

KNOWLEDGE AND PRACTICE OF PERSONAL HYGIENE AMONG URBAN AND RURAL DWELLERS IN CENTRAL CROSS RIVER STATE, NIGERIA

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Abstract

This study assessed knowledge and practices of personal hygiene among semi-urban and rural dwellers in Central, Cross River State, Nigeria. Two research questions were formulated to guide the study. Literature review was carried out based on the variables under study. Survey research design was utilized. Stratified, random sampling technique was used in selecting the 814 respondents sampled for the study. A validated 20 items semi-structured questionnaire was the instrument used for data collection. The reliability estimate of the instrument was 0.83 using Cronbach Alpha reliability method. Data was analysed using the descriptive analysis of frequency and percentages. The result of the study revealed that majority of the residents had fair knowledge of personal hygiene and poor practices. It was recommended that training should be organized for rural dwellers on how to take care of their teeth, hair, feet, nose, eyes and hands.

Key words: Knowledge Practices, Personal hygiene. Residents, Cleanliness

Introduction

Personal hygiene is a concept that is commonly used in medical and public health practices. It involves maintaining the cleanliness of our body and clothes. The knowledge and practice of personal hygiene are vital in all our everyday activities. The public health purposes of personal hygiene include the prevention of faeco-orally transmitted diseases, aesthetic values and social impact (Baslos, 2010). The components of personal hygiene include body hygiene (skin care), oral hygiene (oral care), hand washing (hand care), face hygiene, fingernail and toe nail hygiene (nail care), ear hygiene, hair hygiene, foot hygiene, arm pit and bottom hygiene, clothes hygiene and menstrual hygiene. Several studies show that personal hygiene practices include: seeing a doctor, seeing a dentist, regularly washing (bathing or showering) of the body, regular hand washing, brushing and flossing of teeth, basic manicure and pedicure, feminine hygiene and healthy eating (Ali et al 2013; Bastos, 2010).

Many diseases can be prevented if residents take personal hygiene seriously.

According to UNICEF (2014), numerous studies have revealed that development of communicable diseases results from unhygienic living or lack of hygienic precautions. In Ethiopia, unsafe water, unhygienic handling of food, storage of food at ambient temperature for a long time, poor domestic and personal hygiene have contributed to the gross contamination of weaning foods leading to increased diarrheal diseases in infants and children (Olauni, 2017). Hygiene practice is closely linked to the availability of water and sanitation facilities; despite this, there are so many places where these are lacking and this situation thus reduces the effectiveness of the personal hygiene of the people particularly among the teeming population in the rural community. Communal areas which offer facilities for hand-washing, bathing and laundry may effectively encourage good hygiene.

Personal hygiene is an important global public health issue. Hygiene refers to practices associated with ensuring good health and cleanliness. Personal hygiene is the practice of maintaining cleanliness of one's own body. Good hygienic care as well as practices in terms of personal hygiene contributes to a large

extent on factors relating to healthful living and prevention of hazards from diseases, These health risk factors are directly related to some important daily activities implicated with worthy operational actions and obligatory responsibilities, such as washing hands before meals and after defecation with soap, brushing teeth at least twice a day specially after breakfast and after meals, taking bath with soap regularly, keeping nails short and taking regular exercise (Alu Rahman & Siddiqui, 2017).

There are so many benefits attached to personal hygiene such as prevention of diseases, quick recovery from illnesses, social acceptance by people, emotional satisfaction and good personal appearance. Personal Hygiene is the first step to good grooming and good health and this involves all measures taken by individuals to preserve his or her health (Johnson, 2015). Improved standard of hygiene will prevent health problems like dandruff, athlete's foot, body odour, pin worms, excessive ear wax, gastro-intestinal diseases (Web Health Centre, 2015).

It is estimated that unsafe water, and lack of sanitation and hygiene every year claim lives of more than 1.5 million under age children particularly from diarrhea. Poor hygiene behaviour is a major problem in developing countries (Van Wijk & Tineke, 2013). Hygiene and sanitation related diseases are a huge burden in developing countries; causing many people to fall ill leading to death (UNICEF, 2008). A large fraction of the world's illness and death is attributable to communicable diseases.

