

Effectiveness of Planned Teaching Programme on Knowledge Regarding Personal Hygiene Among School Age Children In Selected Orphanage Of Mangalore

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Abstract

Hygiene refers to practices associated with ensuring good health and cleanliness. The scientific term "Hygiene" refers to maintenance of health and healthy living. Personal hygiene is the practice of maintaining cleanliness of the body. It is done through bathing, hair grooming, hand washing, brushing teeth, trimming nails and cleaning ears. However, maintaining good or acceptable personal hygiene is seldom perceived and acknowledged as protection against disease. Promotion of health as a level of prevention is most apt for formative years of life. Value based learning begins in life cycle at early years of life and thereafter, continues throughout the lifecycle with varied degree of acquisition. Health is not valued unless it is lost. Organized value-based learning can be acquired much more effectively in schools, homes and families. Health and hygiene as a subject cannot be taught, but it can be learnt as a way of life. It would be a real investment in health and development of future citizens.

Objectives of the study

1. To determine the level of knowledge regarding personal hygiene among school age children using structured knowledge questionnaire.
2. To find the effectiveness of planned teaching programme on knowledge regarding personal hygiene in terms of gain in knowledge scores.
3. To find the association between pre-test knowledge scores and selected baseline characteristics (Age, class of study, years of stay in orphanage, previous information)

Methods

An evaluative research approach with pre-experimental (one group pre-test post-test) design was used for the study. The sample consisted of 60 school age children of an orphanage selected by purposive sampling method. Pre-test was conducted by administering a structured knowledge questionnaire. Planned teaching programme was administered to the school age children after the pre-test and on the seventh day post-test was conducted using the same structured knowledge questionnaire. The collected data was analysed using descriptive and inferential statistics.

Results

The results of the study showed that the mean post-test knowledge score (81.50%) was higher than the mean pre-test knowledge score (59.43%). The computed 't' value ($t_{59}=18.79, p<0.05$) showed a significant difference suggesting that the planned teaching programme was effective in increasing the knowledge of school age children regarding various aspects of personal hygiene. There was no significant association between the knowledge of school age children on personal hygiene with selected baseline characteristics (age, class of study, years of stay in orphanage, previous information).

Interpretation and Conclusion

The findings of the study revealed that there was a significant increase in the knowledge of school age children regarding various aspects of personal hygiene after administration of planned teaching programme. Hence, PTP was highly effective in improving the knowledge of school age children.

Key words: Effectiveness; personal hygiene; planned teaching programme, school age children; orphanage.

I. Introduction

Good health stands at the very root of virtuous acts, acquirement of wealth and power, also the attainment of pleasure and emancipation. Diseases are the destroyers of health, wellbeing and life. Health represents the

equilibrium in the absence of diseases. Thus, health is the root cause par excellence of the attainment of all goals in life ¹. Children are the first agenda of human resource development. A child of today is the future citizen and leader of the community as well as of the country as a whole in different spheres of Nation's life. The destiny of nation is determined by how perfectly they are moulded ².

Children are the gift to this world, and it is the society's responsibility to nurture and care for them. School age years are crucial for establishing positive self-esteem and self-concept and it is during this time the child learns how to master skills and relate to others. Although the school age years are one of the healthiest phases of life, many studies have shown that children are affected with many diseases due to lack of personal hygiene ³.

An orphan is a child bereaved of or abandoned by his or her parents. In India many orphan and street children are left without care and support, and the main cause is urbanization and industrialization. Due to family disputes, accidental deaths and illegal contacts many children are becoming parentless today. These orphans / semi orphans / street children are involved in rag picking, pick pocketing and participating in antisocial, criminal activities. Their physical health is also poor due to many factors and one important factor that could be taken into consideration is poor personal hygiene⁴.

Personal hygiene is a very important factor for growing children. Personal hygiene not only makes them comfortable, but it teaches them to do what is right and what is wrong. Early hygiene enhancement gives the child a healthy and comfortable life and will teach them to be hygienic up to the time they grow old. Children touch, reach and grasp to learn about environment and are at a high risk of infection ⁵.

In the light of above-mentioned facts, reports of various literatures, discussion with the experts and the investigator's own experience, it was felt that imparting knowledge about various aspects of personal hygiene to the children residing at orphanages would be very much helpful to maintain their health in the group.

II. Research Methodology

Effectiveness of planned teaching programme on knowledge regarding personal hygiene among school age children in selected orphanage of Mangalore.

Sampling criteria

Inclusion criteria

School age children

- studying in 5th, 6th, and 7th class residing at selected orphanages of Mangalore.
- willing to participate in the study.

