



## Knowledge and Practice of Personal Hygiene among School Children in Magboro Community, Ogun State

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### Abstract

**Background:** Good knowledge and practice of personal hygiene plays a major role in the reduction of the burden of communicable diseases. When school children are well informed, it will not be difficult for them to put into practice healthy behaviors that will promote healthy living. Hence, the need to carry out a research study on the knowledge and practice of personal hygiene among school children in selected primary schools. **Aim:** The study assessed the knowledge of personal hygiene and its practice among primary school children in Magboro Community, Ogun State. **Methods:** This study adopted descriptive research design and a self-developed questionnaire was used to elicit information from 315 school children in selected private primary schools in Magboro, Ogun State. **Results:** Findings from this study showed that 198(66.0%) school children had good knowledge while 259 (86.3%) had good practice on personal hygiene. Association was seen between the school children's grade level and knowledge ( $p = 0.000$ ); between the grade level and the level of practice ( $p = 0.018$ ); and between knowledge and practice (0.000). **Conclusion:** Majority of the school children had good knowledge and practice on personal hygiene. However, the school management should endeavour to continue to imbibe in teachings of personal hygiene in order to improve and maintain high level of knowledge and practice amongst the school children.

**Keywords:** Knowledge, Practice. Personal hygiene, School children.

### Introduction

Personal hygiene is the principle of maintaining cleanliness and grooming the external body (Azuamah et al, 2018). It entails all the activities, actions and practices carried out by an individual to keep the body clean and healthy. It encompasses factors contributing to healthy living such as bathing, clothing, care of the nails, feet, and teeth among others (Rahman et al, 2019). Many conditions are commonly seen among school children relating to poor personal health care, such as diarrhoea, skin infection, abdominal pains and dental caries (Thekdi, Kartha & Thekdi, 2016). At this stage of development,

assessing the school children's knowledge and practice of personal hygiene goes a long way in building a foundation that can be sustained throughout their lifetime. According to Sihra et al; (2019) school children relay information being given from school to their parents and the neighbourhood further impacting knowledge of personal hygiene.

Increase in the prevalence of communicable diseases among school-aged children has being a major public health challenge especially in the developing countries (Ghanim, Nihar, Bashayer, & Zaid, 2016). It has been documented that school-aged

children are exposed to the possibility of not being aware of what personal hygiene means and the major role it plays in staying healthy. Good knowledge and adequate practice of hygiene reduce the exposure of school children to pathogens and communicable diseases in the community. According to Berendes et al (2019), good personal hygiene practices, promotion and education have a great influence on reducing the prevalence of communicable diseases among school-aged children both at home and in the schools. Healthy school children stay in school the more and perform better academically. In addition, inculcating good practices of personal hygiene from childhood will guarantee a healthy life in adulthood (Sakar, 2013). In achieving the sustainable development goal number 2; “to ensure healthy lives and promoting well-being for all, at all ages” (United Nations, 2015) good knowledge and practice of personal hygiene plays a critical role in preventing communicable diseases among school children. Hence, the need to carry out a research study on the knowledge and practice of personal hygiene among school children in selected primary schools in Magboro Community, Ogun State.

### **Material and Methods**

This was a descriptive cross-sectional study carried out among three hundred and fifteen school children in selected private primary schools in Magboro Community. Magboro is a community located in Obafemi Owode Local Government Area, Ogun State. The community shares boundary with Lagos State and other parts of Ogun State. The school children aged 6 – 12 years in grade levels 1-6 were selected using a multi-staged sampling technique. Three stages were used in selecting respondents for the research study. The list of all the 15 private primary schools in Magboro community was obtained from the Inspection of Education’s office. The first stage entailed randomly selecting 5 private primary schools which are one-third of the total number of schools. Each school was stratified according to the grade levels to ensure that all levels

were adequately represented in the sample. The second stage entailed the use of a proportionate sampling to select the number of school children needed from each grade level in each school. Lastly, a simple random sampling technique was used to select 315 respondents for the study. However, only 300 questionnaires were adequately filled and returned; a response rate of 95.3%.

A self-developed questionnaire from a review of previous literature was used to collect data from the school children. The instrument was into three (3) sections: the socio-demographics, items on knowledge of school children about personal hygiene and items on the practice of personal hygiene.

The content and construct validity of the instrument was ascertained by pre-testing the instrument in a private school in Mowe community in the same Local Government Area with a similar setting. A test-retest method was used with 30 school children. The instrument was administered twice to the same number of respondents within a two weeks interval. Pearson’s correlation coefficient was used for test-retest reliability of the instrument with two weeks interval during the pre-test. The correlation coefficient value is 0.83, which implies a strong correlation between the variables.