A high percentage of all deaths in Africa including Nigeria are caused by infectious diseases. This trend is especially notable in developing countries like Nigeria and of course Central Cross River State, here acute respiratory and intestinal infections are the primary causes of morbidity and mortality among residents. Some examples of people's action or behaviours that can cause diseases are: not washing hands before eating, defecating anywhere on the open field, not washing hands after defecating, not washing clothes regularly and when necessary, not

bushing the mouth properly with the right materials.

Inadequate sanitary conditions and poor hygiene practices play major roles in the increased burden of communicable disease within these developing countries. The morbidities arising due to poor personal hygiene practices are more evident in the rural areas because of high population density, spread of respiratory infection, inadequate water supply, lack of sanitary facility, diarrhea and worm infestation, inadequate nutrition leading to anemia, malnutrition and vitamin deficiency. Awareness must be provided to increase the level of knowledge. Enlightenment campaigns are acknowledged as important places for developing health promotion and influencing health-related behaviours including hygiene-related behaviours. Once habits are established in adolescent, they tend to be long-lasting and difficult to alter in adulthood.

Attention to personal hygiene will help a person look their best, feel their best and can help in avoiding diseases. Motivation for personal hygiene practice include reduction of personal illness, healing from personal illness, optimal health and sense of well-being, social acceptance and prevention of spread of diseases to others. An individual's personality can be impaired by his failure to give proper care and attention to his body generally (Johnson, 2015).

Globally cases of cholera had been estimated at 3 million yearly (WHO, 2014) and 500 million people are at risk of suffering from blindness from trachomas globally (Centre for disease control, (CDC),2017). The estimated prevalence of ascariasis was 25% globally (Haburchark, 2014). Personal hygiene is among the risk factors for contacting the infections among others. Good personal hygiene in relation to preventing epidemics or even pandemic outbreaks is very significant (Lucas & Gilles, 2012). In Nigeria, five common health problems of residents are fever/typhoid (56%), headache (43%), stomach ache (29%), cough/catarrh (38%) and malaria (40%) (Federal Ministry of Education, (FMOE) 2016). 30% of adolescents have low body Mass Index (BMI), 0.2% have lice on their heads, 3%

have skin rashes, about 20% do not have normal visual acuity, lip sores were observed in 0.8% and 0.5% of the residents respectively, dental plaque was observed in more than 10% of adolescent, 0.4% have sores on their tongue, about 19% do not have normal hearing (FMOE), 2016).

Knowledge and practice of personal hygiene by residents have been found to increase significantly after creation of awareness through enlightenment campaigns. In Nigeria, dental decay constitutes one of the major oral health problems with its prevalence being particularly high among young children and adolescents and the occurrence closely related to oral hygiene and socio economic class (Akpatá, 2014). Good grooming implies decent clothing, well-kept hair, clean teeth, fresh breath, clean skin, and well-manicured nails. All these minute details about a person's body add up to his level of physical health and sense of well-being.

There exist several studies about the knowledge and practices of personal hygiene done on different groups, example secondary school students and adolescents (Tan. Cheng, Soon, Ghazali & Mahyudin, 2013). These studies have shown that poor personal hygiene contribute to cross transmission of microorganisms, gum infections, increased rate of infectious illnesses, incidence of food borne outbreaks and reproductive tract infections. These have been attributed to inadequate knowledge of personal hygiene and its practices. Personal hygiene deficiency diseases have been found to continue to be a serious public health problem in developing countries like Nigeria and people often affected are school children and adolescents. Moreover, to the best of my knowledge, limited studies focused on young students have been found in the literature and there is no formal study conducted concerning personal hygiene knowledge and practice by urban and rural residents of Central Cross River State, Nigeria. Therefore, however, this study assessed the knowledge and practice of personal hygiene of semi-urban and rural residents of Central Cross River State, Nigeria.

Purpose of the study

The purpose of this study is to assess whether;

- i. Semi-urban dwellers of Central Cross River State have knowledge and practice about personal hygiene.
- ii. Rural dwellers of Central Cross River State have knowledge and practice about personal hygiene.

Research questions

The following research questions were stated to guide the study;

- i. To what extent does semi-urban and rural dwellers of Central Cross River State know about personal hygiene?
- ii. To what extent does semi-urban and rural dwellers of Central Cross River State practice personal hygiene?

Literature review

Cleanliness is often regarded as next to godliness and neglect of one's personal hygiene could cause health and social problems that one may not be aware of. Bad breath for example is a problem which affects many people. Some people with the health related challenge are not often aware of it (Nardo, 2015).

