

Source: Primary Data

Table 6.2 shows that the average score of Debris index measuring both the treatment group demonstration method was 0.131 with a standard deviation of 0.230 while the control group's average score Debris The index was 0.611 with a standard deviation of 0.508. Statistical test results obtained value of  $p = 0.000$  significant at alpha 5% seen no significant difference on average score Debris second measurement index between treatment groups (Primary School 09) with the control group (Primary School 14).

## 7. ANOVA

To analyze the difference of more than two mean or data that more than two groups if you want to know the difference between the internal and the group

**table 7.1**  
Distribution average score Debris index measuring both pupils each treatment group (internal Primary School 09,08,16)

| variable             | mean   | SD    | 95% CI          | P value |
|----------------------|--------|-------|-----------------|---------|
| Debris Index Score 2 |        |       |                 |         |
| Primary School 09    | 0.131  | 0,230 | 0.036 to 0.226  |         |
| Primary School 08    | .0.428 | 0,367 | 0.276 to 0.5798 | 0,001   |
| Primary School 16    | .0,557 | 0,518 | 0.343 to 0.772  |         |

Source: Primary Data

Table 7.1 shows that the average score of Debris index measuring both the treatment group demonstration method (Primary School 09) was 0.131 with a standard deviation of 0.230. The average score Debris index measuring both treatment groups poster media (Primary School Primary School 08) was 0.428 with a standard deviation of 0,367 and the media treatment group leaflet (Primary School 16) was 0.557 with a standard deviation is 0.518.

Statistical test results obtained value of  $p = 0.001$  can be concluded that there are significant differences Debris score a second measurement index or given counseling after brushing is good and right internal treatment group (Primary School 09, Primary School 08, Primary School 16).

**Table 7.2**  
Average distribution capability test *post-test* measurement of both pupils each treatment group (internal Primary School 09, 08,16)

| variable             | mean  | SD    | 95% CI         | P value |
|----------------------|-------|-------|----------------|---------|
| Debris Index Score 2 |       |       |                |         |
| Primary School 09,   | 86,50 | 6.038 | 84.01 to 88.99 | 0,000   |
| Primary School 08,   | 88.38 | 4,433 | 86.55 to 90.21 |         |
| Primary School 16    | 85.30 | 3,559 | 83.83 to 86.77 |         |

Source: Primary Data

Table 7.2 shows that the average test of the ability of *post-test* ratings both in the treatment group demonstration method (Primary School 09) was 86.50 with a standard deviation of 6.038. Average test the ability of *post test* both treatment groups poster media (Primary School 09, 08,16) Primary School 08) was 88.38 with a standard deviation of 4.433 and the media treatment group leaflet (SDN16) was 85.30 with a standard deviation is 3.559.

## CONCLUSION

1. Comparison counseling how to brush teeth properly with the method of demonstration to score Debris Index grade five Primary School 09. The results of *the test - t* paired shows signifikasni value of  $p = 0.000$ , we conclude that there is a difference score Debris Index SDN09 in the moments before and given counseling after brushing is good and right with the method of demonstration. Differences in the ability of these students test significantly between *pre-test and post-test* can be seen from the average score is 77.76, while the value after being given the *post test* increased their average score was 86.50. From the aspect of the number of respondents is 25 people, test the ability of students before education brushing is good and true method of demonstration on the *pre-test*, there were 7 students by category satisfactory value, and after being given the intervention / treatment counseling increased the capacity of students to answer the post test up to 22 people, which means increased from 28% to 88%.
2. Comparison counseling how to brush teeth properly with media leaflet to score Debris Index grade five Primary School 16 Paired t test results showed a significance value of  $p = 0.119$ , we conclude that there is no significant difference Debris Index score at the time before and after counseling how to brush teeth properly with media leaflet. Differences in the ability of these students test significantly between *pre-test and post-test* can be seen from the average score is 85.20, while the value after being given the *post test* score average is 85.30. From the aspect of the number of respondents is 25 people, test the ability of students before education how to brush teeth properly and correctly media leaflet on pre-test there are 22 students in the category of satisfactory value, and after being given the intervention / treatment counseling to answer the post test is 25 means increased from 88% to 100%.