The ethical approval was given by the Lagos University Teaching Hospital Health and Research Ethics Committee with the approval number ADM/DCST/HREC/APP/3253. A letter of introduction was sent from the Local Inspection of Education’s office, same presented to the Proprietors and Headmasters of the selected schools. Parental permission was sought as well as each school child assenting to participate in the study. Anonymity and confidentiality were assured and maintained throughout the data collection. All data collected and the completed questionnaires were kept secure. Data were collected within a month (October 2019) by the researcher. Data collected was analyzed using Statistical Package for the Social Services (SPSS) Version 20. The data were

analyzed using descriptive and inferential statistics. Chi-square was used to establish the

associations between variables for the hypotheses at the significance level of 0.05.

**Results**

**Table 1: Socio-Demographic Data**

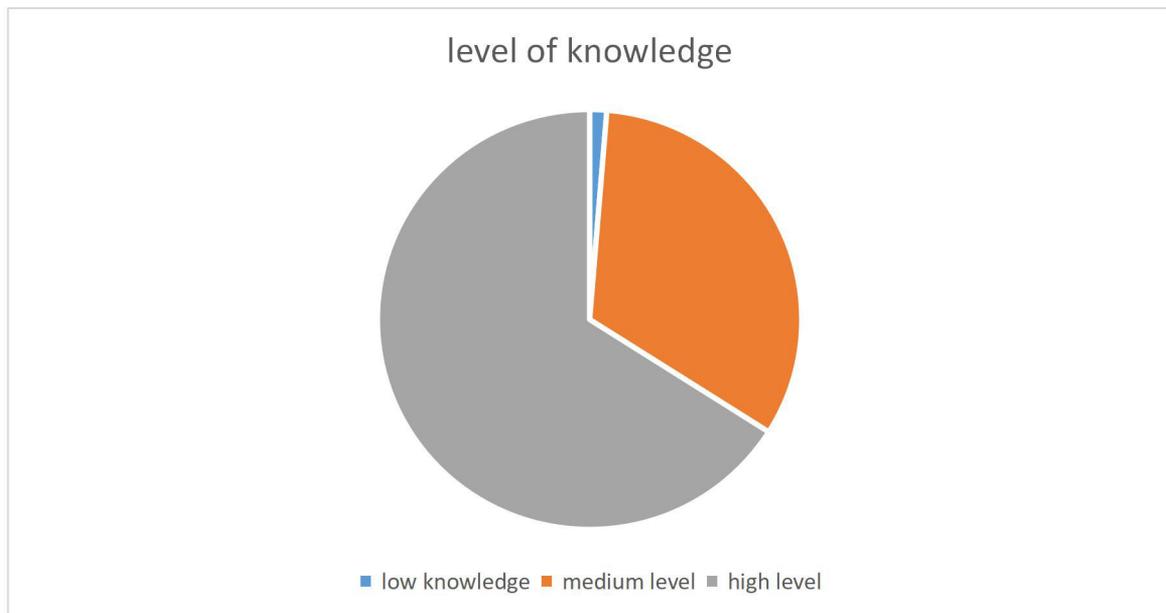
Variables	Frequency	Percentage
<b>Gender</b>		
Male	159	53.0
Female	141	47.0
<b>Total</b>	<b>300</b>	<b>100</b>
<b>Age</b>		
1-4 years	17	5.7
5-8 years	177	59.0
9-12 years	106	35.3
<b>Total</b>	<b>300</b>	<b>100</b>
<b>Grade</b>		
Grade 1-3	145	48.3
Grade 4-6	155	51.7
<b>Total</b>	<b>300</b>	<b>100.0</b>
<b>Family type</b>		
Nuclear family	245	81.7
Extended family	55	18.3
<b>Total</b>	<b>300</b>	<b>100.0</b>
<b>Mother's occupation</b>		
Professional	105	35.0
Artisan	195	65.0
Full house wife	0	0.0
<b>Total</b>	<b>300</b>	<b>300</b>
<b>Father's occupation</b>		
Professional	78	26.0
Artisan	189	63.0
Unemployed	33	11.0
<b>Total</b>	<b>300</b>	<b>100.0</b>

A little above half 159 (53%) of the school children were males, with 194 (64.7%) within the age range of 5-8 years. Majority of the school children are from the nuclear family

type 245 (81.7%); while 195 (65%) mothers were artisans, and 189 (63%) of the respondents' fathers were also artisans as seen in Table 1.