Exclusion criteria

School age children

- not available at the time of data collection

Data collection instrument

Instrument used in the study was:

Structured knowledge questionnaire. It had two parts:

Part I: Baseline characteristics

Part II: Structured knowledge questionnaire on personal hygiene

Development of the tool

The tool was developed on the basis of the objectives of the study after review of the literature on relevant topics, discussion with the experts, discussion with the guide and co-guide and experience of the investigator.

The following steps were undertaken to prepare the tool:

- preparation of a blueprint.
- development of the criteria checklist.
- content validity of the tool.
- pre-testing of the tool.
- reliability of the tool.
- development of the final draft of the tool.

Reliability of the tool

The reliability of the instrument was established by administering the tool to twelve school age children in a selected orphanage of Mulki, Mangalore. The coefficient of internal consistency was computed for the structured knowledge questionnaire by split half method. Karl-Pearson correlation co-efficient was used to find out the

reliability of the half test and Spearman-Brown prophecy formula was used for the full test. A value of $r = 0.97$ for structured knowledge questionnaire was obtained and hence, the tool was found reliable.

Development of Planned Teaching Programme:

Teaching plan is a guide for the teacher because it helps to cover the topics comprehensively with proper sequence of points, without missing anything. The planned teaching programme was developed based on the following:

- review of literature
- discussion with experts
- investigator’s own experience

The steps to prepare the teaching plan were:

- framing the outline of the content
- preparing the outline of the content
- deciding method of instruction and AV aids
- editing the teaching plan
- evaluating the teaching plan.

Method of Data Collection

The formal written permission was obtained from the concerned authority of a selected orphanage of Mangalore, which is situated within 30 kilometres from Mulki town. There were about 86 girls residing in the orphanage, out of which 62 girls were in 5th, 6th and 7th class. Purposive sampling technique was used to select the school children. Prior to the data collection, the investigator introduced herself and explained the purpose of the study to the children to obtain maximum co-operation. Comfortable seating arrangements were done. The data was collected using structured knowledge questionnaire in addition to the baseline characteristics. The average time taken by each child to answer the tool was around 20-25 minutes. Planned teaching programme on personal hygiene was given to the children and the post-test was conducted after 7 days. The investigator expressed gratitude for the co-operation extended by children and the caretakers.

III. Findings Of The Study

Section I: Baseline characteristics of school age children

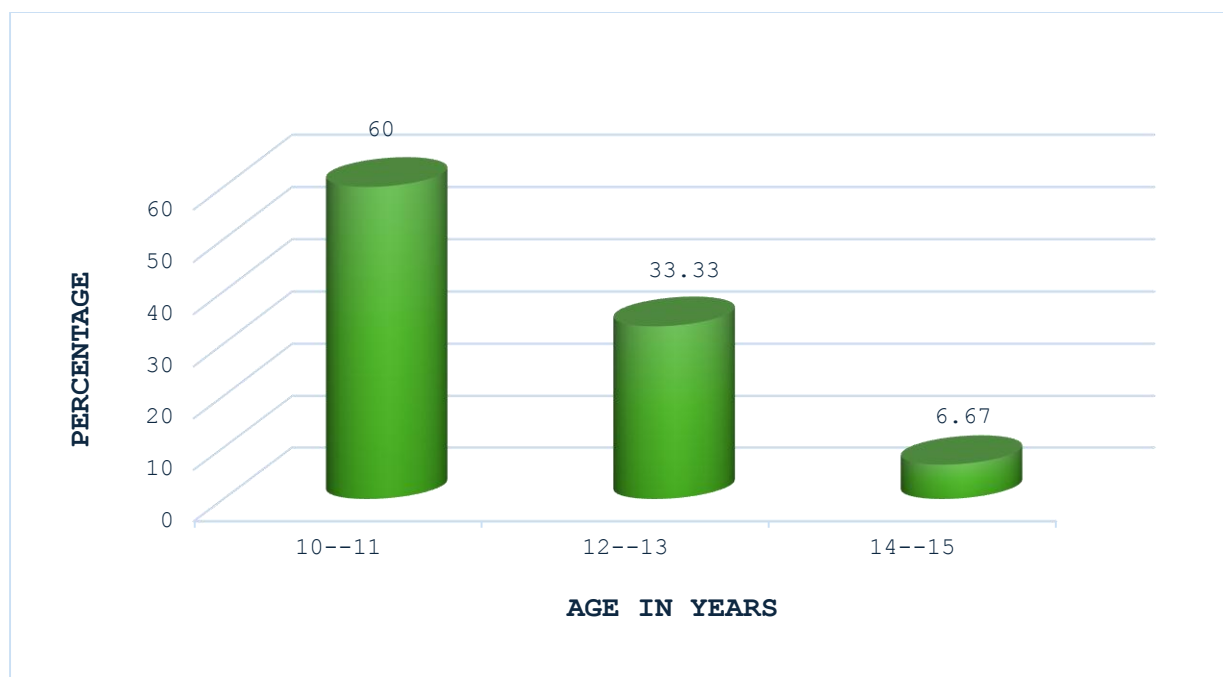


Figure 1: Distribution of school age children according to age.