When residents are provided with things needed to practice personal hygiene, including skills and necessary information, they will become empowered to put into practice hygienic habits that will promote their health (WHO, 2014). It should be borne in mind that it is not easy to form personal hygiene habits without adequate information and knowledge of what it all entails. However, when people are educated on basic skills related to personal hygiene at different stages of their lives, it will not be difficult for them to continue this throughout life (Ademuwagun, Ajala Oke, Moronkola & Jegede, 2012).

Personal hygiene instructions should be presented creatively to people, personal hygiene for instance can be integrated and taught particularly in schools as a school subject like integrated science, nutrition, biology and health education. External resource persons who are specialists in the field relating to personal hygiene could be invited to discuss and interact with the community including

students. In passing across instructions people must be taught on issues they are already familiar with, before moving on to complex aspects. Also local resources person who are knowledge could be used to buttress this fact (Oshiname, 2013). This is fundamental principle of training which also applies to the provision of PH instructions. Multiple methods like role-play, demonstration, field trips when used ill make learning very interesting. Opportunities outside the classroom should be fully utilized and teachers must have very good social relationship with adolescent students knowing the nature of adolescents - that they respect and confide in those who are approachable and trustworthy (WHO, 2015),

Personal hygiene can be maintained by high standard of personal care and human beings are aware of the importance of personal hygiene for thousands of years. The ancient Greeks spent hours in the bath, using fragrances and make up in an effort to beautify themselves and be presentable. Several studies have shown that it is essential that school pupils practice personal hygiene to improve their health which will enable them learn, live, grow and play their respective roles effectively in their various schools and communities (WHO, 2014). At the same time good knowledge of personal hygiene by residents will go a long way in improving the health of communities. Most infections, especially colds and gastro enteritis are caught when people passed germs from unwashed hands into the mouth and this can be prevented through personal hygiene (Rahman, 2011). The simple act of hand washing for at least 20 seconds according to the United States Food and Drugs Administration recommendations can prevent the spread of many food borne illnesses and upper respiratory tract infections (Federal Drug Agency (FDA), 2009). Hand washing with soap has been reported to reduce diarrheal morbidity by 44% and respiratory infections by 23% (Curtis, Danquah & Aunger, 2019).

Personal hygiene involves personal grooming that deals with maintenance of good personal and public appearance (Nardo, 2015). Personal hygiene practices of the residents in urban areas will likely better than those in the

rural areas due to the fact that the facilities in the rural area are not enough and adequate.

The study of Adeola (2015) was designed to determine the knowledge, perception and practices of PH among SSS in Ibadan North West Local Government Area (LGA). A cross-sectional study design was used. Public Junior Secondary School (PJSS) and two of 9 PSSS selected through simple random sampling. Systematic random sampling was used in selecting 476 respondents out of 724 students. An interviewer administered semi-structured questionnaire, which included a 28 knowledge, 9 perception, and 31 practice scales, was used for data collection. Knowledge scores of ≤ 10 , > 10 to < 20 and ≥ 20 were rated as poor, fair and good respectively. Perception scores of 4 were classified as positive while practice scores of 15 were rated as good. Two different sets of observational checklists were used to assess respondents' physical appearance, classrooms and the school's environment. Data were analysed using descriptive statistics and Chi-square test at 5% level of significance.

Respondent's mean age was 13.9 ± 2.0 , 55.7% were females and 60.3% were in JSS. Mean knowledge, perception and practice scores were 17.8 ± 3.9 , 5.8 ± 2.1 and 15.4 ± 4.7 respectively. Respondents with poor, fair and good knowledge in PJSS were 4.9%, 80.1% and 15.0%, while those in the PSSS were 0.5%, 56.1% and 43.4% respectively. Majority (72.9%) had positive perception of PH, 48.8% of the respondents in PJSS and 54.0% in PSSS engaged in good practice. The opinion of 45.6% was that hand washing with clean water alone was enough to make hands free of germs. Bad PH practices among respondents included sharing of bathing sponge with others (73.8%), cutting of fingernails with teeth (40.3%) and cleaning of nostrils with fingers (31.5%). Significantly more respondents (66.4%) with good knowledge of PH engaged in good PH practices compared to those with poor knowledge that engaged in good PH practices (46.7%) with P-value of 0.01.