**Table 2: Knowledge of School Children on Personal Hygiene**

Variables	Yes N (%)	No N (%)	Not sure N (%)	Total N (%)
Personal hygiene means maintaining cleanliness of the external body.	300(100.0)	0(0.0)	0(0.0)	300(100)
The practice includes bathing, washing of hands, clothes and brushing of teeth.	293(97.7)	3(1.0)	4(1.3)	300(100)
Washing of hand is effective when done with soap and water	234(78.0)	58(19.3)	8(2.7)	300(100)
Ash can be used in rural areas where soap and water is not available	228(76.0)	47(15.7)	25(8.3)	300(100)
Alcohol hand sanitizer can be used instead of water and soap	139(46.3)	153(51)	8(2.7)	300(100)
Do you know that germs can stay on the body if it not properly washed	290(96.7)	8(2.7)	2(2.7)	300(100)
Do you know that germs on dirty clothes can cause diseases on the skin	294(98.0)	2(0.7)	4(1.3)	300(100)
Do you know that biting dirty nails can lead to stooling and abdominal pain	290(96.7)	10(3.3)	0(0.0)	300(100)
Do you know that not brushing the teeth with toothpaste or chewing stick can lead to a hole in the teeth and mouth odour	292(97.3)	4(1.3)	4(1.3)	300(100)
Not washing hands after defecating can make one fall sick	294(98.0)	4(1.3)	2(0.7)	300(100)
Germs can enter the body through the feet by not using footwear regularly.	292(97.3)	6(2.0)	2(0.7)	300(100)



**Figure 1: Overall Level of Knowledge on Personal Hygiene**

All the school children could define personal hygiene as the maintenance of cleanliness of the body. Majority 293 (97.7%) reported that hygiene practices include bathing, washing of hands, clothes and brushing of teeth. In addition, a greater proportion of 294 (98%) knew that germs on dirty clothes can cause diseases on the skin as well as biting dirty nails can lead to stooling and abdominal pain.

However, less than half 139 (46.3%) of the school children only reported that alcohol hand sanitizer can be used instead when water and soap are not available (Table 2). A summary of the school children’s knowledge on personal hygiene showed that 198 (66.0%) had good knowledge, 98 (32.7%) moderate knowledge while 4 (1.3%) had poor knowledge as shown in Figure 1.

**Table 3:** Practice of Personal Hygiene among School Children

Practice	Always N (%)	Sometimes N (%)	Never N (%)	Total N (%)
Hand washing before meal with soap and water	272(90.7)	28(9.3)	0(0.0)	300(100.0)
Hand washing after defecation with soap and water or sanitizer	290(96.7)	28(9.3)	0(0.0)	300(100.0)
Oral care with toothpaste and brush or chewing stick	285(95.0)	11(3.7)	4(1.3)	300(100.0)
Daily bathing using soap, water and sponge	272(90.7)	28(9.3)	0(0.0)	300(100.0)
Washing of clothes regularly	231(77.0)	60(20.0)	9(3.0)	300(100.0)
Hand washing immediately after returning from school	170(56.7)	110(36.7)	20(6.7)	300(100.0)
Regular use of footwear	246(82.0)	51(17.0)	3(1.0)	300(100.0)
Regular visit to the dentist	81(27.0)	92(30.7)	127(42.3)	300(100.0)



**Figure 2:** Overall Level of Practice on Personal Hygiene

The most practised personal hygiene among the respondents is hand washing after defecation 290(96.7%), brushing of the teeth with toothpaste 285(95%), followed by washing of hands before a meal and daily bath using soap, sponge and water 272(90.7%) respectively. One hundred and seventy (56.7%) of the school children studied always practice handwashing immediately after returning from school; indicating a little above

of the school children does this. Below half 127 (42.3%) of the respondents never visited the dentist, 92 (30.7%) sometimes visit the dentist while 81 (27%) visit the dentist regularly as seen in Table 3. The overall level of practice on personal hygiene showed that 259(86.3%) of the respondents had a good practice of personal hygiene while 41(13.7%) had a poor practice of personal hygiene (figure 2).