Data presented in figure 1 shows that majority (60%) of children were in the age group of 10-11 years. There were 33.33% children in the age group of 12-13 years and only 6.67% were in the age group of 14 - 15 years.



Figure 2: Distribution of school age children according to class of study.

Data in figure 2 reveals that nearly one third (38.33%) of the children were in 7th standard. The remaining 33.34% and 28.33% were in 5th and 6th class respectively.

Section II: Knowledge level of school age children of orphanage on personal Hygiene

Table 1: Distribution of school age children of orphanage according to the grading of pre-test and post-test knowledge score.

| Level of knowledge score | Pre-test | | Post-test | |
|---------------------------|-----------|----------------|-----------|----------------|
| | frequency | percentage (%) | frequency | percentage (%) |
| Poor (40%) | 5 | 8.33 | 0 | 0.00 |
| Average (41-55%) | 21 | 35.00 | 1 | 1.67 |
| Good (56-79%) | 31 | 51.67 | 17 | 28.33 |
| Very good (80% and above) | 3 | 5.00 | 42 | 70.00 |

n=60

Maximum score – 30

It is evident from table 1 that highest (70) percentage of school age children had very good knowledge and 28.33% had good knowledge in the post-test while only 5% had very good knowledge and 51.67% had good knowledge in the pre-test.

Section III: Effectiveness of planned teaching programme on various aspects of personal hygiene among school age children.

Table 2: Range, Mean, Median, Standard deviation and ‘t’ value of pre-test and post-test knowledge score of school age children of orphanage.

| Knowledge | Range | Mean | Median | Mean percentage | Standard deviation | ‘t’ value |
|-----------|-------|-------|--------|-----------------|--------------------|-----------|
| | | | | | | |
| Post-test | 15-28 | 24.45 | 25 | 81.50 | 2.65 | |

n=60

$t_{59}=2.000, p<0.05$

*significant

Table 2 reveals that Mean±SD of post-test (24.45±2.65) was higher than the Mean±SD of pre-test (17.83±4.29) showing a difference of 6.61 which indicates that there was significant difference between the pre-test and post-test knowledge scores. The computed ‘t’ value ($t_{59}=18.79$) was higher than the table value ($t_{59}=2.000$) at 0.05 level of significance.

Table 3: Area wise Mean, Standard Deviation, Mean difference and paired ‘t’ value of pre-test and post-test knowledge score of school age children regarding various aspects of personal hygiene.

n=60

| Area | Pre-test (X) | | | Post-test (Y) | | | ‘t’ value |
|-------------------------------|--------------|------|--------|---------------|------|--------|-----------|
| | Mean | SD | Mean % | Mean | SD | Mean % | |
| General information | 0.8 | 0.40 | 80 | 0.98 | 0.12 | 98 | 2.176* |
| Care of skin | 3.31 | 1.25 | 66.2 | 4.65 | 0.48 | 93 | 8.809* |
| Care of hair | 1.71 | 0.97 | 42.75 | 3.05 | 0.72 | 76.25 | 6.093* |
| Care of mouth | 2.1 | 0.93 | 52.50 | 3.31 | 0.81 | 82.75 | 9.920* |
| Care of hands, feet and nails | 4.31 | 1.03 | 71.83 | 5.03 | 0.84 | 83.83 | 5.782* |
| Care of eyes, ear and nose | 3.15 | 1.11 | 52.50 | 4.60 | 1.01 | 76.66 | 10.749* |
| Care of external genitalia | 2.43 | 1.01 | 60.75 | 2.81 | 0.92 | 70.25 | 4.737* |
| Total | 17.81 | 6.70 | 59.36 | 24.43 | 4.90 | 81.43 | 48.266 |

t₅₉=2.000, p<0.05

***Significant**

The data presented in table reveals the significant difference between pre and post-test knowledge score in all the areas. The computed ‘t’ value in all the areas were higher than the table value (t₅₉=2.000, p<0.05). This shows that the planned teaching programme was effective in increasing the knowledge of the school age children on various aspects of personal hygiene.