Also more "respondents (58.0%) with positive perception engaged in good practices, than

33.3% with negative perception who engaged in good PH practices. Majority (62.0%) of the observed respondents had neatly combed hair, 87.1% had clean teeth, 98.0% had foot wear on and 72.3% wore stockings. Only 2.9% of the classes observed had bowls for water, none had either soap or towel and only 17.6% of the classes had dustbins. The median number of toilets in the schools was 3.0 (range 0-6) and 80.0% of the schools had dug wells. Majority of the respondents had positive perception of personal hygiene and their knowledge was fair. Furthermore, some of their practices have potential for putting them at risk of infection. Training and the provision of adequate sanitary facilities are needed to address the challenges.

Methodology

The design for the study was descriptive cross-sectional survey. It identifies the personal hygiene knowledge, and practice of residents in central cross River State, Nigeria, The area of the study is Central Cross River State, Nigeria, The zone is comprised of six Local Government Areas specifically; Abu Bold, Etung, Ikom, Obubra and Yakurr Local Government Areas, individually. The Zone has boundaries toward the North with Ogoja and Yala Local Government Areas of the Northern Cross River State; Biase and Akamkpa Local Government Areas of Southern Cross River State toward the South, and the Cameroon Republic toward the East, while toward the West with Ebonyi State. The locale lies between latitude $5^{\circ} 30' 6''$ North $7^{\circ} 45' 9''$ North of the Equator and longitude $7^{\circ} 45' 15''$ East of the Greenwich Meridian. The zone has a territory of 306 Square Kilometers (118 sq mi). The zone has a projected population of about 203,674 male and female residents between the ages of 10-65 years. The semi-urban areas are Ugep urban and Ikom urban cities.

The sampling technique used in this study is the stratified random sampling technique, 4% of the total population in the study area was

used to get a sample of 814 respondents. Data were collected using qualitative and quantitative research instruments; quantitative data was collected through the use of semi-structured questionnaires while qualitative data was collected through the use of observation checklists. This consisted of three sections namely: Section A - Socio-demographic information with five items under it containing the respondents' gender, age, location, religion and occupation. Section B: Knowledge relating to personal hygiene. Section C: Personal hygiene practices which indicated the actions of the respondents on personal hygiene.

In order to ensure the reliability of the instrument, the research instruments were pretested among residents in Biase Local Government Area. Fifty respondents were selected in the Area. The pretested questionnaire was cleaned, coded and entered into an SPSS computer package and a Statistical Reliability Analysis was conducted to test the reliability of the questionnaires. The value of the Alpha model of reliability obtained was 0.83 which showed a good degree of internal consistency. The statistical tool for data analysis was descriptive analysis of frequency and percentages.

Results and Discussions

The result consists of findings generated from data, collected using semi-structured questionnaire. The result from the data analysis is better presented in order of the research question for better understanding of the result. Therefore, the result is presented and interpreted according to the analysis from the data collected for the research question. The results from the semi-structured questionnaire are organised in the following sections: Section A - Socio-demographic information, Section B - Knowledge relating to personal hygiene, Section C - Personal hygiene practices.

Respondent's socio-demographic characteristics by gender, age, location, religion and occupation

Table 1: Frequency distribution of the socio-demographic characteristics of the subjects (N-814)

S/N	Sub variables	Frequency	Percentage	
1.	Gender	Male	577	70.9
		Female	237	29.1
2.	Age	15 years and below	303	37.8
		16-35 years	277	34.1
		36 years and above	229	28.1
4.	Location	Semi-urban	485	59.6
		Rural	329	40.4
5.	Religion	Christianity	697	85.6
		Muslim	24	2.1
		African traditional Practice	93	11.4
7.	Student Occupation	239	29.4	
8.	Farmer	176	21.6	
9.	Civil servant	151	18.5	
10.	Public servant	207	25.4	
11.	Business	41	5.1	

The result presented in Table 1 revealed that 577 of the respondents representing 70.9% were males while 237(29.1%) respondents were females. The finding also revealed that 308 respondents representing (37.8%) were 15 years of age and below; 277 (34.1%) respondents were between 16-35 years, while 229 (28.1%) respondents were 36 years and above. Further examination of the result revealed that 485 respondents representing 59.6% were semi-urban dwellers; 329 representing 20.4 were rural dwellers. Furthermore, the examination revealed that 697 of the respondents representing 85.6% were Christians, 24 respondents, representing 2.1

were Muslims while 93 (11.4%) respondents were practicing African tradition. The examination also revealed that 239 of the respondents representing 29.4% were students, 176 respondents, representing 21.6 were farmers, 151 representing 18.5 were civil servants, 207 representing 25.4 were public servants, while 41(5.1%) respondents were business men and women.