**Table 4:** Association between the Grade Level of the Respondents' and their Knowledge on Personal Hygiene

Grades	Level of Knowledge			Total	X <sup>2</sup>	df	p-value
	Low	Medium	High				
1-3	0	21	126	145	76.89	10	0.00
4-6	4	76	75	155			
Total	4	97	199	300			

**Table 5:** Association between the Academic Level of the Respondents' and their Practice of Personal Hygiene

Grades	Level of Practice		Total	X <sup>2</sup>	df	p-value
	Poor	Good				
1-3	15	130	145	13.70	5	0.018
4-6	26	129	155			
Total	41	259	300			

**Table 6:** Association between the Respondents' Knowledge and Practice of Personal Hygiene

Level of Knowledge	Level of Practice		Total	X <sup>2</sup>	df	p-value
	Poor	Good				
Low	4	0	4	27.56	2	0.000
Medium	16	81	97			
High	21	178	199			
Total	41	259	300			

Association was seen between the school children's grade level and knowledge (p = 0.000); between the grade level and the level of practice (p = 0.018), and between knowledge and practice (0.000).

**Discussion** The findings of this study show that the overall knowledge of the school children is good. All could define personal hygiene, identify that it entails bathing, washing of hands before eating, after toilet use and after playing. In addition, the school children were knowledgeable that germs on dirty clothes can lead to skin infections, and

biting dirty nails can lead to stooling and abdominal pains. This is in line with a study carried out among school children in the United Arab Emirate (Ghanim et al, 2016). It was documented that the majority of school children identified bathing as the most important aspect of personal hygiene. Rahman et al (2019), Rajbhandari et al (2018) and Shilunga et al, (2018) agree with the findings of this study. The authors reported that school children have good knowledge of personal hygiene. These studies were carried out in Bangladesh, Nepal and Namibia among school children respectively. Sarkar (2013)

carried out a study on personal hygiene among primary school children living in a slum of Kolkata in India. Despite living in the slum, it was documented that primary school children between grade levels 1 -5 had good knowledge of personal hygiene. However, Khatoon et al (2017) disagreed with the findings from this study and found in their study that school children had poor knowledge of personal hygiene.

The result of this study shows that the majority of the respondents have a good practice on personal. In accordance to the findings of this study, Rahman et al, (2019) documented satisfactory practice of personal hygiene among school children in Bangladesh where the children attending the school were mainly from the neighbouring slum. On the contrary, studies conducted among school children in Indian, Pakistan, Nepal, Namibia, Ghana and Nigeria revealed an unsatisfactory level of practice on personal hygiene. (Khatoon et al, 2017; Parveen et al, 2018; Rajbhandari et al, 2018, Shilunga et al 2015, Darjaan et al, 2018 & Oyibo, 2012). An obvious gap is seen between knowledge and practice on personal hygiene among most school children. The implication is that having the knowledge does not translate to practice. That is, being equipped with facts, information and skill is not enough but the actual application of the information on personal hygiene goes a long way in preventing pathogens and communicable diseases.

The findings of this study also revealed that a significant relationship exists between the grade level of school children and their knowledge of personal hygiene ( $p=0.000$ ). This is in agreement with Ghanim et al (2016) and Shilunga et al, (2018) on their studies carried out in the United Arab Emirates and Namibia respectively. Furthermore, the findings of this present study also show a significant relationship between the grade level of the school children and their practice of personal hygiene ( $p=0.018$ ). Shilunga et al, (2018) conformed to the findings of this

present study, where the practice of personal hygiene is significantly related to grade level. The results from this study further reveal a significant relationship between the knowledge and practice on personal hygiene ( $p=0.000$ ) among school children. The study by Sakar (2013) reported that no significant relationship was seen between knowledge and practice on personal hygiene among school children. The result is not in accordance with the findings of this present study.

### **Conclusion**

In conclusion, the majority of the respondents had good knowledge and practice on personal hygiene. It is imperative to teach school children on personal hygiene because they are more receptive to learning and eager to put into practice healthy behaviour. It is encouraged that personal hygiene should be taught more and emphasized as this study shows a significant relationship between knowledge and practice of personal hygiene.

### **Recommendations**

- ✧ It is recommended that every school should be well equipped to support personal hygiene practice.
- ✧ Federal Ministry of Health in conjunction with the ministry of education should help implement better health education policies amongst students through the implementation of the school health programme in other to improve the practice of personal hygiene among students in both primary and secondary schools.
- ✧ The school teacher should be encouraged to create awareness and give adequate health education on personal hygiene to school children.
- ✧ Hand hygiene teaching should be incorporated into the school curriculum or syllabus both in primary and secondary schools.

**Running Title:** Personal hygiene among School Children

**Conflict of Interest:** None

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