Section IV: Association between pre-test knowledge score and baseline characteristics

Table 4: Association between the pre-test knowledge scores and selected baseline characteristics

n=60

| Baseline characteristics | Pre-test knowledge score | | χ ² |
|-----------------------------------|--------------------------|---------|----------------|
| | <median | ≥median | |
| Age (in years) | | | 0.122 |
| 10-11 | 14 | 22 | |
| 12-13 | 9 | 11 | |
| 14-15 | 2 | 2 | |
| 16 & above | 0 | 0 | |
| Class of study | | | 0.193 |
| 5 th standard | 10 | 10 | |
| 6 th standard | 11 | 6 | |
| 7 th standard | 4 | 19 | |
| Years of stay in orphanage | | | 0.548 |
| Less than 1 | 3 | 4 | |
| 1-2 | 15 | 18 | |
| 3-4 | 6 | 10 | |
| More than 5 | 1 | 3 | |
| Any previous information | | | 0.472 |
| Yes | 23 | 30 | |
| No | 4 | 3 | |

χ²= 3.841, P<0.05

The data presented shows that the computed χ² values for the baseline characteristics age (χ² = 0.122), class of study (χ²= 0.193), years of stay in the orphanage (χ²= 0.548) and previous information (χ²= 0.472) is less than the tabled value (χ²=3.841) at 0.05 level of significance. It was inferred that there was no significant association between the knowledge of school age children on personal hygiene with selected baseline characteristics at 0.05 (p<0.05) level of significance.

IV. Discussion

- The findings of the present study revealed that highest (70) percentage of school age children had very good knowledge and 28.33% had good knowledge in the post-test while only 5% had very good knowledge and 51.67% had good knowledge in the pre-test on personal hygiene.

- The effectiveness of PTP on personal hygiene was evident from post-test score of school age children. The mean percentage of pre-test knowledge score of school age children was 59.43% with $x \pm SD$ of 17.83 ± 4.29 whereas post-test mean percentage knowledge score was 81.50% with $x \pm SD$ of 24.45 ± 2.65 showing the difference of 6.61 scores. Further, to know the statistical significance the 't' value was computed. The computed 't' value ($t_{59}=18.79$) was higher than the table value ($t_{59}=2.000$) at 0.05 level of significance.
- The area-wise analysis showed that there was significant difference between pre and post-test knowledge scores in all the areas. The effectiveness of planned teaching programme in the area of care of mouth had the mean percentage knowledge score (52.50%) in pre- test with that of 82.75% in the post test. In the area of care of hair the mean percentage knowledge scores of pre-test was 42.75 with the $x \pm SD$ of 1.71 ± 0.97 which significantly increased to the mean percentage of 76.25% with the $x \pm SD$ of 3.05 ± 0.72 in the post-test. The computed 't' value in all the areas were higher than the table value ($t_{59}=2.000, p < 0.05$).
- Chi-square test was computed in order to find association between knowledge and selected variables revealed that there was no significant association between knowledge and baseline characteristics such as age, class of study, years of stay in orphanage and any previous information.

V. Nursing Implications

The findings of the study have implications on the field of nursing education, nursing practice, nursing administration and nursing research.

Nursing education

The present study would help the nurses to understand the level of knowledge of primary school children on personal hygiene. This study gives awareness about the different areas of personal hygiene to the nurses as well as nursing students. The curriculum should incorporate activities like preparation of booklets, pamphlets and teaching methods for disseminating knowledge on personal hygiene.

Nursing practice

Nurses should conduct teaching programmes for orphanage children, caretakers and parents to promote the well-being of orphan children. The present study revealed that majority of the school age children of orphanage had good knowledge but not practicing the personal hygiene which is so important when children live in a group. The investigator as a nurse felt the need that nurses should act as facilitators to educate school age children regarding personal hygiene and constantly reinforce the healthy practices thereby improving the wellbeing of children.

Nursing administration

Nursing administration should implement outreach programmes to make the children aware of the basic health promoting practices to be followed at home. Necessary administration support and necessary health education materials should be provided to conduct several activities.

Nursing research

In nursing, there is scarce literature and research done on knowledge of School age children of orphanage (8-12years) regarding personal hygiene. Research should be conducted to assess the health needs and problems of orphanage children due to poor personal hygiene.

VI. Recommendations

The following recommendations were formed

- A similar study could be undertaken with a large sample to generalize the findings.
- A comparative study can be carried out to ascertain knowledge, attitude and practices regarding personal hygiene with a control group design.
- A similar study can be conducted in other age groups.
- A follow-up study of Planned Health Teaching Programme could be carried out to find out the effectiveness in terms of retention of knowledge.
- A comparative study can be conducted to assess the knowledge, attitude and practice regarding personal hygiene of urban and rural school children.
- A descriptive study could be conducted to study health problems caused due to poor personal hygiene.
- Study to identify problems of orphanage children and factors influencing personal hygiene practices can be conducted.

VII. Conclusion

Personal hygiene is the practice of maintaining cleanliness of the body. In addition to improving appearance, personal hygiene is an important form of protection against disease and infections of all kinds. However, maintaining good or acceptable personal hygiene is seldom perceived and acknowledged as protection against disease. Understanding the importance of personal hygiene allows child to make informed decisions about how to care for their health and appearance⁶.

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