Research question one

To what extent do semi-urban and rural dwellers of Central Cross River Sate know about personal hygiene?

Table 2: Descriptive analysis of knowledge of respondents about personal hygiene

S/N	Variable item	Frequency/percentage	
		Yes (%)	No (%)
1.	Covering one's nostrils while sneezing is not part of personal hygiene	497(61.0)	317(38.9)
2.	Cleaning the inner part of ear with cotton bud is bad health behaviour	465(57.1)	349(42.9)
3.	Cleaning of nostrils with one's fingernails is normal.	501(61.5)	313 (38.5)
4.	Brushing one's teeth cannot prevent mouth odour	309(37.7)	505(62.1)
5.	Clothes are to be washed only when they appear dirty	291(35.7)	523(64.3)
6.	Sharing one's clothes with others cannot lead to infections	315(38.7)	499 (61.3)
7.	One's hands should be washed with soap and water after using the toilet	608(74.7)	206(25.3)
8.	One's hand should be washed before eating any type of food	414(50.9)	400(49.1)
9.	While brushing the teeth the tongue can also be cleaned	348(42.80)	466(57.20)
10.	One's hands should be washed before preparing food	311(38.2)	503(61.8)

The result presented in Table 2 revealed that 497 of the respondents representing 61.0% agreed that covering one's nostrils while sneezing is not part of personal hygiene, while 317 representing 38.9% respondents disagreed. The finding also revealed that 465 of the respondents representing 57.1% agreed that cleaning the inner part of ear with cotton bud is bad health behaviour, while 349 representing 42.9% respondents disagreed. Further examination of the result revealed that 501 respondents representing 61.5% agreed that cleaning the inner part of the ear with cotton bud is bad health behaviour, while 313 representing 38.5% respondents disagreed. Again, the examination revealed that 309 respondents representing 37.9% agreed that brushing one's teeth cannot prevent mouth odour, while 505 representing 62.1% respondents disagreed.

The examination also revealed that 291 respondents representing 35.7% agreed that clothes are to be washed only when they appear dirty, while 523 representing 64.3% respondents disagreed. The finding also revealed that 315 of the respondents representing 38.7% agreed that sharing one's clothes with others cannot lead to infections, while 499 representing 61.3% respondents disagreed. Going forward, the finding revealed that 608 of the respondents representing 74.7% agreed that one's hands should be washed with soap and water after using the toilet, while 206 representing 25.3% respondents disagreed. The examination also revealed that 414 respondents representing 50.9% agreed that one's hand should be washed before eating any type of food, while 400 representing 49.1% respondents disagreed. The finding also revealed that 348 of the respondents

representing 42.8% agreed that while brushing the teeth the tongue can also be cleaned, while 466 representing 57.2% respondents disagreed. Finally, the finding also revealed that 311 of the respondents representing 38.2% agreed that one's hands should be washed before preparing food while 503 representing 61.8% respondents disagreed.

The personal hygiene knowledge of majority of the respondents was high. Just a quarter had good personal hygiene-related knowledge. This is not good enough as many of the health problems which compromise resident health can be prevented or controlled through adequate knowledge of personal hygiene. This finding is in line with UNICEF (2014), which stated that numerous studies have revealed that development of communicable diseases results from unhygienic living or lack of hygienic precautions.

This is also supported by Oshiname, (2013) that personal hygiene instructions should

be presented creatively to residents; personal hygiene for instance can be integrated and taught in subjects like integrated science, nutrition, biology and health education. External resource persons who are specialists in field relating to personal hygiene could be invited to discuss with students. In passing across instructions people must be taught on issues they are already familiar with, before moving on to complex aspects. Local resources can be used to buttress this fact.

The level of knowledge of the respondents in this study indicated that much needs to be done by the various stakeholders in the society and schools in improving the status of personal hygiene education.