3. Comparison counseling how to brush teeth properly with posters against Debris Index scores of students in grade five Primary School 08. The results of *the test -t* pairs showed significant p value = 0.306 it was concluded that there was no significant difference Debris Index score at the time before and after counseling how to brush teeth properly with the posters. Differences in the ability of these students test significantly between pre-test and post-test scores seen from the average value is 82.26, while after being given a post-test score average is 88.38. From the aspect of the number of respondents is 25 people, test the ability of students before education how to brush teeth properly posters on the pre-test there are 17 students in the category of satisfactory value, and after being given the intervention / treatment counseling that could answer the post test is 23 students means increased from 68% to 92%.
4. Comparison between counseling brushing demonstration method with leaflets and posters to score Debris Index pupil. Based on the results of the students' ability categorization test value can be known differences in achievement scores between the treatment / counseling methods demonstrations, posters and leaflets media. Test students' ability group counseling methods demonstration through *pre test* obtaining satisfactory value (7), the pre-test media group leaflets (22), the *pre-test* media group poster (17 people).  
After testing the ability of the students after the extension brushing is good and true method of demonstration through the post test that obtaining satisfactory value (22), the media group leaflet categorized satisfactory value (25) and posters with categories that value (23), with the attainment of the percentage of the pre-test counseling grader V before the demonstration methods that achieve a satisfactory value (28%) increase in post test results (88%) with the difference the difference is (60%). While the achievement percentage in the pre-test grade five before the extension of media leaflet which reaches a satisfactory value (88%) increase on the results of the post test (100%) with the difference the difference is (12%), the achievement percentage of the pre-test grade five before poster media outreach that reached a satisfactory value (68%) increase in post-test results (92%) with the difference the difference is (24%). That is an increase testing capability of pupils who reach a satisfactory score on the post test group demonstration method is the achievement of a larger percentage of the posters, and the percentage below that is the media treatment group counseling leaflet.

Based on a statistical test to score Debris Index ratings first grade five Primary School 09 given counseling methods demonstration that the mean score (1.23) and the second assessment score Debris Index impairment in value is the mean (1.23) and the second assessment score Deris Index ie there is a decrease in the mean value (0.13) or the difference the difference is (1,1). Debris Index to score the first votes in the media group leaflet (Primary School 09, 08,16) Primary School 16) mean value (0.38) and the mean grade is the second assessment (0.56) or the difference the difference is (0.18), and the score Debris Index first vote on the group posters (Primary School 08) with a mean (0.52), while at the second assessment that the mean value (0.43) with the difference the difference is (0.09).

## **BIBLIOGRAPHY**

- Dental and Oral Health, Orthodontics Section, Faculty of Dentistry, Padjadjaran University Bandung, 2010
- Harun Zen, Effect of Gender on the oral cavity, Dental Journal, 2010
- Asri Made et al, Relationship of eating patterns and habits of brushing teeth with oral health (caries) in Indonesia, Surabaya Health System Research Bulletin, 2010
- Evy Delianty Sinaga, The Effects of Counseling and Training on Plaque Index Reduction in Class IV and V Students in Two Primary School, Medan USU e-Repository, 2008
- Budiharto, Research Methodology with Examples of Dental Health Sciences, EGC Publisher Jakarta, 2008
- Hastono Priyo Sutanto, Health Data Analysis, Faculty of Public Health, University of Indonesia, 2007
- Anitasari S, and Liliwati, The Effect of Tooth Brushing Frequency on Teeth and Mouth Hygiene Levels of State Elementary School Students in Palaran District, Samarinda Province, East Kalimantan Province, Dentika Dental Journal, 2005
- Notoatmodjo Soekidjo, Health Research Methodology, Ed. Revised, Publisher Rineka Cipta, 2005
- The Indonesian Ministry of Health, 2010 Healthy Indonesia Indicators and Indicator Guidelines, 2003
- Julitanti, Heri Elica, Indrianti Tuti Susanti, Artini Sri, Dental Health Education, EGC Jakarta, 2002
- Arikunto Suharsimi, Research Procedure for a Practical Approach, Ed. Revised, Jakarta, 2002
- Republic of Indonesia Ministry of Health, Directorate of Basic Health Efforts Directorate General of Health Efforts Ministry of Health Republic of Indonesia, Policy and Strategy for Dental and Oral Health
- Service Development in Public Services Bhawani C, Bass tobrushing technique for gingival and subgingival cleaning, <http://dentistryforstudents.com/bass-tootbrushing-technique/access>, 2013