Research question two

To what extent do semi-urban and rural dwellers of Central Cross River State practice personal hygiene?

Table 3: Descriptive analysis of respondents' personal hygiene practices

S/N	Variable Item	Frequency/percentage	
		Always %	Never %
1	Covering the nose with handkerchief when sneezing	210 (25.8)	604(74.2)
2.	Use of fingers in cleaning the Nose	501 (61.5)	313 (38.5)
3.	Flushing eyes with water when something gets there mistakenly	326(40.0)	488(60.0)
4	Sharing sunshade or glasses with family members, friends and others	295 (36.2)	519(63.8)
5.	Cleaning of ear with cotton buds	484 (59.5)	330 (40.5)
6.	Cleaning of ear with hair pins, broomstick or matches	655 (80.5)	159(19.5)
7.	Exposure of shoes to sunlight	223 (28.4)	591 (72.6)
8.	Use of toothbrush in cleaning in mouth	707(86.9)	107(13.1)
9.	Use of chewing stick in cleaning The teeth	409 (50.2)	405 (49.8)
10	Bathing with well water	579(71.1)	235 (28.9)

The result presented in Table 3 revealed that 210 of the respondents representing 25.8% agreed that they practice the covering of the nose with handkerchief when sneezing, while 604 representing 74.2% respondents never did.

The finding also revealed that 501 of the respondents representing 61.5% agreed that they practice the use of fingers in cleaning their nose, while 313 representing 38.5% respondents never did. Further examination of the result revealed

that 326 respondents representing 40.0% agreed that they flush their eyes with water when something gets there mistakenly, while 488 representing 60.0% respondents never did. Again, the examination revealed that 295 respondents representing 36.2% agreed that they share sunshade or glasses with family members, friends' while 519 representing 63.8% respondents never did. The examination also revealed that 484 respondents representing 59.5% agreed that they clean their ears with cotton buds, while 330 representing 40.5% respondents never did. The finding also revealed that 655 of the respondents representing 80.5% agreed that they clean their ear with hair pins, broomstick or matches, while 159 representing 19.5% respondents never did. Going forward, the finding revealed that 223 of the respondents representing 28.4% agreed that they expose their shoes to sunlight, while 591 representing 72.6% respondents never did. The examination also revealed that 707 respondents representing 86.9% agreed that they use toothbrush in cleaning their mouth, while 107 representing 13.1% respondents never did. The finding also revealed that 409 of the respondents representing 50.2% agreed that they use chewing stick in cleaning their teeth, while 405 representing 49.8% respondents never did. Finally, the finding also revealed that 579 of the respondents representing 71.1% agreed that they bath with well water while 235 representing 28.9% respondents never did.

It was also observed that just a quarter had good personal hygiene- related practices. This is also supported by WHO. (2014) that personal hygiene can be maintained by high standard of personal care and human beings are aware of the importance of personal hygiene for thousands of years. The ancient Greeks spent hours in the bath, using fragrances and make up in an effort to beautify themselves and be presentable. Several studies have shown that it is essential that school pupils practice personal hygiene to improve their health which will enable them learn, live, grow and play their respective roles effectively in their various schools and communities.

The simple act of hand washing for at least 20 seconds according to the United States Food and Drugs Administration recommendations can prevent the spread of many food borne illnesses and upper respiratory tract infections (Federal Drug Agency (FDA), 2009). Hand washing with soap has been reported to reduce diarrheal morbidity by 44% and respiratory infections by 23% (Curtis, Danquah and Aunger, 2019).

Conclusion

The objectives of the study were met, as the level of the knowledge and practice of residents relating to personal hygiene were identified. Majority had fair knowledge of personal hygiene but poor personal hygiene practices. These results suggest that a systematic education about personal hygiene is needed in future to correct this dearth of knowledge and practice among the populace.

Recommendation

It was recommended that:

- i. Training should be organized for students in schools and rural dwellers on how to take care of their teeth, hair, feet, nose, eyes and hands.
- ii. There should be adequate provision and maintenance of sources of water in all the communities with a view to facilitate the practice of personal hygiene among residents.
- iii. Special hygiene intervention like provision of sanitary materials should be provided for,
- iv. Training the retainer programme should be in place also advice the community on how to handle equipments etc.
- v. Sanction should be involved in defaulters.

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